Appendix 1 Environmental Impact and Mitigation Register Appendix 1A Environmental Impact and Mitigation Register - BBNP Appendix 1A - Environmental Impact and Mitigation Register

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	Residents staying adjacent / near to the proposed project	Construction	Potential human annoyance to receptors residing in the vicinity of the construction footprint.	Priority 2	Negligible	Predicted noise levels are less than 3 dB(A) above the regulatory limits	Negligible	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls		Negligible	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Human	Park visitors / Member of public	Construction	Potential human health impact due to exposure to excessive noise to park visitors / member of public		Negligible	Predicted noise levels are less than 3 dB(A) above the regulatory limits	Negligible	Possible / Occasional	Not expected to regularly happen at construction sites, consideration of implementation of minimum controls	The Contractor shall ensure that hoarding is installed around the work zones to reduce noise propagation to surrounding area.  The Contractor shall ensure that workers are trained in noise-reduction behaviours such as reducing the drop height of materials, and turning off equipment and vehicle engines when not in use.  Daily toolbox briefings should include reminders on the need to implement noise-reduction behaviours, in particular during demolition activities.  The Contractor shall select quieter construction equipment and construction methods in accordance with Singapore Standard SS 602:2014 Code of Practice for Noise Control on Construction and Demolition Site, Annex G where necessary to achieve the permissible noise limits.	Negligible	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Fauna	Species that use sounds for communication, foraging, and breeding, or are known to have their behaviours disrupted by sound, and are of conservation significance  > Birds, non-volant mammals and bats of conservation significance	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	High	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	> The Contractor shall deploy quiet models of construction equipment i.e. generators, compressors, excavators. Where there are no quieter models, the Contractor shall demonstrate so under the submission of Quiet Machine/ Equipment List. Quieter models are defined as those having sound pressure levels at least 5 dB quieter than other models readily available locally, when measured 1 m from the equipment body while the equipment is operating at its rated load.  > Provide acoustic shed / enclosure for construction equipment, where viable.  > Site noisy machinery or equipment Plant away from the nearby noise sensitive receptors, where possible.	Moderate	Noise pollution mitigation measures shall be implemented in line with the Singapore Standards Code of Practice for Noise Control at Construction Sites, 2014 (\$\$602.2014), where practicable,	High	High	Less Likely / Rare	Minor	Conduct pre-construction noise baseline monitoring for seven (7) days, one (1) month before commencement of construction work     Conduct continuous monitoring throughout the construction phase by installing real time continuous 24-hour "live" monitoring devices to monitor the noise levels     Conduct Weekly EMMP Inspection
Fauna	Species that are less affected by airborne noise but are of conservation significance  > Aculeate hymenopterans, odonates, butterflies, decapods and reptiles of conservation significance	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	Medium	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	> All machines and equipment shall be labelled with weatherproof stickers showing clearly its noise specification i.e. noise levels at 1m from source. The Contractor shall verify the performance using a Class 1 (Type 1) sound meter on all machines monthly at 1 m distance from	Moderate	Noise pollution mitigation measures shall be implemented in line with the Singapore Standards Code of Practice for Noise Control at Construction Sites, 2014 (SS602:2014), where practicable,	High	Medium	Less Likely / Rare	Minor	> Conduct pre-construction noise baseline monitoring for seven (7) days, one (1) month before commencement of construction work  > Conduct continuous monitoring throughout the construction phase by installing real time continuous 24-hour "live" monitoring devices to monitor the noise levels  > Conduct Weekly EMMP Inspection
Fauna	Species that are not of conservation significance  > all other species	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	example bored, jack-in or micropiling methods.  > The Contractor shall install noise barriers around the work areas before any work commences assessment show that the stipulated noise criteria will be breached by the works. Noise barriers shall be in accordance with Singapore Standard SS 602:2014 Code of Practice for Noise Control on Construction and Demolition Site, Annex F Noise Control Techniques, Section F3.3 and the any specific noise mitigation measures to be stipulated by the Board. The noise barriers shall be designed to achieve a minimum reduction of 5 dB(A).  > Daily toolbox briefings should include reminders on the need to implement noise-reduction behaviours, in particular during pilling activities.	Minor	N/A	High	Low	N/A	N/A	> Conduct Weekly EMMP Inspection

Appendix 1A - Environmental Impact and Mitigation Register

Impact Assessment on Air at B1

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	> Residents staying adjacent / near to the proposed project >Students from the nearby schools	Construction	Potentially result in adverse impacts on air quality, and public and ecosystem health Potentially generate significant nuisance at receptors (human receptors) in the vicinity of the construction footprint/ proposed development.	Priority 1	Low - High	Earthwork footprint >10,000 m2, soil type with large grain size and total materials to be moved >20,000 tonnes - 100,000 tonnes	Low - High	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	Ensure that hoarding is installed around the Project site or work areas to control the dispersion of dust.      Perform earthworks in phases to reduce the extent of exposed footprint at one time.      Ensure effective water suppression is used during demolition operations.      Minimize drop height.      Avoid crushing or screening of demolished construction material onsite.	Minor - Moderate	A site-specific Air Pollution Control Plan ("APCP") should be developed to put in place measures such as establishing communications, implementation of site management measures, monitoring, etc.	Low - High	Low - High	Less Likely / Rare	Minor	> Conduct pre-construction ambient air baseline monitoring for seven (7) days, one (1) month before commencement of construction work by installing real time continuous 24-hour "live" monitoring devices to monitor the PM10 and PM2.5 levels > In the event of a valid complaint, one a month for as long as the particular complaint related construction activity continues. > Conduct Weekly EMMP Inspection
Human	Park visitors / Member of public	Construction	Potentially result in adverse impacts on air quality, and public and ecosystem health  Potentially generate significant nuisance at receptors (human receptors) in the vicinity of the construction footprint/ proposed development.	Priority 3	Low - High	Earthwork footprint >10,000 m2, soil type with large grain size and total materials to be moved >20,000 tonnes - 100,000 tonnes	Very Low - Low	Possible / Occasional	sites, upon implementation of	Prepare an Earth Control Measures Plan.     Ensure that vehicles and equipment are not left idling when not in use.     Maintain and operate all equipment and machinery in a manner such that it does not give rise to smoke emissions, and ensure emissions comply with the Environmental Protection and Management (Vehicular Emissions) Regulations or Environmental Protection and Management (Off-Road Diesel Engine Emissions) Regulations 2012, if applicable.      A list of equipment shall be submitted demonstrating consideration of alternatives.      Ensure that truck loads carrying dry materials (such as cement, sand, aggregate, soil etc.) into the construction area will be covered.      Periodically wet the unpaved temporary access roads to prevent dust propagation.	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Nature Areas	Nature areas of nationally designated site	Construction	N/A	Priority 2	Low - High	Earthwork footprint >10,000 m2, soil type with large grain size and total materials to be moved >20,000 tonnes - 100,000 tonnes	Very Low - Medium	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	New Yorkers clean up any spoil/earth spillage onto the haulage routes immediately and undertake proper housekeeping of the construction site, as well as roadways linked to the entrances of the worksites, to ensure that roadways, vehicle wheels and equipment tracks are clear of dust or mud, and that appropriate barriers, tarpaulin covers/erosion blankets (fully biodegradable, wildlife-friendly) have been repaired and/or reinstated.  Impose a maximum-speed-limit of 25 kilometres per hour (km/hr) on paved or surfaced haul roads and 15 km/hr on unpaved haul roads and work areas.  Ensure all stockpiles of demolished items, debris or good earth / aggregates are covered under canvas sheets or erosion control blankets (fully biodegradable, wildlife-friendly).	Minor - Moderate	A site-specific Air Pollution Control Plan ("APCP") should be developed to put in place measures such as establishing communications, implementation of site management measures, monitoring, etc.	Low - High	Very Low - Medium	Less Likely / Rare	Negligible - Minor	> Conduct pre-construction ambient air baseline monitoring for seven (7) days, one (1) month before commencement of construction work by installing real time continuous 24-hour "live" monitoring devices to monitor the PM10 and PM2.5 levels > In the event of a valid complaint, once a month for as long as the particular complaint related construction activity continues. > Conduct Weekly EMMP Inspection

> Minimise the volume of spoil stockpiled and potential for dust generation and erosion/runoff, schedule removal of spoil from the contract area at least once every five (5) days.

Ramboll BBNP, BBTP and BBHNP EMMP

Appendix 1A - Environmental Impact and Mitigation Register

Impact Assessment on Soil and Sediment at B1

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	Likelihood (L)	Rationale for likelihood	I Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	Visitors / members of public	Construction	Potential for direct soil and/or groundwater, and sediment contamination within the Study Area.  Potential pollution to the adjacent areas within the immediate vicinity of the project due to migration of soil and/or gro	Priority 3	Low	Only small scale localised soil and/or sediment contamination is expected, which is not likely to extend beynord the Study Area and possible to remediate	Very Low	Possible / Occasional	happen at construction sites, upon	Chemical and fuel in drums, carboys, containers, etc shall be stored in a designated storage area within a building or covered shed with concrete floors and containment facilities to contain any leak or spillage.      A full containment should be provided for bulk storage oil tanks, including skid tanks.      Ensure all hazardous substance and chemical containers are labelled as per the GHS requirement      Ensure a chemical inventory is maintained to track the movement of all hazardous substance and chemicals.	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Nature N Areas	Nature areas of nationally designated site	Construction	Potential for direct soil and/or groundwater, and sediment contamination within the Study Area.  Potential pollution to the adjacent areas within the immediate vicinity of the project due to migration of soil and/or groundwater contamination, off-site.	Priority 2	Low	Only small scale localised soil and/or sediment contamination is expected, which is not likely to extend beyond the Study Area and possible to remediate	Very Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	<ul> <li>Return the chemicals back to its designated storage areas when not in use.</li> <li>Transfer of chemicals shall be done over contaminant trays and mats to prevent spillage into the ground.</li> <li>All leaks and spillages in the storage area or construction site shall be collected and sent to a licensed toxic waste collector for proper disposal.</li> <li>Provide emergency spill kits on site in the event of any chemical spillages. The emergency response team shall also be competent in the use of these spill kits.</li> <li>Ensure toxic industrial wastes (TIWs) are stored in a designated storage area within a building or covered shed with concrete floors and containment facilities to contain any leak or spillage.</li> <li>Maintains a TIW register, which is to be updated on a weekly basis.</li> <li>TIW shall be collected regularly by a licensed TIW collector for off-site disposal.</li> <li>Ensure leaks and spillages in the TIW storage area or construction site are collected and sent to a licensed toxic waste collector for proper disposal.</li> </ul>	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection

Receptor Type	Type Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	: Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Water Body	West-flowing stream at the southern boundaries of Areas B1 and C1 Construct	Hydrology:  Increased stormwater peak flow contributions to the channel can lead to increased water level and subsequent flooding of surrounding areas adjacent to the stream/drain due to the land use change from land clearing; and in Stormwater run-off from exposed and unstable slopes may cause soil erosion.  Water contamination:  > Elevated levels of suspended solids leading to increased turbidity and sedimentation rates, solid waste, toxic material, etc; and > Increase in the levels of oil, grease, and other chemical substances.  Liquid effluent generation:  > Inappropriate discharge of wastewater to the watercourse will result in contamination in nearby water sources; and  > Inappropriate discharge of domestic sewage and poor maintenance of the portable toilet (e.g., overflow or overload) can	Priority 1	Medium	The construction of the Stream Loop is not expected to have significant impacts to the existing stream. The location of the proposed trail is sufficiently separated and buffered from the existing stream. Only a small segment bypasses the stream on the southeast corner of B. The spatial extent of exposed earth at any point in time is highly limited, relative to the broader catchment area of the stream.	Medium	Less Likely / Rare	Not expected to happen at construction sites, upon implementation of minimum controls	All work must comply to the PUB, Singapore's National Water Agency's Code of Practice on Surface Water Drainage, particularly Section 6 — Requirements for Construction Activities. The key relevant requirements are highlighted below:    General	Minor	N/A	N/A	N/A	N/A	N/A	> Perform real-time TSS monitoring > Monitor water quality at the natural stream and quarry lakes onsite on a monthly basis during the period of in-water or near-water > Conduct Weekly EMMP Inspection
Water Body	Poh Kim Quarry Lake Construct	result in run-off to nearby water sources and potentially contaminate the waterbodies located adjacent to the construction sites.  Solid wastes:  > Solid wastes:  > Solid waste generated can lead to elevated levels of suspended solids entering waterbodies via run-off or improper handling/disposal.  > Improper storage, handling, disposal or leakage of toxic waste generated at temporary work areas can lead to water contamination.  Improper management of chemical substances:  Contaminated stormwater due to improper storage/disposal/transport of chemical materials handled and stored on site leading to an increase in the levels of oil, grease and other chemical substances in the nearby waterbodies; and  > Fuel and lubricants spillage from maintenance of construction vehicles and mechanical equipment can also lead to elevation in levels of oil in the nearby waterbodies.	Priority 2	Medium	Proximity of construction activities to the water. Water level, flow rates, and erosion risk not expected to change measurably within the quarry lake.	Low	Less Likely / Rare	Not expected to happen at construction sites, upon implementation of minimum controls	drainage systems.  > Design criteria: The Erosion Control Measures ("ECM") shall be designed to cope with a minimum design rainfall intensity of a return period of 1 in 5 years storm.  > ECM installation before commencement of work: The ECM shall be installed by the site operator / contractor according to the endorsed plans and the completed ECM at site shall be approved by the Qualified Erosion Control Professional ("QECP") before commencement of construction and earthworks.  > The site operator/contractor shall ensure that the ECM designed and installed shall be continuously reviewed by the QECP for every stage of the earthworks and construction. The ECM shall remain effective throughout the whole duration of works. The site operator/contractor shall add or amend the ECM at the site according to the design of the QECP. <u>Guidelines of effective ECM</u>		N/A	N/A	N/A	N/A	N/A	> Perform real-time TSS monitoring > Monitor water quality at the natural stream and quarry lakes on- site on a monthly basis during the period of in-water or near-water > Conduct Weekly EMMP Inspection

Receptor Type	Туре	Recorded	Receptor (Scientific Name)	Receptor (Common Name)	Global Status (IUCN/CITES)	National Status	Recorded Species	Phase	Impact type	Sensitivity (S)	Impact intensity (I)		onsequence (0 = S × I)	Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)		Residual Impact intensity (I)	Residual consequence		Residual impact significance
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		Not expected to happen at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     Avoid fogging     No night works (except security-critical works)     Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works)	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works)	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-oritical works)	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works)	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Susceptible to injury and mortality during bamboo felling	High	Likely	Bamboo clusters located within impact zones	> Pre-felling fauna inspections  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry  > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Major	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site > Conduct bamboo bat rescue and translocation	High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Susceptible to injury and mortality during bamboo felling	High	Likely	Bamboo clusters located within impact zones	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections		> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site > Conduct bamboo bat rescue and translocation	High	High	Less likely	Minor
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy mechinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		Not expected to happen at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible

Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     A void fogging     No night works (except security-critical works)     Pre-felling fauna inspections     Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     A void fogging     No night works (except security-critical works)     Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy problemer (i.e., Main Entrance, and the property of the prop	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     A void fogging     No night works (except security-critical works)     Pre-felling fauna inspections     Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	workstes involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to Plaza and Nature Play area) to Prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected	Not expected to happen at construction sites	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     A void fogging     No night works (except security-critical works)     Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksiles involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-oritical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Aquatic - low susceptibility	Low	Possible	during the construction phase of stream	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Construction	Accidental injury or mortality	High	High	Gliding mammal - susceptible to disorientation and loss of launching points	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections		> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor

Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	Medium	Arboreal mammal - mobile but possibly susceptible	Medium	Less Likely	Not known to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Minor		Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Construction	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Construction	Accidental injury or mortality	High	High	Attracted to construction sites	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped injured/dead/dangerous farun is found on-site     Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Construction	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections		> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Construction	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped injured/dead/dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-fellling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low	Not Expected to Occur	Not expected to happen at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible

> Erect hoardings around

Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected appen at struction sites	> Erect hoardings around worksites involving heavy nachinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected ppen at struction sites	> Erect hoardings around worksites involving heavy lachinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected m ppen at struction sites	> Erect hoardings around worksites involving heavy nachinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) • Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected ppen at struction sites	> Erect hoardings around worksites involving heavy nachinery (i.e., Main Entrance, Itaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) • Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected ppen at struction sites	> Erect hoardings around worksites involving heavy nachinery (i.e., Mair Entrance, l'aza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected mplantstruction mplantstruction	> Erect hoardings around worksites involving heavy achinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Awoid fogging > No night works (except security-critical works) Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected in Property in Proper	> Erect hoardings around worksites involving heavy achinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Awoid fogging > No night works (except security-critical works) Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to hap to Occur constr	expected in Property in Proper	> Erect hoardings around worksites involving heavy achinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Awold fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Not Expected to Occur	Negligible
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Accidental injury or mortality	High	Low	Aquatic - low susceptibility	Low	posi happ known i Possible durin constr phas	act could assibly open or m a to occur Pl ing the struction ase of ream	> Erect hoardings around worksites involving heavy nachinery (i.e., Main Entrance, laza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible occionstr	own to Pl cur at struction sites	> Erect hoardings around worksites involving heavy nachinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dnagerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor

> Conduct regular hoarding inspections to ensure there are no

Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	inspections to ensure there are no gaps to prevent fauna entry  > Conduct regular site inspections to ensure contractor compliance with the EMMP  > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes  > Train site personnel on biodiversity awareness and actions to take when encountering wildlife  > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site  > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering widdlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry  > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor

Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering widlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMM/P > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped' injured/ dead' dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	WUIKSILES	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	WOINSILES	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	confined within worksites	within worksites  > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor

Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Anthidiellum Smithii	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Negligible		Medium	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	affected by	limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		Low	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		Medium	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		Low	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Negligible		High	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Negligible		Medium	Very Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Human traffic confined within worksites sinvolving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	Medium	Less likely	Minor
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	Medium	High	Less likely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	Medium	High	Less likely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to the machine within worksites > No night works (except safety-critical works)	IVIINOF		Medium	Low	Less likely	Minor
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	Medium	High	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	Medium	Less likely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to within worksites > No night works (except safety-critical works)	Minor		Medium	Low	Less likely	Minor
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	Medium	Less likely	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to Plaza and Nature Play area) to worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Woderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor

Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	High	Possible	Human traffic confined within worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Human traffic confined within worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	High	Less likely	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to worksites worksites on the state of the state o	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	Medium	Less likely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-	Moderate	> Restrict entry of site personnel beyond the worksite	High	Medium	Less likely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	High	Possible	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to worksites  > No night works (except safety-	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to worksites  > No night works (except safety-	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	critical works)  > Erect hoardings around workstes involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to worksites  > No night works (except safety-	Moderate	> Restrict entry of site personnel beyond the worksite	Low	Medium	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Pitza and Nature Play area) to limit site personnel movement to worksites  > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Serect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Servet hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Servet hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Serical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	Medium	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	Medium	Less likely	Minor

Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Human traffic confined withir worksites	limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Human traffic confined withir worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance,	Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined withir worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-	Moderate	> Restrict entry of site personnel beyond the worksite	Low	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within works(except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor

Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Piaza and Nature Piay area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor	High	Low	Less likely	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety- critical works)	Minor	High	Low	Less likely	Minor
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-	Minor	Medium	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor	Medium	Low	Less likely	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-	Minor	High	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	critical works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety- critical works)	Minor	Low	Low	Less likely	Minor

Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites  > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites     No night works (except safety-critical works)	Negligible		Low	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High		Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High		Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Low	High	Less likely	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium		Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Medium	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium		Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Construction	Human disturbance	High	High	Extremely sensitive to human presence	High		Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	High	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Medium	Low	Less likely	Minor

Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Medium	Low	Less likely	Minor
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Medium	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Medium	Low	Less likely	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Medium	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	Human traffic confined within worksites		Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Construction	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor

Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	within worksites  > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety- critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Construction	Human disturbance	High	Medium	Sensitive to human presence	Medium	Possible	worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked buildog bat	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No riight works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance,	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance,	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance,	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance,	Minor		Low	Low	Less likely	Minor

Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMM/P > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     No night works (except safety-critical works)     Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat, highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/ dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	Frect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     No night works (except safety-critical works)     Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/ dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP. > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor

Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     No night works (except safety-critical works)     Pre-felling fauna inspections     Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance,	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	prevent rauna entry  > No night works (except safety- critical works)  > Pre-felling fauna inspections  > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	No night works (except safety-critical works)     Pre-felling fauna inspections     Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	No night works (except safety-critical works)     Pre-felling fauna inspections     Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving neavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna ently > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry  > No night works (except safety-critical works)  > Pre-felling fauna inspections  > Erect hoardings around	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent faune entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent faune entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry  > No night works (except safety-critical works)  > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent faune entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent faune entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Free-felling faulus linspections > Freet hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rájah	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	Pre-felling fauna inspections     Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry     No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas ? Train site personnel that feeding of wildlife is strictly prohibited	Medium	Medium	Less likely	Minor

Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Construction	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped injured/dead/dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas ? Train site personnel that feeding of wildlife is strictly prohibited	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Predominantly ground- dwelling; can be excluded with hoarding	Plaza and Nature Play area) to prevent fauna entry	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Predominantly ground- dwelling; can be excluded with hoarding	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	INA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	INA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	INA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	INA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections > Erect hoardings around	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Moderate	Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry     Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site     Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas     Train site personnel that feeding of wildlife is strictly prohibited		High	Less likely	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/idead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas ? Train site personnel that feeding of wildlife is strictly prohibited		High	Less likely	Minor
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas ? Train site personnel that feeding of wildlife is strictly prohibited	High	High	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Less Likely	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works) > Pre-felling fauna inspections	Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Predominantly ground- dwelling; can be excluded with hoarding	Plaza and Nature Play area) to prevent fauna entry	Minor		Low	Low	Less likely	Minor

Part	Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas ? Train site personnel that feeding of wildlife is strictly prohibited	High	High	Less likely	Minor
Part	Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	Low	as nuisance; less tolerant of human	Low	Less Likely	ground- dwelling; can be excluded	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Minor		Low	Low	Less likely	Minor
Part	Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Construction	Human-Wildlife conflict	High	High		High	Possible	occur at construction	worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area) to prevent fauna entry > No night works (except safety- critical works)	Moderate	inpsections to ensure there are no gaps to prevent fauna entry  > Conduct regular site inspections to ensure contractor compliance with the EMMP  > Train site personnel on biodiversity awareness and actions to take when encountering wildlife  > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas?  ? Train site personnel that feeding of	High	High	Less likely	Minor
Part	Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	night works	No night works	Minor		High	High	Less likely	Minor
Part	Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Fact   Ris	Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Part	Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Fig. 10	Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Fairs Bid No Typerpetric defaults Leaser function by Layer districtions with the control of the	Fauna	Bat	No	Pteropus vampyrus	Large flying-fox			No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Part   Bot   No   Typeny-term protegome   Content bottom   Content bottom   No   Content bottom   No   No   Cont	Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Farm Der Ver Americk machen 1 NA Not Assessed Wilmerde Ver Combeton 1 Lyd destroace 1 Mg Neglyte shadow 1 Ne	Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor		High	High	Less likely	Minor
Fairs Eds No Contino Replicate Pairs No Contino Replication Replication Pairs No Contino Replicate Pairs No Contino Replicate Pairs No Contino Replication Replicate Pairs No Contino Replication Replicate Pairs No Contino Replication Replicate Pairs No Contino Replicate Pairs No Contino Replicate Pairs No Contino Repl	Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Faun Be No Coration Adaptives No Construction No Construction Light disturbance High Negligible Construction High Negligible Accordance of the feedbland for describing the second to the feedbland for the feedbl	Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Faunt Billion No Curation relative No Curation relative No Curation No Construction Light desturbance High Negligible Aculetian relative No Curative No	Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Lasing/isosaum seminusatum NA Net Assessed Critically Endangered No Construction Light disturbance High Negligible Accidents—not sensitive controls only to the constitute of the control of	Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Lipotriches fakarumensis NA Not Assessed Vulnerable No Construction Light disturbance High Negligible Aculetian-rod sensible only of the sensible	Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Megachie indonesica NA Not Assessed Vulnerable No Construction Light disturbance High Negligble Acutesta not sensible and	Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Megachile ornata NA Not Assessed Vulnerable No Construction Light disturbance High Negligible Aculeata -not sensible  Fauna Bee No Megachile ramera  NA Not Assessed Vulnerable No Construction Light disturbance High Negligible Aculeata -not sensible  Fauna Bee No Momada malayana NA Not Assessed Vulnerable No Construction Light disturbance High Negligible  Fauna Bee No Nomada malayana NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible  Fauna Bee No Paterlapis intricata NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible  Fauna Bee No Paterlapis intricata NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible  Fauna Ber No Paterlapis intricata NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible  Fauna Ber No Paterlapis intricata NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible  Fauna Ber No Paterlapis intricata NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible  Fauna Bird No Arcedo meninting  Blue-eared kingfisher Least Concern Endangered No Construction Light disturbance High Medium Diurnal bird Medium Diurnal bird Medium Less Likely night works No n	Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Megachile ramera NA Not Assessed Vulnerable No Construction Light disturbance High Negligible Aculeata - not sensitive sensitive very Low Less Likely injut works No night wo	Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Nomada malayana NA Not Assessed Vulnerable No Construction Light disturbance High Negligible Aculeata - not sensitive  Fauna Bee No Nomia apicalis  NA Not Assessed Critically Endangered No Construction  Fauna Bee No Patellapis intricata  NA Not Assessed Critically Endangered No Construction  Fauna Bee No Patellapis intricata  NA Not Assessed Critically Endangered No Construction  Fauna Bird No Alcedo meninting  Blue-eared kingfisher  Least Concern Endangered No Construction  Endangered No Construction  Light disturbance High Medium  Light disturbance  High Negligible  Aculeata - not sensitive  Aculeata - not sensitive  Very Low Less Likely  No injet works  No night	Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No No Nomia apicalis NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible Aculeata - not sensitive Very Low Less Likely injin works No night	Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna Bee No Patellapis intricata NA Not Assessed Critically Endangered No Construction Light disturbance High Negligible Sensitive Very Low Less Likely night works No nig	Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Safety-critical Fauna Bird No <i>Alcedo meninting</i> Blue-eared kingfisher Least Concern Endangered No Construction Light disturbance High Medium Diurnal bird Medium Less Likely night works No night works Minor Medium Medium Less only Safety-critical Fauna Bird No <i>Ardea purpurea</i> Purple heron Least Concern Endangered No Construction Light disturbance High Medium Diurnal bird Medium Less Likely night works No night works Minor Medium Medium Less	Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Negligible		Very Low	Less Likely	Safety-critical night works	No night works	Negligible		Negligible	Very Low	Less likely	Negligible
Safety-critical Fauna Bird No <i>Ardea purpurea</i> Purple heron Least Concern Endangered No Construction Light disturbance High Medium Diurnal bird Medium Less Likely night works No night works Minor Medium Medium Less	Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works	No night works	Minor		Medium	Medium	Less likely	Minor
	Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works	No night works	Minor		Medium	Medium	Less likely	Minor

Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	High	Migratory	High	Less Likely	only Safety-critical night works	No night works	Minor	High	High	Less likely	Minor
									-						only Safety-critical	-					
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern Least Concern; CITES	Vulnerable	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	protected (Appendix II)	Endangered	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Construction	Light disturbance	High	High	Migratory	High	Less Likely	night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	High	Migratory	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Migratory	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical night works	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected	Endangered	Yes	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	(Appendix I) Least Concern; CITES	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	only Safety-critical night works	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	protected (Appendix II)  Least Concern; CITES	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical night works	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	protected (Appendix II)  Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	High	Migratory	High	Less Likely	only Safety-critical night works	No night works	Minor	High	High	Less likely	Minor
			-						-						only Safety-critical	-				-	
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Construction	Light disturbance	High	Medium	Diurnal bird  Butterfly - slightly	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Low	sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor

Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Low	Butterfly - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
	,					Nationally Extinct			-			sensitive  Butterfly - slightly			only Safety-critical						
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	(Rediscovered)  Nationally Extinct	No	Construction	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Less Likely	only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	(Rediscovered)	No	Construction	Light disturbance	High	Low	sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Construction	Light disturbance	High	Low	Butterfly - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Construction	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct	No	Construction	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
	,		- -		Not Assessed; CITES	(Rediscovered)			-			sensitive  Butterfly - slightly			only Safety-critical						
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	protected (Appendix II)	Vulnerable  Nationally Extinct	No	Construction	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	(Rediscovered)	No	Construction	Light disturbance	High	Low	sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Construction	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Negligible	Aquatic - not sensitive	Very Low	Less Likely	night works only Safety-critical	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only	No night works	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Construction	Light disturbance	High	Medium	Diurnal mammal	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Construction	Light disturbance	High	Medium	Diurnal mammal	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Safety-critical night works	No night works	Minor	High	High	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely		No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	Odonate - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	Sensitive Odonate - slightly	Low	Less Likely	only Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Low	sensitive Odonate - slightly	Low	Less Likely	only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
				-					-			sensitive Odonate - slightly			only Safety-critical						
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	sensitive  Crepuscular	Low	Less Likely	night works only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Medium	odonate	Medium	Less Likely	night works only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely		No night works	Minor	Low	Low	Less likely	Minor

Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Low	Odonate - slightly	Low	Less Likely	Safety-critical night works	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Low	Sensitive Odonate - slightly	Low	Less Likely	only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Construction	Light disturbance	High	Low	Sensitive Odonate - slightly	Low	Less Likely	only Safety-critical	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES	Vulnerable	Yes	Construction	Light disturbance	High	High	sensitive Nocturnal	High	Less Likely	only Safety-critical	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	protected (Appendix II)  Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical night works	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES	Near Threatened	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	protected (Appendix II)  Least Concern	Vulnerable	No	Construction	Light disturbance	High	Medium	Diurnal reptile	Medium	Less Likely	only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES	Vulnerable	No	Construction	Light disturbance	High	Medium	Diurnal reptile	Medium	Less Likely	only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	protected (Appendix II)  Least Concern	Vulnerable	No	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	only Safety-critical	No night works	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Construction	Light disturbance	High	Medium	Diurnal reptile	Medium	Less Likely	only Safety-critical	No night works	Minor	Medium	Medium	Less likely	Minor
. ===									Loss of/reduction in ecological			Highly dependent on connected			only Impact is not expected to					Not Expected	
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Construction	connectivity for faunal movement	High	High	habitats for dispersal Highly dependent	High	to Occur	happen during construction Impact is not		Minor	High	High	to Occur	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High	Not Expected to Occur			Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats	Medium	Not Expected to Occur	Impact is not		Minor	Medium	Medium	Not Expected to Occur	Minor
									Loss of/reduction in ecological			for dispersal  Highly dependent on connected			construction Impact is not expected to					Not Expected	
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Construction	connectivity for faunal movement	High	High	habitats for dispersal Highly dependent	High		happen during construction Impact is not		Minor	High	High	to Occur	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High		expected to happen during construction		Minor	High	High	Not Expected to Occur	Minor
-	D. /		0		Near Threatened; CITES	0.5. 11.5.1		0	Loss of/reduction in ecological			Not dependent on connected habitats		Not Expected	Impact is not			N . F 71		Not Expected	N. F. 7.
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	protected (Appendix II)	Critically Endangered	No	Construction	connectivity for faunal movement	High	Negligible	for dispersal and able to traverse urban infrastructure	Very Low				Negligible	Negligible	Very Low	to Occur	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High		Impact is not expected to happen during		Minor	High	High	Not Expected to Occur	Minor
-	5.			0				0	Loss of/reduction in ecological		10.1	dispersal Highly dependent on connected		Not Expected	construction Impact is not expected to				10.1	Not Expected	
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Construction	connectivity for faunal movement	High	High	habitats for dispersal Slightly dependent	High	to Occur	happen during construction		Minor	High	High	to Occur	Minor
_									Loss of/reduction in ecological			on connected habitats for dispersal and		Not Expected	Impact is not expected to					Not Expected	
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Construction	connectivity for faunal movement	High	Low	adaptable to traverse urban infrastructures if	Low		happen during construction		Negligible	Low	Low	to Occur	Negligible
												needed Slightly dependent on connected									
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	habitats for dispersal and adaptable to	Low		Impact is not expected to happen during		Negligible	Low	Low	Not Expected to Occur	Negligible
												traverse urban infrastructures if needed			construction						
												Slightly dependent on connected habitats for			Impact is not						
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	dispersal and adaptable to traverse urban	Low	Not Expected to Occur	expected to happen during construction		Negligible	Low	Low	Not Expected to Occur	Negligible
												infrastructures if needed Slightly dependent									
F	D	N-	Occasion video i	NA	NetAssessed	Videocable	N-	0	Loss of/reduction in ecological	I II-l-	1	on connected habitats for dispersal and	1	Not Expected	Impact is not expected to		Markata.	l avv	1	Not Expected	Na aliaikia
rauna	bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	NO	Construction	connectivity for faunal movement	High	Low	adaptable to traverse urban infrastructures if	Low		happen during construction		Negligible	LOW	Low	to Occur	Negligible
												needed Slightly dependent on connected									
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	habitats for dispersal and adaptable to	Low	Not Expected to Occur	Impact is not expected to happen during		Negligible	Low	Low	Not Expected to Occur	Negligible
												traverse urban infrastructures if needed			construction						

Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed Slightly dependent	Low		Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not d expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent	High		Impact is not dexpected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not d expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Highly dependent	High		Impact is not dexpected to happen during construction Impact is not	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal Highly dependent	High	Not Expected to Occur		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal Highly dependent	High	Not Expected to Occur	expected to happen during construction Impact is not	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High		d expected to	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not d expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not d expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not dexpected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium		Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not d expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Not Expected to Occur	Impact is not expected to happen during	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for dispersal Slightly dependent	High	Not Expected to Occur	construction Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Slightly dependent	Medium	Not Expected to Occur	Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Slightly dependent	Medium	Not Expected to Occur	Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium		Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium		Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium		Impact is not expected to happen during construction	Minor	Medium	Medium	Not Expected to Occur	Minor

Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		Impact is not	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Considerable changes in waterbody that may affect connectivity for aquatic species	High		Impact is not likely to happen during stream restoration as watercourse is not adversely affected	Minor	High	High	Not Expected to Occur	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Impact is not expected to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	to Occur	Impact could possibly happen or has been known to occur during construction Impact could	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		possibly happen or has been known to occur during construction	Minor	High	High	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent	High	Not Expected to Occur	Impact is not likely to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent	High	Not Expected to Occur	Impact is not likely to happen during construction	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Impact is not expected to happen during construction	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Considerable changes in waterbody that may affect connectivity for aquatic species	High	Possible	Impact could possibly happen or has been known to occur during construction
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Considerable changes in waterbody that may affect connectivity for aquatic species	High	Possible	Impact could possibly happen or has been known to occur during construction
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	Impact is not likely to happen during construction
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Minor		High	High	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Moderate	> Avoid changes to watercourses	High	High	Less likely	Minor
Minor		High	High	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Moderate	> Avoid changes to watercourses	High	High	Less likely	Minor
Minor		High	High	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Minor		Medium	Medium	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Minor		High	High	Not Expected to Occur	Minor
Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat, 2 bamboo clusters affected	Low	Certain	NA
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat, 2 bamboo clusters affected	Low	Certain	NA
Fauna	Bee	Yes	Amegilla insularis	NA NA	Not Assessed	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Вее	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	S Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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	Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP				

Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA NA
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA NA
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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	Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP				

Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

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Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of ≺10% of habitat	Low	Certain	NA
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Negligible	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Negligible	Very Low	Not Expected to Occur	Negligible
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Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., tails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate

Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Quarry QB	Very Low	NOI Expected	Quarry QB is not affected by construction
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
Negligible	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Ouarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Low	Very Low	Not Expected to Occur	Negligible
Negligible	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-sitle and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Negligible	Very Low	Not Expected to Occur	Negligible
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Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Quarry QB	Very Low	to Occur	Quarry QB is not affected by construction
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Negligible	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Negligible	Very Low	Not Expected to Occur	Negligible
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Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of Stream SB1a (habitat enhancement only)	Very Low	Not Expected to Occur	NA
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA

Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For Irail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
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Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation Not expected
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low	Not Expected to Occur	to happen during operation

Мос	derate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
Мос	derate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature Play area, Quarry Trail) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > For trail construction, only understory plants are removed when necessary, and replanted elsewhere in BBNP	Low	Low	Certain	Moderate
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible
Neg	gligible		Low	Low	Not Expected to Occur	Negligible

Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur		Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Expected to Occur	buildings	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision Resident with	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Accidental injury or mortality	High	Medium	known records of bird-building collision	Medium	Not Expected to Occur	buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Expected to Occur	No new buildings Not expected	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision Resident with	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Medium	known records of bird-building collision	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Operational	Accidental injury or mortality	High	High	Forest edge frugivore	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Forest edge frugivore	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Operational	Accidental injury or mortality	High	High	Forest edge frugivore	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision Resident with	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Expected to Occur	No new buildings	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely	Minor

Negligible

Minor

Negligible

Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Forest edge frugivore	High	Not Expected to Occur	No new buildings	Minor	High	High	Less likely
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low	Not Expected to Occur	during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low	Not Expected to Occur	during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low		during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	to Occur	during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - Iow susceptibility	Low	to Occur	during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low		during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	to Occur	during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	to Occur	during operation Not expected	Negligible	Low	Low	Not Expected to Occur
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	to happen during operation	Negligible	Low	Low	Not Expected to Occur

Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Aquatic - Iow susceptibility	Low	Not Expected to Occur	operation  Not expected to happen during	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Operational	Accidental injury or mortality	High	Medium	Arboreal mammal - mobile but possibly susceptible to	Medium	Less Likely	operation Adjacent roads already experience	Minor	Medium	Medium	Less likely	Minor
												roadkills  Arboreal mammal -			high traffic volumes Adjacent roads already					
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	Medium	mobile but possibly susceptible to roadkills	Medium	Less Likely	experience high traffic volumes Adjacent roads	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Operational	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Less Likely	already experience high traffic volumes	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Operational	Accidental injury or mortality	High	High	Known to cross roads - highly susceptible to	High	Less Likely	Adjacent roads already experience high traffic	Minor	High	High	Less likely	Minor
	Non-volant				Critically Endangered;							roadkills  Ground-dwelling mammal - highly			volumes Adjacent roads already					
Fauna	mammal	Yes	Manis javanica	Sunda pangolin	CITES protected (Appendix I)	Critically Endangered	Yes	Operational	Accidental injury or mortality	High	High	susceptible to roadkills  Ground-dwelling	High	Less Likely	experience high traffic volumes Adjacent roads	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Operational	Accidental injury or mortality	High	High	mammal - highly susceptible to roadkills	High	Less Likely	already experience high traffic volumes	Minor	High	High	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Expected to Occur	during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Accidental injury or mortality	High	Low	Aquatic - low susceptibility	Low	Not Expected to Occur	Not expected to happen during operation	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	volumes Adjacent roads already experience	Minor	High	High	Less likely	Minor
															high traffic volumes Adjacent roads already					
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	experience high traffic volumes	Minor	High	High	Less likely	Minor

Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic volumes
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic volumes
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic volumes
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic volumes
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic volumes
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Adjacent roads already experience high traffic volumes
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence

Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Conduct regular post-construction	Medium	Medium	Less likely	Minor
Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	<ul> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species</li> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> </ul>	Medium	Medium	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Conduct regular post-construction	Medium	Medium	Less likely	Minor
Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Negligible		High	Very Low	Not Expected to Occur	Negligible
Negligible		Medium	Very Low	Not Expected to Occur	Negligible
Negligible		High	Very Low	Not Expected to Occur	Negligible
Negligible		High	Very Low	Not Expected to Occur	Negligible
Negligible		High	Very Low	Not Expected to Occur	Negligible
Negligible		High	Very Low	Not Expected to Occur	Negligible

Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	presence Not adversely affected by human presence
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks

Negligible		Low	Very Low	Not Expected to Occur	Negligible
Negligible		High	Very Low	Not Expected to Occur	Negligible
Negligible		Medium	Very Low	Not Expected to Occur	Negligible
Negligible		Low	Very Low	Not Expected to Occur	Negligible
Negligible		High	Very Low	Not Expected to Occur	Negligible
Negligible		Medium	Very Low	Not Expected to Occur	Negligible
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Conduct regular post-construction biodiversity monitoring to determine if	High	High	Less likely	Minor
Minor	the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	Medium	Less likely	Minor
Minor	<ul> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species</li> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> </ul>	Medium	High	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	High	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	High	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	High	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Conduct regular post-construction	Medium	High	Less likely	Minor
Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	Medium	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	High	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	Medium	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	High	Less likely	Minor

Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Heliopais personalus	Masked finfoot	Endangered	Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks

Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species	High	High	Less likely	Mir
	<ul> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> <li>Conduct regular post-construction biodiversity monitoring to determine if</li> </ul>				
Minor	the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Mir
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail	Medium	High	Less likely	Mir
Minor	(e.g., install railings)  > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	High	Less likely	Mir
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	High	Medium	Less likely	Mir
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail	High	Medium	Less likely	Mir
Minor	(e.g., install railings)  > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Mir
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Mir
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	Medium	Less likely	Mil
Minor	<ul> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species</li> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> </ul>	Low	High	Less likely	Mii
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Mi
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Mi
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Mil
Minor	(e.g., inistal railings)  Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species  Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	Medium	Less likely	Mi
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail	Low	Medium	Less likely	Mil
Minor	(e.g., install railings)  > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Mir

Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Expected to Occur	Not adversely affected by human presence

Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	High	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Low	Medium	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
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Minor		Low	Low	Less likely	Minor
Minor		High	Low	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		High	Low	Less likely	Minor
Minor		High	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
				Not Expected	
Negligible		Low	Very Low	to Occur	Negligible

Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Operational	Human disturbance	High	High	Sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks

Minor		Low	Low	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species	Low	High	Less likely	Minor
Minor	<ul> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species</li> <li>Design the boardwalks and trails to</li> </ul>	Low	Medium	Less likely	Minor
	deter visitors from venturing off-trail (e.g., install railings)				
Minor	> Conduct regular post-construction	Medium	Low	Less likely	Minor
Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Conduct regular post-construction	Medium	High	Less likely	Minor
Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install rallings)	Medium	High	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor		Medium	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
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Minor	<ul> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species</li> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> </ul>	Medium	Medium	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor

Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwal ks
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife conflict

Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)	Medium	Medium	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
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Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor

Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human-wildlife
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	conflict Impact is not expected to happen during
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	operation Impact is not expected to happen during
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	operation Impact is not expected to happen during operation
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation Impact is not
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation

Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
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Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
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Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
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Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
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Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Negligible		Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur		Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	to Occur	expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	to Occur	expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		happen during operation Impact is not expected to	Wildlife-human coexistence education programs  Wildlife-human coexistence	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	nuisance or threat	Very Low	to Occur	happen during operation Impact is not expected to	education programs  Wildlife-human coexistence	Negligible	Negligible	Very Low	to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered  Nationally Extinct	No	Operational	Human-Wildlife conflict  Human-Wildlife conflict	High	Negligible	nuisance or threat  Not perceived as	Very Low	to Occur	happen during operation Impact is not expected to	education programs  Wildlife-human coexistence	Negligible	Negligible	Very Low	to Occur	Negligible
Fauna	Butterfly  Butterfly	No No	Gangara lebadea lebadea  Jamides alecto ageladas	Banded redeye  Metallic caerulean	Not Assessed  Not Assessed	(Rediscovered)  Nationally Extinct	No	Operational Operational	Human-Wildlife conflict	High High	Negligible  Negligible	nuisance or threat  Not perceived as	Very Low	to Occur	happen during operation Impact is not expected to	education programs  Wildlife-human coexistence	Negligible  Negligible	Negligible Negligible	Very Low Very Low	to Occur  Not Expected	Negligible  Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	(Rediscovered)  Nationally Extinct	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as	Very Low	Not Expected		education programs  Wildlife-human coexistence	Negligible	Negligible	Very Low	to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected		education programs  Wildlife-human coexistence	Negligible	Negligible	Very Low	Not Expected	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected	happen during operation Impact is not expected to happen during	education programs  Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	to Occur  Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected	operation Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	happen during	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	operation Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as	Very Low			Wildlife-human coexistence	Negligible		Negligible	Very Low	Not Expected	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	nuisance or threat  Not perceived as	Very Low		happen during operation Impact is not expected to	education programs  Wildlife-human coexistence	Negligible		Negligible		to Occur  Not Expected	
_	·					Nationally Extinct						nuisance or threat  Not perceived as			happen during operation Impact is not expected to	education programs  Wildlife-human coexistence				Very Low	to Occur  Not Expected	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	(Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	nuisance or threat	Very Low	to Occur	happen during operation Impact is not	education programs	Negligible		Negligible	Very Low	to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat Possibly perceived	Very Low				Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Operational	Human-Wildlife conflict	High	Low	as nuisance; less tolerant of human presence Possibly perceived	Low	Less Likely	likely to happen during operation Impact is not		Minor		Negligible	Low	Less likely	Minor
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Low	as nuisance; less tolerant of human presence	Low	Less Likely	likely to happen during operation Mammal -		Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Less Likely	Mammal - possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation		Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Impact is not likely to happen during operation		Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation Impact is not	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur		Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low			Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low			Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	expected to happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Less Likely	Reptile - possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Less Likely	Reptile - possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor

Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Less Likely	Reptile - possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Expected to Occur	Impact is not expected to happen during operation	Wildlife-human coexistence education programs	Negligible		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	operation		Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	operation		Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Less Likely	Reptile - possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	operation		Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Less Likely	Reptile - possibly implicated in human-wildlife conflict		Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail		Minor		High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.		Minor		High	High	Not Expected to Occur	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.		Minor		High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.		Minor		High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.		Minor		High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.		Minor		High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.		Minor		High	High	Not Expected to Occur	Minor

High Not Expected Minor

Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Bee	Yes	Amegilla insularis	NA NA	Not Assessed	Vulnerable	Yes	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA NA	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA NA	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA NA	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA NA	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA NA	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Megachile indonesica	NA .	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Megachile ornata	NA .	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Bee	No	Megachile ramera	NA NA	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible

Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Negligible Very Low Not Expected to Occur Negligible

Negligible Very Low Not Expected to Occur Negligible

Not Expected to Occur

Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur s	Lighting will only be ovided along  Duarry Trail and the outhern part of Stream  .oop, which e currently lit  .e., worse off  om baseline.	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur I ar	Lighting will only be ovided along  Duarry Trail and the outlern part of Stream  Loop, which e currently lit e, worse off  om baseline.	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur I ar	Lighting will only be ovided along  Juarry Trail and the  outhern part of Stream  .cop, which  e currently lit  e, worse off  om baseline.	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur I ar	Lighting will only be only be ovided along 2uarry Trail and the outhern part of Stream oop, which e currently lit e, worse off om baseline.	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur I ar	Lighting will only be ovided along Duarry Trail and the outhern part of Stream oop, which e currently lit e, worse off om baseline.	Minor
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur I ar	Lighting will only be ovided along Quarry Trail and the outhern part of Stream .oop, which e currently lit e, worse off om baseline.	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur I ar	Lighting will only be ovided along Duarry Trail and the outhern part of Stream oop, which e currently lit e, worse off om baseline.	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur I ar	Lighting will only be ovided along Duarry Trail and the outhern part of Stream oop, which e currently lit e, worse off m baseline.	Minor
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur I ar	Lighting will only be ovided along Quarry Trail and the outhern part of Streamoop, which e currently lit e, worse off mb baseline.	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	pr ( Not Expected to Occur I ar (i.	Lighting will only be ovided along 2 Uarry Trail and the outhern part of Streamoop, which e currently lit e, worse off om baseline.	Minor

Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.  Lighting will	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	soumern part of Stream Loop, which are currently lit (i.e., worse off from baseline. Lighting will	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	of Stream Loop, which are currently lit (i.e., worse off from baseline. Lighting will	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline. Lighting will	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline. Lighting will	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	only be provided along Quarry Trail	Minor	High	High	Not Expected to Occur	Minor

Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline. Lighting will	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	only be provided along Quarry Trail	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor

Not Expected to Occur Negligible

Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur  To Occur  Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	High	High	Not Expected to Occur	
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur to Occur of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	High	High	Not Expected to Occur	
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur to Occur to Occur September 1	Minor	Medium	Medium	Not Expected to Occur	
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur  Not expected to Occur  Not expected to Occur  The southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur Vicinity, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur Vicinity, which are currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Not Expected to Occur	
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur  Not Expected to Horizonta Courry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Not Expected to Occur	ı
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Not Expected to Occur	ı
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Not Expected to Occur	ı
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur  Not expected to Cocur  Southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Not Expected to Occur	

Negligible

Negligible

Low Low Not Expected to Occur Negligible

Low Not Expected to Occur Negligible

Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sidine blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.

Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.

1	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
١	Negligible	Low	Low	Not Expected to Occur	Negligible
۸	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.

Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Minor	High	High	Not Expected to Occur	Minor
Minor	High	High	Not Expected to Occur	Minor
Minor	Medium	Medium	Not Expected to Occur	Minor
Minor	Medium	Medium	Not Expected to Occur	Minor
Minor	High	High	Not Expected to Occur	Minor

Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	N

Minor	High	High	Not Expected to Occur	Minor
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible
Minor	Medium	Medium	Not Expected to Occur	Minor
Negligible	Low	Low	Not Expected to Occur	Negligible
Negligible	Low	Low	Not Expected to Occur	Negligible

Low Not Expected to Occur Negligible

Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Operational	Light disturbance	High	Low	Species that are slightly sensitive to changes in light levels	Low	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Negligible
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: noctumal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor

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Minor High High Not Expected No	linor
Minor Medium Medium Not Expected Medium to Occur M	<b>f</b> inor

Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Operational	Light disturbance	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Not Expected to Occur	Lighting will only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	e Least Concern	Vulnerable	No	Operational	Light disturbance	High	Medium	Species that are sensitive to changes in light levels	Medium	Not Expected to Occur	only be provided along Quarry Trail and the southern part of Stream Loop, which are currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Highly dependent	Medium	Not Expected to Occur	No major new buildings	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal Highly dependent	High	Not Expected to Occur		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High	Not Expected to Occur		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITEs protected (Appendix II)		No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed Slightly dependent	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur		Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent	High	Not Expected to Occur		Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna Fauna	Bird Bird	No No	Chloropsis cyanopogon Chloropsis sonnerati	Lesser green leafbird  Greater green leafbird	Near Threatened  Endangered	Critically Endangered  Critically Endangered	No No	Operational Operational		High High	High High	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for	High High	to Occur		Minor Minor	High High	High High		Minor
									connectivity for faunal movement  Loss of/reduction in ecological			Highly dependent on connected habitats for dispersal Highly dependent on connected		to Occur	buildings  No major new buildings  No major new				to Occur  Not Expected	
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Operational	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological	High	High	Highly dependent on connected habitals for dispersal Highly dependent on connected habitals for dispersal Highly dependent on connected habitals for	High	Not Expected to Occur  Not Expected to Occur	buildings  No major new buildings  No major new	Minor		High	Not Expected to Occur	Minor
Fauna Fauna	Bird Bird	No Yes	Chloropsis sonnerati  Chrysococcyx xanthorhynchus	Greater green leafbird Violet cuckoo	Endangered Least Concern	Critically Endangered  Vulnerable	No Yes	Operational Operational	Connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological	High High	High High	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for dispersal	High High	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur	buildings  No major new buildings  No major new buildings  No major new buildings  No major new	Minor Minor	High High	High High	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur	Minor Minor
Fauna Fauna Fauna	Bird Bird Bird	No Yes Yes	Chloropsis sonnerati Chrysococcyx xanthorhynchus Collocalia affinis	Greater green leafbird  Violet cuckoo  Plume-toed swiftlet	Endangered  Least Concern  Least Concern	Critically Endangered  Vulnerable  Vulnerable	No Yes Yes	Operational Operational	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High High High	High High Negligible	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for connected habitats for	High High Very Low	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur	buildings  No major new buildings  No major new buildings  No major new buildings	Minor Minor Negligible	High High Negligible	High High Very Low	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur	Minor Minor Negligible
Fauna Fauna Fauna	Bird Bird Bird	No Yes Yes	Chloropsis sonnerati  Chrysococcyx xanthorhynchus  Collocalia affinis  Copsychus malabaricus	Greater green leafbird  Violet cuckoo  Plume-toed swiftlet  White-rumped shama	Endangered  Least Concern  Least Concern  Least Concern; CITES protected (Appendix II)	Critically Endangered  Vulnerable  Vulnerable  Endangered	No Yes Yes	Operational Operational Operational	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High High High	High High Negligible High	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for dispersal Slightly dependent on connected habitats for dispersal Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures infrastructures if	High High Very Low High	Not Expected to Occur	buildings  No major new buildings	Minor  Megligible  Minor	High High Negligible High	High High Very Low High	Not Expected to Occur	Minor Minor Negligible Minor
Fauna Fauna Fauna Fauna	Bird Bird Bird	No Yes Yes	Chloropsis sonnerati  Chrysococcyx xanthorhynchus  Collocalia affinis  Copsychus malabaricus  Copsychus saularis	Greater green leafbird  Violet cuckoo  Plume-toed swiftlet  White-rumped shama  Oriental magpie-robin	Endangered  Least Concern  Least Concern; CITES protected (Appendix II)  Least Concern	Critically Endangered  Vulnerable  Vulnerable  Endangered  Vulnerable	No Yes Yes Yes	Operational Operational Operational Operational	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High High High High	High High Negligible High	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for dispersal Slightly dependent on connected habitats for dispersal Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed Dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed Dependent on connected habitats	High  Very Low  High  Low	Not Expected to Occur	buildings  No major new buildings	Minor  Megligible  Minor  Negligible	High High Negligible High	High  High  Very Low  High  Low	Not Expected to Occur	Minor  Megligible  Minor  Negligible
Fauna Fauna Fauna Fauna	Bird Bird Bird Bird	No Yes Yes Yes	Chrysococcyx xanthorhynchus  Collocalia affinis  Copsychus malabaricus  Copsychus saularis  Corvus macrorhynchos	Greater green leafbird  Violet cuckoo  Plume-toed swiftlet  White-rumped shama  Oriental magpie-robin  Large-billed crow  Brown-chested jungle	Endangered  Least Concern  Least Concern; CITES protected (Appendix II)  Least Concern	Critically Endangered  Vulnerable  Vulnerable  Endangered  Vulnerable  Vulnerable	No Yes Yes Yes Yes	Operational Operational Operational Operational	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High High High High	High  High  Negligible  High  Low	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructure Highly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed Dependent on connected habitats for dispersal and adpatable to traverse urban infrastructures if needed Dependent on connected habitats for dispersal and able to traverse urban infrastructure urban infrastructure Dependent on connected habitats for dispersal and able to traverse urban infrastructure Dependent on connected habitats for dispersal	High  Very Low  High  Low  Medium	Not Expected to Occur	buildings  No major new buildings	Minor  Negligible  Minor  Negligible  Minor	High  High  Negligible  High  Low	High  High  Very Low  High  Low	Not Expected to Occur	Minor  Megligible  Minor  Negligible
Fauna Fauna Fauna Fauna	Bird  Bird  Bird  Bird	No Yes Yes Yes No	Chrysococcyx xanthorhynchus  Collocalia affinis  Copsychus malabaricus  Copsychus saularis  Corvus macrorhynchos  Cyomis brunneatus	Greater green leafbird  Violet cuckoo  Plume-toed swiftlet  White-rumped shama  Oriental magpie-robin  Large-billed crow  Brown-chested jungle flycatcher	Endangered  Least Concern  Least Concern; CITES protected (Appendix II)  Least Concern  Least Concern  Vulnerable	Critically Endangered  Vulnerable  Vulnerable  Endangered  Vulnerable  Vulnerable  Vulnerable	Yes Yes Yes Yes	Operational Operational Operational Operational Operational	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High High High High	High  High  Negligible  High  Low  Medium	Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Not dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for dispersal and able to traverse urban infrastructure Highly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed  Dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed  Not dependent on connected habitats for dispersal and able to traverse urban infrastructures if needed  Dependent on connected habitats for dispersal and able to traverse urban infrastructure	High  High  Very Low  Medium  Very Low	Not Expected to Occur  Not Expected to Occur	buildings  No major new buildings	Minor  Negligible  Minor  Negligible  Minor  Negligible	High High Negligible High Low Medium	High  High  Very Low  High  Low  Medium	Not Expected to Occur  Not Expected to Occur	Minor  Megligible  Minor  Negligible  Minor

Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected No major n to Occur buildings		Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected No major n to Occur buildings		Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected No major n to Occur buildings		Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected No major n to Occur buildings		Negligibl	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Slightly dependent	Medium	Not Expected No major n to Occur buildings		Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected No major n to Occur buildings		Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Slightly dependent	Medium	Not Expected No major n to Occur buildings		Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected No major n to Occur buildings		Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent on connected	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected No major n to Occur buildings		Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected No major n to Occur buildings		Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected No major n to Occur buildings		Medium	Medium	Not Expected to Occur	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected No major n to Occur buildings		Negligibl	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected No major n to Occur buildings		Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Highly dependent	Medium	Not Expected No major n to Occur buildings	Wilnor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal Highly dependent	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected No major n to Occur buildings		High	High	Not Expected to Occur	Minor

Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur		Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Slightly dependent on connected	Medium	Not Expected to Occur	No major new buildings	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if	Low	Not Expected to Occur	No major new buildings	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	needed Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	No major new buildings	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Considerable changes in waterbody that may affect connectivity for aquatic species	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Expected to Occur	No major new buildings	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Expected to Occur	No major new buildings	Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Highly dependent	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal Highly dependent	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal Slightly dependent	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Expected to Occur	No major new buildings	Negligible	High	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if	Low	Not Expected to Occur	No major new buildings	Negligible	High	Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	needed  Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Odonate	No	Vestalis amethystina	Common flashwing	Not Assessed	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	Yes	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Calliophis bivirgatus	Malayan blue coral snake	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected to Occur	No major new buildings	Minor	High	High	Not Expected to Occur	Minor

Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected 1 to Occur	No major new buildings		Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected 1 to Occur	No major new buildings		Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Expected 1 to Occur	No major new buildings		Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Highly dependent	Medium	Not Expected 1 to Occur			Minor	Medium	Medium	Not Expected to Occur	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High	Not Expected 1 to Occur	No major new buildings		Minor	High	High	Not Expected to Occur	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Species with	High	Not Expected 1 to Occur			Minor	High	High	Not Expected to Occur	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected Not Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected N to Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected N to Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected N to Occur	poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching	Very Low	Not Expected N to Occur	Not likely to be poached  Currently	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	already accessible to public;	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected Not Coccur		Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected Not Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	Yes	Amegilla insularis	NA	Not Assessed	Vulnerable	Yes	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected Not Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected Not Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching Species with	Very Low	Not Expected Not Coccur		Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected Not Coccur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected N to Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected N to Occur		Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low		poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected Not Occur	poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected Not Occur	poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low		poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with	Very Low	Not Expected Not Coccur	poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching	Very Low	Not Expected N to Occur		Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	No	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Less Likely Singapore's zero-tollerance stance to illegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	No	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to iilegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Yes	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)		No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tollerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Yes	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildiffe trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Yes	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	No	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Yes	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Yes	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible

Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	Yes	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Yes	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Decapod	No	Geosesarma peraccae	Peracca's land crab	Not Assessed	Vulnerable	No	Operational	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Yes	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	No	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected Not likely to be to Occur poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Non-volant mammal	No	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Currently already accessible to public; Less Likely Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor

Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Yes	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Yes	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High		Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High		Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Not Expected to Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching Species with	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	No	Operational	Poaching	High	Negligible	Species with negligible susceptibility to poaching Species with	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching	Very Low		Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Expected to Occur	Negligible
Fauna Fauna	Odonate	No	Indothemis carnatica Podolestes orientalis	White-tipped demon	Near Threatened  Least Concern	Critically Endangered  Vulnerable	No	Operational Operational	Poaching Poaching	High High	Negligible Negligible	negligible susceptibility to	Very Low	to Occur Not Expected		Wildlife Act	Negligible  Negligible	Negligible Negligible	Very Low		Negligible Negligible
												negligible susceptibility to poaching Species with negligible susceptibility to poaching Species with negligible susceptibility to poaching to poaching Species with negligible susceptibility to poaching		Not Expected to Occur	poached  Not likely to be					to Occur	
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	No	Operational	Poaching	High	Negligible	negligible susceptibility to poaching Species with negligible susceptibility to poaching Species with negligible susceptibility to	Very Low	Not Expected to Occur  Not Expected to Occur	poached  Not likely to be poached  Not likely to be	Wildlife Act	Negligible	Negligible	Very Low	to Occur  Not Expected to Occur  Not Expected	Negligible
Fauna Fauna	Odonate	No No	Podolestes orientalis Prodasineura collaris	Blue-spotted flatwing  Collared threadtail	Least Concern	Vulnerable Vulnerable	No No	Operational Operational	Poaching Poaching	High	Negligible Negligible	negligible susceptibility to poaching Species with negligible susceptibility to	Very Low	to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less Likely	poached  Not likely to be poached  Not likely to be poached  Not likely to be	Wildlife Act Wildlife Act	Negligible Negligible	Negligible Negligible	Very Low Very Low	to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur	Negligible Negligible
Fauna Fauna Fauna	Odonate  Odonate  Odonate	No No	Podolestes orientalis  Prodasineura collaris  Vestalis amethystina	Blue-spotted flatwing  Collared threadtail  Common flashwing	Least Concern  Least Concern  Not Assessed  Vulnerable; CITES	Vulnerable  Vulnerable  Vulnerable	No No	Operational Operational	Poaching Poaching	High High High	Negligible  Negligible  Negligible	negligible susceptibility to poaching Species with negligible susceptibility to poaching Species that are highly susceptible to poaching: listed on CITES Appendix	Very Low Very Low	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less Likely	poached  Not likely to be poached  Not likely to be poached  Not likely to be poached  Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife	Wildlife Act Wildlife Act Wildlife Act	Negligible  Negligible  Negligible	Negligible  Negligible  Negligible	Very Low Very Low	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur	Negligible  Negligible  Negligible
Fauna Fauna Fauna	Odonate  Odonate  Odonate  Reptiles	No No No Yes	Podolestes orientalis  Prodasineura collaris  Vestalis amethystina  Amyda cartilaginea	Blue-spotted flatwing  Collared threadtail  Common flashwing  Asian softshell turtle	Least Concern  Least Concern  Not Assessed  Vulnerable; CITES protected (Appendix II)	Vulnerable  Vulnerable  Vulnerable  Vulnerable	No No	Operational Operational Operational	Poaching Poaching Poaching	High High High	Negligible  Negligible  Negligible  High	negligible susceptibility to poaching Species with negligible susceptibility to poaching Species that are highly susceptible to poaching; listed on CITES Appendix I or II  Species with low susceptibility to poaching; not commonly known	Very Low Very Low High	to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less Likely  Not Expected to Occur	poached  Not likely to be poached  Not likely to be poached  Not likely to be poached  Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act Wildlife Act Wildlife Act	Negligible  Negligible  Negligible  Minor	Negligible  Negligible  Negligible  High	Very Low Very Low High	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less likely	Negligible  Negligible  Negligible  Minor
Fauna Fauna Fauna	Odonate  Odonate  Odonate  Reptiles	No No Yes	Podolestes orientalis  Prodasineura collaris  Vestalis amethystina  Amyda cartilaginea  Boiga cynodon	Blue-spotted flatwing  Collared threadtail  Common flashwing  Asian softshell turtle	Least Concern  Not Assessed  Vulnerable; CITES protected (Appendix II)  Least Concern	Vulnerable  Vulnerable  Vulnerable  Vulnerable	No No	Operational Operational Operational Operational	Poaching Poaching Poaching Poaching	High High High	Negligible  Negligible  Negligible  High	negligible susceptibility to poaching Species with negligible susceptibility to poaching; Species that are highly susceptible to poaching; listed on CITES Appendix I or II  Species with low susceptibility to poaching; not commonly known to be traded as pets  Species with low susceptibility to poaching; not commonly known	Very Low Very Low High	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less Likely  Not Expected to Occur  Not Expected to Occur	poached  Not likely to be poached  Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade  Not likely to be poached  Not likely to be poached	Wildlife Act Wildlife Act Wildlife Act Wildlife Act	Negligible  Negligible  Minor  Negligible	Negligible  Negligible  Negligible  High	Very Low Very Low High	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less likely  Not Expected to Occur	Negligible  Negligible  Minor
Fauna Fauna Fauna Fauna	Odonate  Odonate  Odonate  Reptiles  Reptiles	No No No No No	Podolestes orientalis  Prodasineura collaris  Vestalis amethystina  Amyda cartilaginea  Boiga cynodon  Boiga melanota	Blue-spotted flatwing  Collared threadtail  Common flashwing  Asian softshell turtle  Dog-toothed cat snake  Gold-ringed cat snake	Least Concern  Least Concern  Not Assessed  Vulnerable; CITES protected (Appendix II)  Least Concern	Vulnerable  Vulnerable  Vulnerable  Vulnerable  Vulnerable	No No No No No	Operational Operational Operational Operational	Poaching Poaching Poaching Poaching Poaching	High High High	Negligible  Negligible  Negligible  High  Low	negligible susceptibility to poaching Species with negligible susceptibility to poaching Species that are highly susceptible to poaching: listed on CITES Appendix I or II  Species with low susceptibility to poaching; not commonly known to be traded as pets  Species with low susceptibility to poaching; not commonly known to be traded as pets  Species with low susceptibility to poaching; not commonly known to be traded as pets	Very Low Very Low High Low	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less Likely  Not Expected to Occur  Not Expected to Occur	poached  Not likely to be poached  Not likely to be poached  Not likely to be poached  Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade  Not likely to be poached  Not likely to be poached	Wildlife Act Wildlife Act Wildlife Act Wildlife Act	Negligible  Negligible  Minor  Negligible  Negligible	Negligible  Negligible  Negligible  High  Low	Very Low Very Low High Low	Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Not Expected to Occur  Less likely  Not Expected to Occur  Not Expected to Occur	Negligible  Negligible  Minor  Negligible

Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected 1 to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	No	Operational	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected 1 to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	No	Operational	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Not Expected 1 to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Expected to Occur	Negligible

Receptor Type	Туре	Habitat	Phase	Impact type	Impact category	Sensitivity (S)	Key minimum conntrols	Impact intensity (I)	Reason	Consequence (C = S × I)	Likelihood (L)	Reason	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual	Residual	Residual impact significance
														> Avoid areas of high conservation		consequence	likelillood	
														value > Erect hoardings to delineate				
														worksites involving heavy machinery (i.e., Main Entrance, Plaza and Nature				
Habitat	Terrestrial	Native-dominated secondary forest	Construction	Loss of habitat	Direct	Priority 1		Low	< 10%	Low	Certain	Overlaps with slope stabilisation worksite	Moderate	Play, Quarry Trail) > For worksites involving manual work	Low	Low	Certain	Moderate
														only (i.e., trails, boardwalks, stream edge enhancement), ensure the extent				
							Hoarding installation, TPZ							of the working space is clearly demarcated on-site and cross-checked				
							installation, daily checks by EM							by a Flora Specialist to avoid unnecessary vegetation clearance				
Habitat	Terrestrial	loned kampong and/or plantation with native recru		Loss of habitat	Direct	Priority 2		Low	< 10%	Very Low	Certain	Overlaps with slope stabilisation worksite	Minor		Low	Very Low	Certain	Minor
Habitat Habitat	Terrestrial Terrestrial	Abandoned kampong and/or plantation Grassland	Construction Construction	Loss of habitat Loss of habitat	Direct Direct	Priority 2 Priority 2		Low Negligible	< 10% No overlap	Very Low Imperceptible	Certain Unlikely	Overlaps with worksite No development	Minor Negligible		Low Negligible	Very Low Imperceptible	Certain Unlikely	Minor Negligible
Habitat Habitat	Terrestrial Terrestrial	Scrubland Farm	Construction Construction	Loss of habitat Loss of habitat	Direct Direct	Priority 3 Priority 3		Negligible Negligible	No overlap No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat Habitat	Terrestrial	Urban vegetation	Construction Construction	Loss of habitat	Direct	Priority 3		Medium	10-40%	Very Low	Certain	Overlaps with worksite	Minor		Medium	Very Low	Certain	Minor
Habitat	Aquatic Aquatic	Stream B1a Stream B2a	Construction	Loss of habitat Loss of habitat	Direct Direct	Priority 2 Priority 2		Negligible Negligible	No loss (stream enhancement only) No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No loss (stream enhancement only) No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat Habitat	Aquatic Aquatic	Stream B2b Quarry Lake QB	Construction Construction	Loss of habitat Loss of habitat	Direct Direct	Priority 2 Priority 2		Negligible Negligible	No overlap No loss (boardwalk)	Imperceptible Imperceptible	Unlikely Unlikely	No development No loss (boardwalk)	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat	Terrestrial	Native-dominated secondary forest	Construction	Habitat degradation	Indirect	Priority 1		Medium	17.7% (1.40 ha)	Medium	Less likely	Minimum controls	Minor		Medium	Medium	Less likely	Minor
Habitat Habitat	Terrestrial Terrestrial	Joned kampong and/or plantation with native recru Abandoned kampong and/or plantation	Construction Construction	Habitat degradation Habitat degradation	Indirect Indirect	Priority 2 Priority 2		Medium I ow	10.0% (1.18 ha) 4.4% (0.81 ha)	Low Very Low	Less likely Less likely	Minimum controls Minimum controls	Minor Negligible		Medium Low	Low Very Low	Less likely Less likely	Minor Negligible
Habitat	Terrestrial	Grassland	Construction	Habitat degradation	Indirect	Priority 2	ECM implementation,	Negligible	No overlap	Imperceptible	Unlikely	No development	Negligible		Negligible	Imperceptible	Unlikely	Negligible
Habitat Habitat	Terrestrial Terrestrial	Scrubland Farm	Construction Construction	Habitat degradation Habitat degradation	Indirect Indirect	Priority 3 Priority 3	proper stockpiling, DCM implementation, ensure	Negligible Negligible	No overlap No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat	Terrestrial	Urban vegetation	Construction	Habitat degradation	Indirect	Priority 3	noise levels within approved limits, daily	Medium	36.3% (2.03 ha)	Very Low	Less likely	Minimum controls	Negligible		Medium	Very Low	Less likely	Negligible
Habitat	Aquatic	Stream B1a	Construction	Habitat degradation	Indirect	Priority 2	checks by EM, avoid	Medium	Considerable reduction in surface water quality	Low	Less likely	Minimum controls	Minor		Medium	Low	Less likely	Minor
Habitat Habitat	Aquatic Aquatic	Stream B2a Stream B2b	Construction Construction	Habitat degradation Habitat degradation	Indirect Indirect	Priority 2 Priority 2	fogging	Negligible Negligible	No overlap No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat	Aquatic	Quarry Lake QB	Construction	Habitat degradation	Indirect	Priority 2		Medium	Considerable reduction in surface water quality	Low	Less likely	Minimum controls	Minor		Medium	Low	Less likely	Minor
Habitat	Terrestrial	Native-dominated secondary forest	Construction	Formation of edge effects	Indirect	Priority 1		Low	< 10% increase in P/A	Low	Less likely	Small development (simple interventions)	Minor		Low	Low	Less likely	Minor
Habitat Habitat	Terrestrial Terrestrial	foned kampong and/or plantation with native recru Abandoned kampong and/or plantation	Construction Construction	Formation of edge effects Formation of edge effects	Indirect Indirect	Priority 2 Priority 2		Low Low	< 10% increase in P/A < 10% increase in P/A	Very Low Very Low	Less likely Possible	Small development (simple interventions) Considerable development (main entrance)	Negligible Minor		Low Low	Very Low Very Low	Less likely Possible	Negligible Minor
Habitat	Terrestrial	Grassland	Construction	Formation of edge effects	Indirect	Priority 2		Negligible	No change	Imperceptible	Unlikely	No development	Negligible		Negligible	Imperceptible	Unlikely	Negligible
Habitat Habitat	Terrestrial Terrestrial	Scrubland Farm	Construction Construction	Formation of edge effects Formation of edge effects	Indirect Indirect	Priority 3 Priority 3	NA	Negligible Negligible	No change No change	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat Habitat	Terrestrial Aquatic	Urban vegetation Stream B1a	Construction Construction	Formation of edge effects Formation of edge effects	Indirect Indirect	Priority 3 Priority 2		Medium NA	10-40% increase in P/A NA	Very Low NA	Possible NA	Considerable development (main entrance) NA	Minor Negligible		Medium NA	Very Low NA	Possible NA	Minor Negligible
Habitat	Aquatic	Stream B2a	Construction	Formation of edge effects	Indirect	Priority 2		NA	NA.	NA	NA	NA	Negligible		NA	NA	NA	Negligible
Habitat Habitat	Aquatic Aquatic	Stream B2b Quarry Lake QB	Construction Construction	Formation of edge effects Formation of edge effects	Indirect Indirect	Priority 2 Priority 2		NA NA	NA NA	NA NA	NA NA	NA NA	Negligible Negligible		NA NA	NA NA	NA NA	Negligible Negligible
														> Put up signages to remind visitors not to litter or pollute the habitats				
												Reconfiguration of activity spaces to consolidate		> Carry out regular maintenance of the				
Habitat	Terrestrial	Native-dominated secondary forest	Operational	Habitat degradation	Indirect	Priority 1		Medium	17.7% (1.40 ha)	Medium	Less likely	peripheral spaces to the plaza area will reduce human access to the habitat	Minor	park (e.g., removal of litter, emptying of trash, ensure integrity of railings along	Medium	Medium	Less likely	Minor
												namar access to the nashar		trails and boardwalks > Conduct regular patrols to deter				
Habitat	Terrestrial	decad because and/or electric with action con-	0			D: 1 0			40.00/ (4.40.1.)					visitors from straying off-trail				Minor
Habitat	Terrestrial	foned kampong and/or plantation with native recru Abandoned kampong and/or plantation	Operational	Habitat degradation Habitat degradation	Indirect Indirect	Priority 2 Priority 2		Medium Low	10.0% (1.18 ha) 4.4% (0.81 ha)	Low Very Low	Possible Possible	Trail (people can still stray off track) Trail (people can still stray off track)	Minor Minor		Medium Low	Low Very Low	Less likely Less likely	Negligible
Habitat Habitat	Terrestrial Terrestrial	Grassland Scrubland	Operational Operational	Habitat degradation Habitat degradation	Indirect Indirect	Priority 2 Priority 3	Avoid fogging	Negligible Negligible	No overlap No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat Habitat	Terrestrial Terrestrial	Farm Urban vegetation	Operational Operational	Habitat degradation	Indirect	Priority 3		Negligible	No overlap	Imperceptible	Unlikely	No development	Negligible		Negligible	Imperceptible	Unlikely	Negligible
				Habitat degradation	Indirect	Priority 3		Medium	36.3% (2.03 ha)	Very Low	Possible	Trail (people can still stray off track)  Trail (people can still stray off track), albeit	Minor		Medium	Very Low	Less likely	Negligible
Habitat	Aquatic	Stream B1a	Operational	Habitat degradation	Indirect	Priority 2		Low	Some reduction in surface water quality	Very Low	Possible	surface runoff controlled and littering not expected	Minor		Low	Very Low	Less likely	Negligible
Habitat Habitat	Aquatic Aquatic	Stream B2a Stream B2b	Operational Operational	Habitat degradation Habitat degradation	Indirect Indirect	Priority 2 Priority 2		Negligible Negligible	No overlap No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely Unlikely	Negligible Negligible
Habitat	Aquatic	Quarry Lake QB	Operational	Habitat degradation	Indirect	Priority 2		Low	Some reduction in surface water quality	Very Low	Less likely	Boardwalk with railing, surface runoff controlled	Negligible		Low	Very Low	Less likely	Negligible
Habitat	Terrestrial	Native-dominated secondary forest	Operational	Changes in microclimatic conditions	Indirect	Priority 1		Medium	17.7% (1.40 ha)	Medium	Unlikely	and littering not expected  Development is largely green	Negligible		Medium	Medium	Unlikely	Negligible
Habitat Habitat	Terrestrial Terrestrial	foned kampong and/or plantation with native recru Abandoned kampong and/or plantation	Operational Operational	Changes in microclimatic conditions Changes in microclimatic conditions	Indirect Indirect	Priority 2 Priority 2		Medium Low	10.0% (1.18 ha) 4.4% (0.81 ha)	Low Very Low	Unlikely Unlikely	Development is largely green Development is largely green	Negligible Negligible		Low Low	Very Low Very Low	Unlikely Unlikely	Negligible Negligible
Habitat Habitat	Terrestrial Terrestrial	Grassland Scrubland	Operational Operational	Changes in microclimatic conditions	Indirect	Priority 2 Priority 3	Ensure noise levels within	Negligible	No overlap	Imperceptible	Unlikely	No development	Negligible		Negligible	Imperceptible	Unlikely Unlikely	Negligible
Habitat	Terrestrial	Farm	Operational	Changes in microclimatic conditions Changes in microclimatic conditions	Indirect Indirect	Priority 3	approved limits, ensure dust levels within	Negligible Negligible	No overlap No overlap	Imperceptible Imperceptible	Unlikely Unlikely	No development No development	Negligible Negligible		Negligible Negligible	Imperceptible Imperceptible	Unlikely	Negligible Negligible
Habitat Habitat	Terrestrial Aquatic	Urban vegetation Stream B1a	Operational Operational	Changes in microclimatic conditions Changes in microclimatic conditions	Indirect Indirect	Priority 3 Priority 2	approved limits	Medium Low	36.3% (2.03 ha) 6.7% (0.01 ha. but concretised)	Very Low Very Low	Unlikely Unlikely	Development is largely green Development is largely green	Negligible Negligible		Medium Low	Very Low Very Low	Unlikely Unlikely	Negligible Negligible
Habitat	Aquatic	Stream B2a	Operational	Changes in microclimatic conditions	Indirect	Priority 2		Negligible	No overlap	Imperceptible	Unlikely	No development	Negligible		Negligible	Imperceptible	Unlikely	Negligible
Habitat Habitat	Aquatic Aquatic	Stream B2b Quarry Lake QB	Operational Operational	Changes in microclimatic conditions Changes in microclimatic conditions	Indirect Indirect	Priority 2 Priority 2		Negligible Low	No overlap 2.30% (0.03 ha)	Imperceptible Very Low	Unlikely Unlikely	No development Development is largely green	Negligible Negligible		Negligible Low	Imperceptible Very Low	Unlikely Unlikely	Negligible Negligible
Habitat	Terrestrial	Native-dominated secondary forest	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 1		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Terrestrial	foned kampong and/or plantation with native recru	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Terrestrial	Abandoned kampong and/or plantation	Operational	Introduction of exotic species	Indirect	Priority 2		NA	NA	NA	NA	NA NA	NA		NA	NA	NA	NA
				(aquatic habitats only) Introduction of exotic species				NA.	NA NA		NA NA	NA NA			NA.		NA NA	
Habitat	Terrestrial	Grassland	Operational	(aquatic habitats only) Introduction of exotic species	Indirect	Priority 2				NA			NA			NA		NA
Habitat	Terrestrial	Scrubland	Operational	(aquatic habitats only)	Indirect	Priority 3		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Terrestrial	Farm	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 3	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Terrestrial	Urban vegetation	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 3		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Aquatic	Stream B1a	Operational	Introduction of exotic species	Indirect	Priority 2		Medium	Change balance of native vs exotic	Low	Less likely	Already accessible to public	Minor		Medium	Low	Less likely	Minor
Habitat	Aquatic	Stream B2a	Operational	(aquatic habitats only) Introduction of exotic species	Indirect	Priority 2		Medium	Change balance of native vs exotic	Low	Less likely	No development	Minor		Medium	Low	Less likely	Minor
				(aquatic habitats only) Introduction of exotic species														
Habitat	Aquatic	Stream B2b	Operational	(aquatic habitats only)	Indirect	Priority 2		High	Detrimental to native-dominated habitat	Medium	Less likely	No development	Minor		High	Medium	Less likely	Minor
Habitat	Aquatic	Quarry Lake QB	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2		Low	Some impact to exotic-dominated habitat	Very Low	Certain	For members of public to visit, accessible to public	Minor		Low	Very Low	Certain	Minor

Receptor Type	Туре	Receptor	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual consequence		Residual impact significance
Flora	Indirect	Antidesma coriaceum	Construction	Decline in plant health	High	High	All specimens (1 specimen) affected indirectly by slope stabilisation works	High	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Implement soil erosion control measures	Major	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	High	High	Possible	Moderate
Flora	Direct	Campnosperma auriculatum	Construction	Mortality	High	Negligible	6/51 (<10%) specimen affected directly by developent of boardwalk, trails and slope stabilization works	Very Low	Certain	Specimen located on the proposed footprint of worksite		Minor	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	No change	No change	No change	Minor
Flora	Direct	Strombosia javanica	Construction	Mortality	High	Negligible	6/168 (<10%) specimen affected directly by development of boardwalk, trails and slope stabilization works	Very Low	Certain	Specimen located on the proposed footprint of worksite		Minor	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	No change	No change	No change	Minor
Flora	Direct	Canthiumera robusta	Construction	Mortality	High	High	All specimens (only 1 recorded across entire Study Area) affected directly by slope stabilization	High	Certain	Specimen located on the proposed footprint of worksite		Major	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Occur	Negligible

> Design for and implement dense landscaping and infill planting at areas that are cleared, at

Flora	Indirect Aporosa benthamiana	Construction Decline in plant health High	Low 19/128 specimens indirectly by devel		Less likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Minor	and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change No change	Minor
Flora	Indirect Clerodendrum villosum	Construction Decline in plant health High	3/18 specimens a indirectly by devel of boardwalk/trails edge enhancemen slope stabilisation respectively	opment stream t and	Less likely	Formation of some forest edges in a mix of forested, scrubland, and urban vegetation areas; plant specimens previously in forested areas now exposed to some edge habitats and changes to hydrology	Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change No change	Minor
Flora	Indirect Guioa pubescens	Construction Decline in plant health High	6/56 specimen aff indirectly by devel Cow of boardwalk/trails edge of quarry an stabilisation works	opment near Low slope	Less likely	Formation of some forest edges in a mix of forested, scrubland, and urban vegetation areas; plant specimens previously in forested areas now exposed to some edge habitats	Minor	Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change No change	Minor
Flora	Indirect Strombosia javanica	Construction Decline in plant health High	Low 29/162 specimens indirectly by all tyl development exce main entrance	es of	Less likely	Formation of some forest edges in a mix of forested, scrubland, and urban vegetation areas; plant specimens previously in forested areas now exposed to some edge habitats and changes to hydrology	Minor		No change	No change No change	Minor
Flora	Indirect <i>Dialium platysepalum</i>	Construction Decline in plant health High	4/7 specimens aff Medium indirectly by devel of boardwalk/trails		Less likely	Formation of some forest edges in a mix of forested, scrubland, and urban vegetation areas; plant specimens previously in forested areas now exposed to some edge habitats (for specimens affected by development of raingarden)	Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change No change	Minor
Flora	Indirect <i>Lindera lucida</i>	Construction Decline in plant health High	1/34 (<10%) spec Megligible affected by slope stabilisation works	Very Low	Possible	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Very Low No change	Minor
Flora	Indirect Tetracera fagifolia var. borneensis	Construction Decline in plant health High	1/24 (<10%)speci Negligible affected indirectly stabilisation works	by slope Very Low	Possible	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Minor	Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions     conduct regular inspections to ensure contractor compliance with the EMMP     Adjust design footprint to ensure Priority 1 plant species are not within the impact zones     Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Very Low Possible	Minor

Flora	Indirect Canarium patentinervium	Construction Decline in plant health	High	High	1 specimen (the only specimen on site) will be indirectly affected by the development of boardwalk/trail	High	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Cratoxylum formosum	Construction Decline in plant health	High	High	1 specimen (the only specimen on site) will be indirectly affected by the development of boardwalk/trail	High	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Elaeocarpus ferrugineus ssp. ferrugineus	Construction Decline in plant health	High	High	1 specimen (the only specimen on site) will be indirectly affected by the development of boardwalk/trail	High	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Ficus cf. rumphii	Construction Decline in plant health	High	High	1 specimen (the only specimen on site) will be indirectly affected by the development of main entrance	High	Not Expected to Occur	Developments will be done at existing built-up area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Gnetum cf. microcarpum	Construction Decline in plant health	High	High	1 specimen (the only specimen on site) will be indirectly affected by the development of boardwalk/trail	High	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Salacia cf. korthalsiana	Construction Decline in plant health	High	High	1 specimen (the only specimen on site) will be indirectly affected by the development of plaza	High	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Ziziphus elegans	Construction Decline in plant health	High	Medium	1/2 specimens affected indirectly by boardwalk/trail	Medium	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Minor		No change	No change	No change	Minor
Flora	Indirect Bambusa vulgaris	Construction Decline in plant health	High	Low	1/4 large bamboo specimens indirectly affected by developement of main entrance	Low	Possible	Formation of some forest edges in a mix of forested, scrubland, and urban vegetation areas; plant specimens previously in forested areas now exposed to some edge habitats		Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect Anodendron candolleanum	Construction Decline in plant health	High	Low	1/3 specimens affected indirectly by slope stabilisation works	Low	Likely	Formation of some forest edges in some forested area; plant specimens previously in forested areas now exposed to some edge habitats from slope stabilisation woks	control	Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Beilschmiedia madang	Construction Decline in plant health	High	Low	1/10 specimens affected indirectly by slope stabilisation works	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Implement soil erosion control measures	Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Calophyllum tetrapterum	Construction Decline in plant health	High	Low	1/7 specimen indirectly affected by slope stabilisation wokrks	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Implement soil erosion control measures	Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor

> Design for and implement dense landscaping and infill planting at areas that are cleared, at

Flora	Indirect Dasymaschalon dasymaschalum	Construction Decline in plant health High	Low	1/4 specimen indirectly affected by slope stabilisation works	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Moderate	and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Dibridsonia cf. conferta	Construction Decline in plant health High	Low	1/4 specimen indirectly affected by slope stabilisation works	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Ficus vasculosa	Construction Decline in plant health High	Low	1/7 indirectly affected by slope stabilisation works	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Agelaea macrophylla	Construction Decline in plant health High	Low	3/29 specimens affected indirectly by slope stabilisation works	Low	Possible	Formation of some forest edges in some forested area; plant specimens previously in forested areas now exposed to some edge habitats from slope stabilisation woks	Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect Hetaeria oblongifolia	Construction Decline in plant health High	Low	1/7 will be indirectly affected by the slope stabilisation works	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Aidia densiflora	Construction Decline in plant health High	Low	4/17 specimens indirectly affected by development of boardwalk/trail, plaza and slope stabilisation works	Low	Possible	Formation of some forest edges in some forested area; plant specimens previously in forested areas now exposed to some edge habitats from slope stabilisation woks	Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	e No change	Minor

Flora	Indirect Knema communis	Construction Decline in plant health	High Low	3/10 specimens affected by slope stabilization	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	ion Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor
Flora	Indirect Garcinia forbesii	Construction Decline in plant health	High Low	3/9 specimen will be indirectly affected by the development of boardwalk/trails and slope stabilisation works	Low	Possible	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	ion I Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect Horsfieldia polyspherula var. polyspherula	Construction Decline in plant health	High Low	2/15 specimens affected by development of boardwalk, trails and slope stabilisation works	Low	Possible	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	ion I Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect Oncosperma tigillarium	Construction Decline in plant health	High Low	2/20 specimens affected indirectly by development of nature play area and slope stabilisation works	Low	Possible	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	ion I Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect Xanthophyllum vitellinum	Construction Decline in plant health	High Low	2/7 specimens affected by the development slope stabilisation works	Low	Possible	Developments will be done at soil eros existing built up areas contro measur	ion I Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect <i>Xylopia malayana</i> var. <i>malayana</i>	Construction Decline in plant health	High Low	1/5 specimen affected indirectly by slope stabilisation works	Low	Likely	Formation of some forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats from slope stabilisation woks	ion I Moderate	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliiance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Low	Low	Possible	Minor

Flora	Direct Oxyceros cf. bispinosus	Construction Mortality	High High	All specimens (only 1 recorded across entire Study Area) affected directly by slope stabilization	High C	Certain Specimen located on the proposed footprint of worksite	> Avoid areas of high conse > Adjust design footprint to species > Adjust construction footpr and trails to avoid Priority 1 consultation with a Flora Sp. > Arborists to determine sui trees that will be retained w > Ensure construction work waste storage, access route within the boundaries of the working space > Transplant or salvage sar conservation significance > Conduct regular inspectic surrounding habitats to ens vegetation has occurred be worksite boundaries > Conduct regular site inspector contractor compliance with	nt of boardwalks clant species, in scialist able TPZs for any hin the worksites , material and s, etc., are kept worksite or agreed ings of as in the re no removal of ond the agreed ctions to ensure		Not Expected to Occur	Negligible
Flora	Direct Strophanthus caudatus	Construction Mortality	High High	1 specimen (the only specimen on site) will be indirectly affected by the slope stabilization works	High Co	Specimen located on the proposed footprint of worksite	> Avoid areas of high conse > Adjust design footprint to species > Adjust construction footpr and trails to avoid Priority 1 consultation with a Flora Sp > Arborists to determine sui trees that will be retained w > Ensure construction work waste storage, access route within the boundaries of the working space > Transplant or salvage sar conservation significance > Conduct regular inspectic surrounding habitats to ens vegetation has occurred be worksite boundaries > Conduct regular site insp contractor compliance with	nt of boardwalks clant species, in scialist able TPZs for any thin the worksites , material and s, etc., are kept worksite or agreed ings of as in the re no removal of ond the agreed ctions to ensure		Not Expected to Occur	Negligible
Flora	Direct Aidia densiflora	Construction Mortality	High Low	3/20 specimens directly affected by slope stabilisation works	Low C	Certain Specimens located on the proposed footprint of worksite	> Avoid areas of high conse > Adjust design footprint to species > Adjust construction footpr and trails to avoid Priority 1 consultation with a Flora Sp > Arborists to determine suit trees that will be retained w > Ensure construction work waste storage, access route within the boundaries of the working space > Transplant or salvage sap conservation significance > Conduct regular inspectic surrounding habitats to ens vegetation has occurred be worksite boundaries > Conduct regular site insp contractor compliance with	nt of boardwalks clant species, in scialist able TPZs for any hin the worksites , material and s, etc., are kept worksite or agreed ings of as in the re no removal of ond the agreed ctions to ensure		Not Expected to Occur	Negligible
Flora	Direct Bambusa vulgaris	Construction Mortality	High Low	2/5 large bamboo specimens directly affected by slope stabilisation works	Low C	Certain Specimen located on the proposed footprint of worksite	> Avoid areas of high conse > Adjust design footprint to species > Adjust construction footpr and trails to avoid Priority 1 consultation with a Flora Sp > Arborists to determine su trees that will be retained w > Ensure construction work waste storage, access route within the boundaries of the working space > Transplant or salvage sar conservation significance > Conduct regular inspectic surrounding habitats to ens vegetation has occurred be worksite boundaries > Conduct regular site insp contractor compliance with	nt of boardwalks clant species, in scialist able TPZs for any hin the worksites , material and s, etc., are kept worksite or agreed ings of as in the re no removal of ond the agreed ctions to ensure	No change	No change	Moderate

Ramboll BBNP, BBTP and BBHNP EMMP

> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan

Flora	Direct Aporosa benthamiana	Construction	Mortality	High	Negligible	1/129 (<10%) specimens affected by development of boardwalk and trails	Very Low	Certain	Specimen located on the proposed footprint of worksite	Minor	> Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist  > Arborists to determine suitable TPZs for any trees that will be retained within the worksites  > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space  > Transplant or salvage saplings of conservation significance  > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries  > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Occur	Negligible
Flora	Direct Aspidopterys concava	Construction	Mortality	High	Negligible	1/30 (<10%) specimens affected by development of boardwalk and trails	Very Low	Certain	Specimen located on the proposed footprint of worksite	Minor	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Occur	Negligible
Flora	Direct Goniophlebium percussum	Construction	Mortality	High	Negligible	1/11 (<10%) specimen affected directly by development of stream edge enhancement	Very Low	Certain	Specimen located on the proposed footprint of worksite	Minor	Avoid areas of high conservation value     Adjust design footprint to avoid Priority 1 plan species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for any trees that will be retained within the worksites     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries     Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Occur	Negligible
Flora	Direct Guioa pubescens	Construction	Mortality	High	Negligible	3/59 specimens directly affected by development of boardwalk,trails and slope stabilization works	Very Low	Certain	Specimens located on the proposed footprint of worksite	Minor	Avoid areas of high conservation value     Adjust design footprint to avoid Priority 1 plan species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for any trees that will be retained within the worksites     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries     Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Occur	Negligible

> Avoid areas of high conservation value

Flora	Direct Horsfieldia polyspherula var. polyspherula	Construction Mortality	High Negli	1/16 (<10%)specimens gible affected by slope stabilization	Very Low	Certain	Specimen located on the proposed footprint of worksite	N	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 pl species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for an trees that will be retained within the worksite: > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agree working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	ny s ed Negligible f	Very Low	Not Expected to Occur	Negligible
Flora	Direct Sandoricum koetjape	Construction Mortality	High Lo	1/3 specimens affected by w development of the main entrance	Low	Certain	Specimen located on the proposed footprint of worksite	Мо	Novid areas of high conservation value     Adjust design footprint to avoid Priority 1 pl species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for an trees that will be retained within the worksite:     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agree working space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries     Conduct regular site inspections to ensure contractor compliance with the EMMP	ny s ed Negligible f	Very Low	Not Expected to Occur	Negligible
Flora	Direct Macaranga griffithiana	Construction Mortality	High Negli	2/37(<10%) specimens affected directly by gible development of stream enhancement and boardwalk and trails	Very Low	Certain	Specimens located on the proposed footprint of worksite	N	Novid areas of high conservation value     Adjust design footprint to avoid Priority 1 pl species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for an trees that will be retained within the worksites     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agree working space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries     Conduct regular site inspections to ensure contractor compliance with the EMMP	ny s ed Negligible f	Very Low	Not Expected to Occur	Negligible
Flora	Direct Tetracera fagifolia var. borneensis	Construction Mortality	High Negli	1/25 (<10%) specimens affected directly by slope stabilization works	Very Low	Certain	No specimen will be affected by impact of mortality	N	Navoid areas of high conservation value     Adjust design footprint to avoid Priority 1 pl species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for an trees that will be retained within the worksite:     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreeworking space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries     Conduct regular site inspections to ensure contractor compliance with the EMMP	ny s ed Negligible f	Very Low	Not Expected to Occur	Negligible
Flora	Indirect Adinandra dumosa	Construction Decline in plant health	High Lo	of plaza and nature play area	Low	Not Expected to Occur	existing built-up area. No trees will be cleared during construction.	measures Implement	ligible	No change	No change	No change	Negligible
Flora	Indirect Aglaia tomentosa ssp. cordata	Construction Decline in plant health	High Negli	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion Neg control measures	ligible	No change	No change	No change	Negligible

Flora	Indirect	Alangium griffithii	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flore	la dia at	A	Occapionation	Dealine in also the allih	I Colo	No effects	No specimen affected	Variation	Not Expected	No specimen will lie within impact	measures Implement soil erosion	Mar Parist	Northead	No channe - No channe	No officials
Flora	Indirect	Anaxagorea javanica	Construction	Decline in plant health	High	Negligible	indirectly by development	Very Low	to Occur	zones of proposed constructions	control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect	Angelesia splendens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Antidesma velutinosum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Aporosa cf. lucida var. lucida	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Aporosa frutescens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Archidendron clypearia	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Aspidopterys concava	Construction	Decline in plant health	High	Negligible	1/29 (<10%) specimens affected indirectly by development of boardwalk/trail plaza	Very Low	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Baccaurea polyneura	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Bambusa bambos	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Bambusa heterostachya	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect	Breynia discigera	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Calophyllum ferrugineum var. ferrugineum:	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Calophyllum pulcherrimum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Calophyllum teysmannii var. teysmannii	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Campnosperma auriculatum	Construction	Decline in plant health	High	Negligible	2/50 (<10%) trees indirectly affected by development of	Very Low	Not Expected to Occur	Developments will be done at existing pathway area.	measures Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Causonis japonica	Construction	Decline in plant health	High	Negligible	boardwalk/trail  No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Chonemorpha fragrans	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect	Cryptocarya griffithiana	Construction	Decline in plant health	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	measures Implement soil erosion	Negligible	No change	No change No change	Negligible
Flora	Indirect			Decline in plant health	High		indirectly by development  No specimen affected	Very Low	to Occur  Not Expected	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion		·		
		Dacryodes cf. costata			Ü	Negligible	indirectly by development  No specimen affected	·	to Occur  Not Expected	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion	Negligible	No change	No change No change	Negligible
Flora	Indirect	Diplazium cf. phanerotis	Construction	Decline in plant health	High	Negligible	indirectly by development	Very Low	to Occur	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion	Negligible	No change	No change No change	Negligible
Flora	Indirect	Drepananthus cf. ridleyi	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	to Occur	zones of proposed constructions	control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Direct	Durio singaporensis	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures	Negligible	No change	No change No change	Negligible

Flora	Indirect Elaeocarpus mastersii	Construction Decline in plant health	High Negligible	1/6 ((<10%) specimen affected indirectly by development of boardwalk/trail	Very Low	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control	Negligible	No change	No change No change	Negligible
Flora	Indirect Elaeocarpus nitidus	Construction Decline in plant health	High Negligible	No specimen affected	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect Elaeocarpus obtusus ssp. apiculatus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect  Elaeocarpus pedunculatus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect Elaeocarpus petiolatus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect Endospermum diadenum	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	Negligible
Flora	Indirect Entada spiralis	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus benghalensis	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus caulocarpa	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus elastica	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus microcarpa	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus sagittata	Construction Decline in plant health	High Negligible	2/6 large specimen of this	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus variegata	Construction Decline in plant health	High Low	species will be indirectly affected by development of main plaza	Low	Not Expected to Occur	Developments will be done at existing built up area	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Ficus villosa	Construction Decline in plant health	High Negligible	indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Garcinia cf. griffithii	Construction Decline in plant health	High Negligible	manechy by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Gluta cf. wallichii	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development  2/10 (<10%) specimens affected indirectly by	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions  Developments will be done at	soil erosion control measures Implement soil erosion	Negligible	No change	No change No change	Negligible
Flora	Indirect Goniophlebium percussum	Construction Decline in plant health	High Negligible	development of main plaza and nature play area 2/6 specimens affected indirectly by the	Low	to Occur	existing built up area  Developments will be done at	control measures Implement soil erosion	Negligible	No change	No change No change	Negligible
Flora	Indirect Guioa pleuropteris	Construction Decline in plant health	High Low	development of boardwalk/trail 1/9 specimen affected	Low	to Occur	existing pathway area.  Developments will be done at	control measures Implement soil erosion	Negligible	No change	No change No change	Negligible
Flora	Indirect Gymnacranthera farquhariana var. eugeniifoli	ia Construction Decline in plant health	High Low	indirectly by development of main plaza 8/159 (<10%) specimen affected indirectly by	Low	to Occur	existing built up area	control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Gynochthodes rigida	Construction Decline in plant health	High Negligible		Low	Not Expected to Occur	Developments will be done at existing built up area	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Knema intermedia	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Knema malayana	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development  2/7 specimens affected	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	Negligible
Flora	Indirect Limacia scandens	Construction Decline in plant health	High Low	indirectly by development of boardwalk/trails	Low	Not Expected to Occur	Developments will be done at existing pathway area.	soil erosion control measures	Negligible	No change	No change No change	Negligible

No change No change

No change No change Negligible

Flora	Indirect	Litsea accedens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Litsea grandis	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Litsea umbellata	Construction	Decline in plant health	High	Negligible	5/33 (<10%) specimens affected indirectly by development of boardwalk/trail	Low	Not Expected to Occur	Developments will be done at existing pathway area.	Implement soil erosion control measures	Negligible
Flora	Indirect	Lomariopsis lineata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Macaranga griffithiana	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Macaranga hullettii	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Maesa sumatrana	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Melicope lunu-ankenda	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Memecylon cf. garcinioides	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Monocarpia maingayi	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Morinda elliptica	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Neolitsea cassia	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Nothaphoebe umbelliflora	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Oxyceros longiflorus	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Parishia insignis	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Pellacalyx saccardianus	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Piper ramipilum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Polyspora singaporeana	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Popowia fusca	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Psychotria ovoidea	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Pternandra echinata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible
Flora	Indirect	Rhodamnia cinerea	Construction	Decline in plant health	High	Low	2/9 specimens affected indirectly by development of main entrance and boardwalk/trails	Low	Not Expected to Occur	Developments will be done at existing built up areas	Implement soil erosion control measures	Negligible
Flora	Indirect	Rubus moluccanus var. angulosus	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible

											lauriament					
Flora	Indirect Sandoricum	koetiane Co	Construction Decline in p	nlant health	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	Implement soil erosion	Negligible	No change	No change	No change	Negligible
Tiora	manect Sandoncum	noeyape CC	onstruction Decline in p	piani nealin	riigii	Negligible	indirectly by development	very Low	to Occur	zones of proposed constructions	control measures	Negligible	No change	No change	No change	Negligible
											Implement					
Flora	Indirect Santiria apicu	ulata var. apiculata Co	Construction Decline in p	plant health	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	soil erosion	Negligible	No change	No change	No change	Negligible
							indirectly by development		to Occur	zones of proposed constructions	control measures					
											Implement					
Flora	Indirect Santiria cf. ru	ubiginosa var. rubiginosa Co	Construction Decline in p	plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
							mandaly by actoropment		10 0000.	zonec er proposed constituent	measures					
							No aposimon affastad		Not Expected	No anaciman will lie within impact	Implement					
Flora	Indirect Sterculia cf. o	coccinea Co	Construction Decline in p	plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
											measures					
<b>-</b> .							No specimen affected	., .	Not Expected	No specimen will lie within impact	Implement soil erosion	N . F 71				
Flora	Indirect Symplocos fa	asciculata Co	Construction Decline in p	plant health	High	Negligible	indirectly by development	Very Low	to Occur	zones of proposed constructions	control	Negligible	No change	No change	No change	Negligible
											measures Implement					
Flora	Indirect Tectaria sem	nininnata Co	Construction Decline in	nlant health	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	soil erosion	Negligible	No change	No change	No change	Negligible
rioid	mancot rotana sem	inpirinata SC	onou douon Decime in p	piant noutri	riigii	rtogrigibio	indirectly by development	voly Low	to Occur	zones of proposed constructions	control measures	regigiolo	140 Ghango	140 ondinge	140 onlange	regigible
											Implement					
Flora	Indirect Tetracera cf.	akara Co	Construction Decline in p	plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
							indirectly by development		to Occui	zones of proposed constituctions	measures					
											Implement					
Flora	Indirect Tetracera ma	acrophylla Co	Construction Decline in p	plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
											measures					
							No specimen affected		Not Expected	No specimen will lie within impact	Implement soil erosion					
Flora	Indirect Timonius wai	<i>llichianus</i> Co	Construction Decline in p	plant health	High	Negligible	indirectly by development	Very Low	to Occur	zones of proposed constructions	control	Negligible	No change	No change	No change	Negligible
											measures					
Flora	Indirect Uncaria cord	lata Ca	Construction Decline in r	plant hoolth	High	Nogligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	Implement soil erosion	Nagligible	No change	No change	No obongo	Nogligible
FIOIA	Indirect Uncaria cord	ala CC	Construction Decline in p	piani nealin	підії	Negligible	indirectly by development	very Low	to Occur	zones of proposed constructions	control measures	Negligible	No change	No change	No change	Negligible
											Implement					
Flora	Indirect Uncaria longi	iflora var. pteropoda Co	Construction Decline in p	plant health	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	soil erosion	Negligible	No change	No change	No change	Negligible
	3				3	3 3 4	indirectly by development	,	to Occur	zones of proposed constructions	control measures					3 3 4
											Implement					
Flora	Indirect Ziziphus calo	phylla Co	Construction Decline in p	plant health	High	Negligible	No specimen affected	Very Low	Not Expected to Occur	No specimen will lie within impact	soil erosion control	Negligible	No change	No change	No change	Negligible
							indirectly by development		to occur	zones of proposed constructions	measures			3		
Flora	Direct Adinandra du	umosa Co	Construction Mort	rtality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by		Negligible	No change	-	No change	Negligible
													No change	No change		
Flora	Direct Adinandra du			rtality	High High	Negligible Negligible	No specimen affected directly by development No specimen affected directly by development	Very Low	Not Expected to Occur Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible	_	No change	No change	Negligible Negligible
	Indirect Agelaea ma	acrophylla Co	Construction Mort				No specimen affected directly by development No specimen affected		Not Expected to Occur Not Expected	No specimen will be affected by impact of mortality No specimen will be affected by			No change	No change		
Flora	Indirect Agelaea ma	acrophylla Co otosa ssp. cordata Co	Construction Mort	rtality	High High	Negligible Negligible	No specimen affected directly by development No specimen affected directly by development No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur Not Expected to Occur Not Expected to Occur Not Expected	No specimen will be affected by impact of mortality  No specimen will be affected by impact of mortality  No specimen will be affected by impact of mortality  No specimen will be affected by		Negligible Negligible	No change	No change No change	No change	Negligible Negligible
Flora Flora Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril	acrophylla Co ntosa ssp. cordata Co ffithii Co	Construction Mort Construction Mort Construction Mort	rtality rtality rtality	High High	Negligible Negligible Negligible	No specimen affected directly by development	Very Low Very Low Very Low	Not Expected to Occur Not Expected to Occur Not Expected to Occur Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible	No change No change No change	No change No change No change	No change No change	Negligible Negligible Negligible
Flora	Indirect Agelaea ma	acrophylla Co ntosa ssp. cordata Co ffithii Co	Construction Mort	rtality rtality rtality	High High	Negligible Negligible	No specimen affected directly by development directly by development directly by development	Very Low	Not Expected to Occur Not Expected to Occur Not Expected to Occur Not Expected to Occur Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible	No change No change No change	No change No change No change	No change	Negligible Negligible
Flora Flora Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril	acrophylla Co ntosa ssp. cordata Co fffithii Co javanica Co	Construction Mort Construction Mort Construction Mort Construction Mort	rtality rtality rtality	High High	Negligible Negligible Negligible	No specimen affected directly by development No specimen affected	Very Low Very Low Very Low	Not Expected to Occur Not Expected to Occur Not Expected to Occur Not Expected to Occur Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by specimen will be affected by specimen will be affected by		Negligible Negligible Negligible	No change No change No change	No change No change No change No change	No change No change	Negligible Negligible Negligible
Flora Flora Flora Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium grit  Direct Anaxagorea g  Direct Angelesia sp	acrophylla Contosa ssp. cordata Conflithii C	Construction Mort Construction Mort Construction Mort Construction Mort Construction Mort	rtality rtality rtality rtality rtality rtality	High High High High	Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development No specimen affected	Very Low Very Low Very Low Very Low Very Low	Not Expected to Occur Not Expected	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible Negligible Negligible	No change No change No change No change No change	No change No change No change No change No change	No change No change No change No change No change	Negligible Negligible Negligible Negligible Negligible
Flora Flora Flora Flora Flora Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril  Direct Anaxagorea p  Direct Angelesia sp  Direct Anodendron	acrophylla Contosa ssp. cordata Conffithii Confidence C	Construction More Construction	rtality rtality rtality rtality rtality rtality rtality	High High High High High	Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development	Very Low Very Low Very Low Very Low Very Low Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No change No change No change No change No change No change	No change No change No change No change No change No change	No change No change No change No change No change No change	Negligible Negligible Negligible Negligible Negligible Negligible
Flora Flora Flora Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium grit  Direct Anaxagorea g  Direct Angelesia sp	acrophylla Contosa ssp. cordata Conffithii Confidence C	Construction More Construction	rtality rtality rtality rtality rtality rtality	High High High High	Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development	Very Low Very Low Very Low Very Low Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible Negligible Negligible	No change No change No change No change No change	No change No change No change No change No change No change	No change No change No change No change No change	Negligible Negligible Negligible Negligible Negligible
Flora Flora Flora Flora Flora Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril  Direct Anaxagorea  Direct Angelesia sp  Direct Anodendron	acrophylla Contosa ssp. cordata Conffithii Conjavanica Condendens Concordata Contosa ssp. cordata Contosa ssp. cordata Confitte Contosa ssp. cordata Contosa sp. cordata Co	Construction Mort	rtality rtality rtality rtality rtality rtality rtality	High High High High High	Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development No specimen affected	Very Low Very Low Very Low Very Low Very Low Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No change No change No change No change No change No change	No change	No change No change No change No change No change No change	Negligible Negligible Negligible Negligible Negligible Negligible
Flora Flora Flora Flora Flora Flora Flora Flora Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea p Direct Angelesia sp Direct Anodendron Direct Antidesma co	acrophylla Contosa ssp. cordata Contosa ssp. cordata Conffithii Conjavanica Confederation Conjavanica	Construction More Construction	rtality rtality rtality rtality rtality rtality rtality rtality rtality	High High High High High High	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No change	No change	No change	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible
Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril  Direct Anaxagorea p  Direct Angelesia sp  Direct Anodendron  Direct Antidesma cc  Direct Aporosa cf. la	acrophylla Contosa ssp. cordata Contosa sp.	Construction Mort	rtality	High High High High High High High High	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible
Flora Flora Flora Flora Flora Flora Flora Flora Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea p Direct Angelesia sp Direct Anodendron Direct Antidesma co	acrophylla Contosa ssp. cordata Contosa sp.	Construction Mort	rtality rtality rtality rtality rtality rtality rtality rtality rtality	High High High High High High	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No change	No change	No change	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible
Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril  Direct Anaxagorea p  Direct Angelesia sp  Direct Anodendron  Direct Antidesma cc  Direct Aporosa cf. la	acrophylla Contosa ssp. cordata Contosa condolleanum Contosa condolleanum Contosa con	Construction More Construction	rtality	High High High High High High High High	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible
Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril  Direct Anaxagorea p  Direct Angelesia sp  Direct Anodendron  Direct Antidesma co  Direct Aporosa cf. In  Direct Aporosa frute  Direct Archidendron	acrophylla Contosa ssp. cordata Contosa sp. condolleanum Contosa sp. condolleanum Contosa sp.	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea p Direct Angelesia sp Direct Anodendron Direct Antidesma co Direct Aporosa ch. lic	acrophylla Contosa ssp. cordata Contosa sp. condolleanum Contosa sp. condolleanum Contosa sp.	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible Negligible
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Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea p Direct Anodendron Direct Antidesma co Direct Aporosa frute Direct Aporosa frute Direct Archidendron Direct Baccaurea p Direct Bambusa hei	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa candolleanum Contosa cum Contosa cum Contosa cum Contosa cum Contosa contos	Construction More Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea ma  Direct Aglaia tomen  Direct Alangium gril  Direct Anaxagorea p  Direct Angelesia sp  Direct Andendron  Direct Antidesma ve  Direct Aporosa frute  Direct Archidendron  Direct Aporosa frute  Direct Archidendron  Direct Baccaurea p  Direct Bambusa bal	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa candolleanum Contosa cum Contosa cum Contosa cum Contosa cum Contosa contos	Construction More Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea p Direct Anodendron Direct Antidesma co Direct Aporosa frute Direct Aporosa frute Direct Archidendron Direct Baccaurea p Direct Bambusa hei	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa candolleanu	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea p Direct Anodendron Direct Antidesma co Direct Aporosa frute Direct Aporosa frute Direct Baccaurea p Direct Bambusa hei Direct Beilschmiedie Direct Breynia discig	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa cum Contosa	Construction More Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea property and provide the provided and pro	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa candolleanu	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea property and provide the provided and pro	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa candolleanu	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea property and provide the provided and pro	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa cum Contosa	Construction More Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea properties of the pro	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa candolleanu	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur Not Expected	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium gril Direct Anaxagorea p Direct Anodendron Direct Antidesma co Direct Antidesma co Direct Aporosa frute Direct Aporosa frute Direct Archidendror Direct Baccaurea p Direct Bambusa bai Direct Beilschmiedia Direct Breynia discig Direct Calophyllum Direct Calophyllum Direct Calophyllum Direct Calophyllum Direct Calophyllum	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa cum Contosa	Construction More Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium grill Direct Anaxagorea properties of the pro	acrophylla Contosa ssp. cordata Contosa candolleanum Contosa cum Contosa	Construction More Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible
Flora	Indirect Agelaea man Direct Aglaia tomen Direct Alangium gril Direct Anaxagorea p Direct Anodendron Direct Antidesma co Direct Antidesma co Direct Aporosa frute Direct Aporosa frute Direct Archidendror Direct Baccaurea p Direct Bambusa bai Direct Beilschmiedia Direct Breynia discig Direct Calophyllum Direct Calophyllum Direct Calophyllum Direct Calophyllum Direct Calophyllum	acrophylla Contosa ssp. cordata Contosa ssp. condolleanum Contosa cum	Construction Mort Construction	rtality	High High High High High High High High	Negligible	No specimen affected directly by development No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality No specimen will be affected by impact of mortality		Negligible	No change	No change	No change	Negligible

Flore	Direct	Chanamaunha fragusa	Canatavatian	Mantality	llimb	Nagligible	No specimen affected	Venden	Not Expected	No specimen will be affected by	Nagligibla	No shansa	No shansa	No shansa	Naglizikla
Flora	Direct	Chonemorpha fragrans	Construction	Mortality	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality No specimen will be affected by	Negligible	No change	-	No change	Negligible
Flora	Direct	Clerodendrum villosum	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Cratoxylum formosum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Cryptocarya griffithiana	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Dacryodes cf. costata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Dasymaschalon dasymaschalum	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Dialium platysepalum	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change		No change	Negligible
		, , ,		•			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by		-		•	
Flora	Direct	Dibridsonia cf. conferta	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Diplazium cf. phanerotis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Drepananthus cf. ridleyi	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Durio singaporensis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Elaeocarpus ferrugineus ssp. ferrugineus	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Elaeocarpus mastersii	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
		•		•			directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by					
Flora	Direct	Elaeocarpus nitidus	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Elaeocarpus obtusus ssp. apiculatus	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Elaeocarpus pedunculatus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Elaeocarpus petiolatus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Endospermum diadenum	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Entada spiralis	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
		•		•			directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by		· ·		•	
Flora	Direct	Ficus benghalensis	Construction	Mortality	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus caulocarpa	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus cf rumphii	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus elastica	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus microcarpa	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Ficus sagittata	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
		-		•			directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by			-	Ü	
Flora	Direct	Ficus variegata	Construction	Mortality	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus vasculosa	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Ficus villosa	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Garcinia cf. griffithii	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Garcinia forbesii	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Gluta cf. wallichii	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Gnetum cf. microcarpum	Construction	Mortality			directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by		No change	-	No change	Negligible
		•		•	High	Negligible	directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible				
Flora	Direct	Guioa pleuropteris	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Gymnacranthera farquhariana var. eugeniifolia	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Gynochthodes rigida	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Hetaeria oblongifolia	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Knema communis	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Knema intermedia	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
				•			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by				•	
Flora	Direct	Knema malayana	Construction	Mortality	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Limacia scandens	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Lindera lucida	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Litsea accedens	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Litsea grandis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Litsea umbellata	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Lomariopsis lineata	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by		No change	-	No change	Negligible
		·		•			directly by development No specimen affected		to Occur Not Expected	impact of mortality No specimen will be affected by	Negligible		-	•	
Flora	Direct	Macaranga hullettii	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Maesa sumatrana	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible

Flora	Direct	Melicope lunu-ankenda	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flore	Direct	Managadan of garaininida	Construction	Mantality	Himb	Magligible	No specimen affected	Van I am	Not Expected	No specimen will be affected by	Nastinikla	No shansa	No oboneo	No obones	Nagiaina
Flora	Direct	Memecylon cf. garcinioides	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Monocarpia maingayi	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Morinda elliptica	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
_		,		•			directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by		_		-	
Flora	Direct	Neolitsea cassia	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Nothaphoebe umbelliflora	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Oncosperma tigillarium	Construction	Mortality	High	Mogligiblo	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Tiola	munect	Oncosperna ugilianum	Construction	Wortanty	riigii	Negligible	directly by development	very Low	to Occur	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Oxyceros longiflorus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Parishia insignis	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
<b>5</b> 1	D: .	0.00					directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by					
Flora	Direct	Pellacalyx saccardianus	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Piper ramipilum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Polyspora singaporeana	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
1 1010	5	. oryopora singapor sana	00110111011011	mortanty			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by	. reging.s.e	Tto Ghango	110 onango	. to onango	
Flora	Direct	Popowia fusca	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Psychotria ovoidea	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Dtornandra cabinata	Construction	Mortality	Lliah	Nogligible	directly by development No specimen affected	Vondlow	Not Expected	No specimen will be affected by	Negligible	No shanga	No obongo	No obongo	Negligible
FIOIA	Direct	Pternandra echinata	Construction	Wortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Rhodamnia cinerea	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Rubus moluccanus var. angulosus	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
		· ·		•			directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by					
Flora	Direct	Salacia cf. korthalsiana	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Santiria apiculata var. apiculata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Santiria cf. rubiginosa var. rubiginosa	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Tiola	Direct	Santina ci. Tubiginosa var. Tubiginosa	Construction	Wortanty	riigii	Negligible	directly by development No specimen affected	very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flora	Direct	Sterculia cf. coccinea	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Symplocos fasciculata	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Flore	Discort	To starte a societion of	0	Mandalit.	10-6	No official	directly by development No specimen affected	V1	to Occur Not Expected	impact of mortality  No specimen will be affected by	No officials	No shores	No observe	No observe	NI C C C I
Flora	Direct	Tectaria semipinnata	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Tetracera cf. akara	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Tetracera macrophylla	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
				·			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by		-	•	-	
Flora	Direct	Timonius wallichianus	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Uncaria cordata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Uncaria longiflora var. pteropoda	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
Tiola	Direct	Oncana longillora var. pteropoda	Construction	Wortanty	riigii	Negligible	directly by development No specimen affected	very Low	to Occur	impact of mortality  No specimen will be affected by	rvegrigible	No change	No change	No change	Negligible
Flora	Direct	Xanthophyllum vitellinum	Construction	Mortality	High	Negligible	directly by development	Very Low	Not Expected to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Xylopia malayana var. malayana	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	Negligible	No change	No change	No change	Negligible
51	D: .						directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by					
Flora	Direct	Ziziphus calophylla	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ziziphus elegans	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	Negligible	No change	No change	No change	Negligible
						Assuming the									
						only specimen has been									
Flora	Indirect	Canthiumera robusta	Construction	Decline in plant health	High	cleared during									
						construction phase									
						Assuming the									
						only specimen									
Flora	Indirect	Oxyceros cf. bispinosus	Construction	Decline in plant health	High	has been cleared during									
						construction									
						phase Assuming the									
						only specimen									
Flora	Indirect	Strophanthus caudatus	Construction	Decline in plant health	High	has been cleared during									
						construction									
						phase									
							Many specimens of this species could get stolen								
<b>5</b> 1				<b>.</b>			as plant possess			Specimens are clustered/spread out,					
Flora	indirect	Hetaeria oblongifolia	Operational	Poaching	High	High	charismatic properties (orchid flowers but only	High	Less likely	and are accessible to members of public	Minor	No change	No change	No change	Minor
							obvious when its			•					
							flowering) Few plant specimens of								
						_	this species could get			Specimens are clustered/spread out,	••				
Flora	Indirect	Agelaea macrophylla	Operational	Poaching	High	Low	stolen (i.e., not charismatic, no	Low	Less likely	and are accessible to members of public	Minor	No change	No change	No change	Minor
							ethnobotanical value)			F					

Flora	Indirect Aglaia tomentosa ssp. cordata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Aidia densiflora	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Anaxagorea javanica	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Angelesia splendens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Aspidopterys concava	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Beilschmiedia madang	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Breynia discigera	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Calophyllum tetrapterum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Causonis japonica	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Chonemorpha fragrans	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Clerodendrum villosum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Cryptocarya griffithiana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Dasymaschalon dasymaschalum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Dialium platysepalum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Dibridsonia cf. conferta	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Drepananthus cf. ridleyi	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Elaeocarpus mastersii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are spread out, and accessible to members of public	Minor	No change	No change	e No change	Minor
Flora	Indirect Elaeocarpus nitidus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	e No change	Minor

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Flora	Indirect Elaeocarpus pedunculatus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Elaeocarpus petiolatus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Entada spiralis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Ficus sagittata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Ficus vasculosa	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Garcinia cf. griffithii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Garcinia forbesii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Goniophlebium percussum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are spread out, and accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Guioa pleuropteris	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Guioa pubescens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Gynochthodes rigida	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Horsfieldia polyspherula var. polyspherula	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Knema communis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Knema intermedia	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Limacia scandens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Litsea umbellata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Macaranga griffithiana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Macaranga hullettii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor

Flora	Indirect Maesa sumatrana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Melicope lunu-ankenda	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Memecylon cf. garcinioides	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Monocarpia maingayi	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Morinda elliptica	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Nothaphoebe umbelliflora	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Oncosperma tigillarium	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Oxyceros longiflorus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Parishia insignis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Pellacalyx saccardianus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect <i>Piper ramipilum</i>	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Polyspora singaporeana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Popowia fusca	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Psychotria ovoidea	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Pternandra echinata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Rubus moluccanus var. angulosus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Santiria apiculata var. apiculata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor
Flora	Indirect Strombosia javanica	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor	No change	No change	No change	Minor

Flora	Indirect Symplocos fasciculata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Tectaria semipinnata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Tetracera cf. akara	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Tetracera fagifolia var. borneensis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Tetracera macrophylla	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect <i>Uncaria cordata</i>	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Uncaria longiflora var. pteropoda	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Xanthophyllum vitellinum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Xylopia malayana var. malayana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Lindera lucida	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		Low	Low	No change	Minor
Flora	Indirect Aporosa benthamiana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	No change	No change	No change	Minor
Flora	Indirect Aporosa cf. lucida var. lucida	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	No change	No change	No change	Minor
Flora	Indirect Aporosa frutescens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	No change	No change	No change	Minor

Flora	Indirect Archidendron clypearia	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	> Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Put up signages to remind visitors not to stray off-trail > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular patrols to deter poaching activities > Transplant specimens of conservation significance away from publicly accessible areas	nange	No change No change	Minor
Flora	Indirect Cratoxylum formosum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	nange	No change No change	Minor
Flora	Indirect Dacryodes cf. costata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	> Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Put up signages to remind visitors not to stray off-trail > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular patrols to deter poaching activities > Transplant specimens of conservation significance away from publicly accessible areas	nange	No change No change	Minor
Flora	Indirect Gymnacranthera farquhariana var. eugeniifolia	a Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	> Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Put up signages to remind visitors not to stray off-trail > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular patrols to deter poaching activities > Transplant specimens of conservation significance away from publicly accessible areas	nange	No change No change	Minor
Flora	Indirect <i>Litsea grandis</i>	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	nange	No change No change	Minor
Flora	Indirect Neolitsea cassia	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	nange	No change No change	Minor

Flora	Indirect Sandoricum koetjape	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	No change	No change	No change	Minor
Flora	Direct Durio singaporensis	Operational	Poaching	High	Medium	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Medium	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Bambusa bambos	Operational	Poaching	High	Medium	Some plant specimens of this species could get stolen (i.e., plant species with ethnobotanical value	Medium	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Bambusa heterostachya	Operational	Poaching	High	Medium	Some plant specimens of this species could get stolen (i.e., plant species with ethnobotanical value	Medium	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Bambusa vulgaris	Operational	Poaching	High	Medium	Some plant specimens of this species could get stolen (i.e., plant species with ethnobotanical value	Medium	Less likely	Specimens are clustered/spread out, and are accessible to members of public	Minor		No change	No change	No change	Minor
Flora	Indirect Alangium griffithii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	> Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Put up signages to remind visitors not to stray off-trail > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular patrols to deter poaching activities > Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Anodendron candolleanum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	> Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Put up signages to remind visitors not to stray off-trail > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular patrols to deter poaching activities > Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Antidesma coriaceum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor

Flora	Indirect Antidesma velutinosum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Baccaurea polyneura	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Calophyllum ferrugineum var. ferrugineum:	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Calophyllum pulcherrimum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Calophyllum teysmannii var. teysmannii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Canarium patentinervium	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor

Flora	Indirect <i>Diplazium cf. phanerotis</i>	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Elaeocarpus ferrugineus ssp. ferrugineus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Elaeocarpus obtusus ssp. apiculatus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Ficus villosa	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect <i>Gluta cf. wallichii</i>	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Gnetum cf. microcarpum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor

Flora	Indirect <i>Knema malayana</i>	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Litsea accedens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Lomariopsis lineata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Salacia cf. korthalsiana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Santiria cf. rubiginosa var. rubiginosa	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Sterculia cf. coccinea	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor

Flora	Indirect Ziziphus calophylla	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Ziziphus elegans	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Less likely	BBNP already accessible to public	Minor	Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Put up signages to remind visitors not to stray off-trail     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular patrols to deter poaching activities     Transplant specimens of conservation significance away from publicly accessible areas	Low	Low	Less likely	Minor
Flora	Indirect Adinandra dumosa	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are spread out, and accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Campnosperma auriculatum	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Endospermum diadenum	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ficus benghalensis	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ficus caulocarpa	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ficus cf. rumphii	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ficus elastica	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ficus microcarpa	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ficus variegata	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are clustered/spread out, and are accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Rhodamnia cinerea	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are spread out, and accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Timonius wallichianus	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Not Expected to Occur	Specimens are spread out, and accessible to members of public	Negligible		No change	No change	No change	Negligible
Flora	Indirect Canthiumera robusta	Operational	Poaching	High	Assuming the	only specimen has been cleared	d during constru		account to members of public						
Flora	Indirect Oxyceros cf. bispinosus	Operational	Poaching	High		only specimen has been cleared									
Flora	Indirect Strophanthus caudatus	Operational	Poaching	High	Assuming the	only specimen has been cleared	d during constru	uction phase							

Appendix 1B Environmental Impact and Mitigation Register - BBTP

## Impact Assessment on Noise at D

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity		Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)		Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	Residents staying adjacent / near to the proposed project	Construction	Potential human annoyance to receptors residing in the vicinity of the construction footprint.	Priority 2	Negligible	Predicted noise levels are less than 3 dB(A) above the regulatory limits	Negligible	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	<ul> <li>Restricted Working Hours (RWH): The Contractor shall ensure that general construction activities are confined to daytime (0800-1800 hours) only, Monday to Saturday for all parks, while noisy activities are only limited to 1000 – 1700 hours for BBNP.</li> <li>The noise levels should not exceed the maximum permissible noise levels for construction set out in the Schedule to the Environmental Protection and Management (Control of Noise at Construction Sites) Regulations, and the project-specific maximum permissible noise levels of 75 dB (Leq 1 hour) and 90 dB (Leq 5 min) at the boundary.</li> </ul>	Negligible	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Human	Park visitors / Member of public	Construction	Potential human health impact due to exposure to excessive noise to park visitors / member of public		Negligible	Predicted noise levels are less than 3 dB(A) above the regulatory limits	Negligible	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	The Contractor shall ensure that hoarding is installed around the work zones to reduce noise propagation to surrounding area.  The Contractor shall ensure that workers are trained in noise-reduction behaviours such as reducing the drop height of materials, and turning off equipment and vehicle engines when not in use.  Daily toolbox briefings should include reminders on the need to implement noise-reduction behaviours, in particular during demolition activities.  The Contractor shall select quieter construction equipment and construction methods in accordance with Singapore Standard SS 602:2014 Code of Practice for Noise Control on Construction and Demolition Site, Annex G where necessary to achieve the permissible noise limits.	Negligible	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Fauna	Species that use sounds for communication, foraging, and breeding, or are known to have their behaviours disrupted by sound, and are of conservation significance  > Birds, non-volant mammals and bats of conservation significance		Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	High	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	The Contractor shall deploy quiet models of construction equipment i.e. generators, compressors, excavators. Where there are no quieter models, the Contractor shall demonstrate so under the submission of Quiet Machine/ Equipment List. Quieter models are defined as those having sound pressure levels at least 5 dB quieter than other models readily available locally, when measured 1 m from the equipment body while the equipment is operating at its rated load.  Provide acoustic shed / enclosure for construction equipment, where viable.  Site noisy machinery or equipment Plant away from the nearby noise	Moderate	Noise pollution mitigation measures shall be implemented in line with the Singapore Standards Code of Practice for Noise Control at Construction Sites, 2014 (SS602:2014), where practicable,	High	High	Less Likely / Rare	Minor	> Conduct pre-construction noise baseline monitoring for seven (7) days, one (1) month before commencement of construction work > Conduct continuous monitoring throughout the construction phase by installing real time continuous 24-hour "live" monitoring devices to monitor the noise levels > Conduct Weekly EMMP Inspection
Fauna	Species that are less affected by airborne noise but are of conservation significance  > Aculeate hymenopterans, odonates, butterflies, decapods and reptiles of conservation significance	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	Medium	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	sensitive receptors, where possible.  > All machines and equipment shall be labelled with weatherproof stickers showing clearly its noise specification i.e. noise levels at 1m from source. The Contractor shall verify the performance using a Class 1 (Type 1) sound meter on all machines monthly at 1 m distance from	Moderate	Noise pollution mitigation measures shall be implemented in line with the Singapore Standards Code of Practice for Noise Control at Construction Sites, 2014 (SS602:2014), where practicable,	High	Medium	Less Likely / Rare	Minor	> Conduct pre-construction noise baseline monitoring for seven (7) days, one (1) month before commencement of construction work > Conduct continuous monitoring throughout the construction phase by installing real time continuous 24-hour "live" monitoring devices to monitor the noise levels > Conduct Weekly EMMP Inspection
Fauna	Species that are not of conservation significance  > all other species	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	>The Contractor shall use quieter (non-percussive) piling methods, for example bored, jack-in or micropiling methods.  > The Contractor shall install noise barriers around the work areas before any work commences assessment show that the stipulated noise criteria will be breached by the works. Noise barriers shall be in accordance with Singapore Standard SS 602:2014 Code of Practice for Noise Control or Construction and Demolition Site, Annex F Noise Control Techniques, Section F3.3 and the any specific noise mitigation measures to be stipulated by the Board. The noise barriers shall be designed to achieve a minimum reduction of 5 dB(A).  > Daily toolbox briefings should include reminders on the need to implement noise-reduction behaviours, in particular during piling activities.	Minor	N/A	High	Low	N/A	N/A	> Conduct Weekly EMMP Inspection

Appendix 1B - Environmental Impact and Mitigation Register

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequenc e (C = S × I)		Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	> Residents staying adjacent / near to the proposed project >Students from the nearby schools	Construction	Potentially result in adverse impacts on air quality, and public and ecosystem health  Potentially generate significant nuisance at receptors (human receptors) in the vicinity of the construction footprint/ proposed development.	Priority 1	Negligible - Medium	Earthwork footprint >2,500 m2 - 10,000 m2, moderately dusty soil type and total materials to be moved <5,000 tonnes	Very Low - Medium	Possible / Occasional	sites, upon implementation of minimum controls	> Ensure that hoarding is installed around the Project site or work areas to control the dispersion of dust.  > Perform earthworks in phases to reduce the extent of exposed footprint at one time.  > Ensure effective water suppression is used during demolition operations.	Minor - Moderate	A site-specific Air Pollution Control Plan ("APCP") should be developed to put in place measures such as establishing communications, implementation of site management measures, monitoring, etc.	Negligible - Medium	Very Low - Medium	Less Likely / Rare	Negligible - Minor	Conduct pre-construction ambient air baseline monitoring for seven (7) days, one (1) month before commencement of construction work by installing real time continuous 24-hour "live" monitoring devices to monitor the PM10 and PM2.5 levels     In the event of a valid complaint, once a month for as long as the particular complaint related construction activity continues.     Conduct Weekly EMMP Inspection
Human	Park visitors / Member of public	Construction	Potentially result in adverse impacts on air quality, and public and ecosystem health  Potentially generate significant nuisance at receptors (human receptors) in the vicinity of the construction footprint/ proposed development.	Priority 3	Negligible - Medium	Earthwork footprint >2,500 m2 - 10,000 m2, moderately dusty soil type and total materials to be moved <5,000 tonnes	Negligible - Very Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	Notinimize drop height.  Notice are a Earth Control Measures Plan.  Prepare an Earth Control Measures Plan.  Ensure that vehicles and equipment are not left idling when not in use.  Maintain and operate all equipment and machinery in a manner such that it does not give rise to smoke emissions, and ensure emissions comply with the Environmental Protection and Management (Vehicular Emissions) Regulations or Environmental Protection and Management (Off-Road Diesel Engine Emissions) Regulations 2012, if applicable.  A list of equipment shall be submitted demonstrating consideration of alternatives.  Ensure that truck loads carrying dry materials (such as cement, sand, aggregate, soil etc.) into the construction area will be covered.  Periodically wet the unpaved temporary access roads to prevent dust propagation.	Negligible - Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Nature Areas	Nature areas of nationally designated site	Construction	N/A	Priority 2	Negligible - Medium	Earthwork footprint >2,500 m2 - 10,000 m2, moderately dusty soil type and total materials to be moved <5,000 tonnes	Negligible -	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	> Ensure that workers clean up any spoil/earth spillage onto the haulage routes immediately and undertake proper housekeeping of the construction site, as well as roadways linked to the entrances of the worksites, to ensure that roadways, vehicle wheels and equipment tracks are clear of dust or mud, and that appropriate barriers, tarpaulin covers/erosion blankets (fully biodegradable, wildlife-friendly) have been repaired and/or reinstated.  > Impose a maximum-speed-limit of 25 kilometres per hour (km/hr) on paved or surfaced haul roads and 15 km/hr on unpaved haul roads and work areas.  > Ensure all stockpiles of demolished items, debris or good earth / aggregates are covered under canvas sheets or erosion control blankets (fully biodegradable, wildlife-friendly).  > Minimise the volume of spoil stockpiled and potential for dust generation and erosion/runoff, schedule removal of spoil from the contract area at least once every five (5) days.	Negligible - Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity		Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	Visitors / members of public	Construction	Potential for direct soil and/or groundwater, and sediment contamination within the Study Area. Potential pollution to the adjacent areas within the immediate vicinity of the project due to migration of soil and/or groundwater contamination, off-site.	Priority 3	Low	Only small scale localised soil and/or sediment contamination is expected, which is not likely to extend beyond the Study Area and possible to remediate	Very Low	Possible / Occasional	sites, upon implementation of minimum controls	> Practice due diligence in proper storage and handling of machinery to prevent release of chemicals, fuels or other potentially harmful materials.  > Transfer of fuel shall be done over contaminant trays and mats to prevent spillage into the ground.  > Ensure oil-containing equipment or machineries are inspected for leaks before being put into use.  > Provide emergency spill kits on site in the event of any fuel spillages. The emergency response team shall also be competent in the use of these spill kits.  > Chemical and fuel in drums, carboys, containers, etc shall be stored in a designated storage area within a building or covered shed with concrete floors and containment facilities to contain any leak or spillage.  > A full containment should be provided for bulk storage oil tanks, including skid tanks.  > Ensure all hazardous substance and chemical containers are labelled as per the GHS requirement  > Ensure a chemical inventory is maintained to track the movement of all hazardous substance and chemicals.  > Return the chemicals back to its designated storage areas when not in use.		N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Nature 1 Areas	Nature areas of nationally designated site	Construction	Potential for direct soil and/or groundwater, and sediment contamination within the Study Area.  Potential pollution to the adjacent areas within the immediate vicinity of the project due to migration of soil and/or groundwater contamination, off-site.	Priority 2	Low	Only small scale localised soil and/or sediment contamination is expected, which is not likely to extend beyond the Study Area and possible to remediate	Very Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of	Transfer of chemicals shall be done over contaminant trays and mats to prevent spillage into the ground.  All leaks and spillages in the storage area or construction site shall be collected and sent to a licensed toxic waste collector for proper disposal.  Provide emergency spill kits on site in the event of any chemical spillages. The emergency response team shall also be competent in the use of these spill kits.  Ensure toxic industrial wastes (TIWs) are stored in a designated storage area within a building or covered shed with concrete floors and containment facilities to contain any leak or spillage.  Maintains a TIW register, which is to be updated on a weekly basis.  TIW shall be collected regularly by a licensed TIW collector for off-site disposal.  Ensure leaks and spillages in the TIW storage area or construction site are collected and sent to a licensed toxic waste collector for proper disposal.	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity			Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Water Body	Seng Chew Quarry Lake	Construction	Hydrology:  > Increased stormwater peak flow contributions to the channel can lead to increased water level and subsequent flooding of surrounding areas adjacent to the stream/drain due to the land use change from land clearing; and > Stormwater run-off from exposed and unstable slopes may cause soil erosion.  Water contamination: > Elevated levels of suspended solids leading to increased turbidity and sedimentation rates, solid waste, toxic material, etc; and > Increase in the levels of oil, grease, and other chemical substances.	Priority 2	Medium (water quality) Negligible (hydrology)	Proximity of construction activities to the water (in water construction activities). Spatially limited footprint of proposed viewing deck; low risk of erosion to quarry lake granite banks.		Less Likely / Rare	at construction sites,	All work must comply to the PUB, Singapore's National Water Agency's Code of Practice on Surface Water Drainage, particularly Section 6 – Requirements for Construction Activities. The key relevant requirements are highlighted below:  General  > The execution of any work shall not change, disrupt, fill, block, divert or disturb the existing overland flow or the existing system of drains unless an alternative drainage system has been approved by PUB.  > The runoff within, upstream of and adjacent to the worksite shall be effectively drained away without causing drainage problems within the worksite or in areas outside the worksite.  > Bunds of stockpiled materials such as earth from trench work shall not be longer than 10 m and gaps of at least 1 m width shall be provided between the bunds to allow the free flow of surface runoff.  > Material from any stockpile shall not be allowed to fall or be washed into the drain.  Earth Control Measures  > Water quality parameter compliance: The discharge from any	(hydrology)	N/A	N/A	N/A	N/A	N/A	> Perform real-time TSS monitoring > Monitor water quality at the quarry lakes on-site on a monthly basis during the period of in-water or near-water > Conduct Weekly EMMP Inspection
Water Body	Little Guilin Quarry Lake	Construction	Liquid effluent generation:  Inappropriate discharge of wastewater to the watercourse will result in contamination in nearby water sources; and Inappropriate discharge of domestic sewage and poor maintenance of the portable toilet (e.g. overflow or overload) can result in run-off to nearby water sources and potentially contaminate the waterbodies located adjacent to the construction sites.  Solid wastes:  Solid wastes:  Solid wastes generated can lead to elevated levels of suspended solids entering waterbodies via run-off or improper handling/disposal.  Improper storage, handling, disposal or leakage of toxic waste generated at temporary work areas can lead to water contamination.  Improper management of chemical substances:  Contaminated stormwater due to improper storage/disposal/transport of chemical materials handled and stored on site leading to an increase in the levels of oil, grease and other chemical substances in the nearby waterbodies; and  Fuel and lubricants spillage from maintenance of construction vehicles and mechanical equipment can also lead to elevation in levels of oil in the nearby waterbodies.		Medium (water quality) Negligible (hydrology)	Proximity of construction activities to the water (in water construction activities). Suspended nature of boardwalk above the water surface; low risk of erosion to quarry lake granite banks.	(hydrology)	Possible / Occasional (water quality) Less Likely / Rare (hydrology)	Not expected to regularly happen at construction sites, upon implementation of minimum controls	construction / earthwork sites into storm water drainage system shall not contain Total Suspended Solids ("TSS") in concentrations greater than, the prescribed limits under Regulation 4(1) of the Sewerage and Drainage (Surface Water Drainage) Regulations.  > Minimal or no discharge: Wherever possible, a construction / earthwork site should practise recycling of water. The recycled water could be used for non-potable purposes to minimise discharge into the stormwater drainage systems.  > Design criteria: The Erosion Control Measures ("ECM") shall be designed to cope with a minimum design rainfall intensity of a return period of 1 in 5 years storm.  > ECM installation before commencement of work: The ECM shall be installed by the site operator / contractor according to the endorsed plans and the completed ECM at site shall be approved by the Qualified Erosion Control Professional ("QECP") before commencement of construction and earthworks.  > The site operator/contractor shall ensure that the ECM designed and installed shall be continuously reviewed by the QECP for every stage of the earthworks and construction. The ECM shall remain effective throughout the whole duration of works. The site operator/contractor shall add or amend the ECM at the site according to the designed and for the QECP.	Minor (water quality) Negligible (hydrology)	N/A	N/A	N/A	N/A	N/A	> Perform real-time TSS monitoring > Monitor water quality at the quarry lakes on-site on a monthly basis during the period of in-water or near-water > Conduct Weekly EMMP Inspection

Receptor Type	Туре	Recorded	Receptor ( Scientific Name)	Receptor (Common Name)	Global Status (IUCN/CITES)	National Status	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	Likelihood (L)	Rationale for likelihood	Key minimum controls > Erect hoardings	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual consequence	Residual likelihood	Residual impact significance
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Embakonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	rauna entry  > Avoid fogging  > No night works (except security-critical works)  > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Unlikely	construction-bamboo clusters do not overlap	fauna entry	Negligible		High	High	Unlikely	Negligible
Fauna	Bat	No	Tybnycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Unlikely	Impact is not expected to happen during construction-bamboo clusters do not overlap with impact zone	fauna entry	Negligible		High	High	Unlikely	Negligible
Fauna	Bee	No	Amegilia insularis	NA .	Not Assessed	Vuinerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heamy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA.	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA.	Not Assessed	Vuinerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible

Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Novid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligibie	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible

Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Chiloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injurymorality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heaving machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect haardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pro-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	: Violet cuckoo	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect haardings around worksites involving heavy machinery (i.e., Main Enthance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hadrings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksiles involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Dicaeum chrysortheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect heardings around worksites involving the second programmer (i.e., Main Entance) to prevent fauna entire) > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible

Fauna	Bird	No	Hakyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fanna entry > Avoid foggins > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksities involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid flogging > No night works (except security-critial works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Nettapus coromandellanus	Cotton pygmy goose	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Psitinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injurymentality from construction activitie	Low	Unlikely	Impact is almost certain to occur during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No right works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injurylmortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible

Fauna	Bird	Yes	Pycnonólus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction     (exce	Erect hoardings around worksites involving heavy schingey (Le, Main intrance) to prevent fauna entity > Avoid foggling No night works yorks) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	c Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction > 1 (exce	Erect hoardings around workstes involving heavy schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging > No night works peet security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	are in mac Impact is not expected to happen during construction     (exce	Erect heardings around worksites involving heavy (i.e., Main trance) to prevent fauna entry > Avoid fogging No night works pept security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected in the to happen during construction construction > P	Erect heardings around worksites involving heavy achinery (i.e., Main itrance) to prevent fauna entry > Avoid fogging > No night works pept security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction   exception	Erect heardings around worksites involving heavy schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging > No night works pept security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	Erect heardings around worksites involving hears schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging > No night works pept security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction   constructio	Erect hoardings around worksites involving heave schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging > No night works peet security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction     (exce	Erect hoardings around worksites involving heavy schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging > No night works pept security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	Erect hoardings around worksites involving heavy schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging > No night works pet security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	. NA	Not Assessed	Nationally Extinct (Rediscovered	) Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	are in mac in ma	Erect hoardings around worksites involving heavy schinery (i.e., Main trance) to prevent faune entry > Avoid fogging > No night works epst security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction   constructio	Erect hoardings around worksites involving heavy schinery (i.e., Main trance) to prevent fauna entry > Avoid fogging No night works pept security-critical works) Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible

Fauna	Butterfly	No	Arhopale eumoļihus maxwelli	Green cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., aim Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet cekblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except securily-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pro-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/moratily from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-feiling fauna inspections	Negligible	Low	Low	Unlikely	Negligible

Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., aim Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Law	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid foging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low suspeptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid foging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Paplio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligble	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avolid fogging > No night works (except security-critical works) > Pro-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Tapena thwaltesi bornea	Dark flat	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/moratily from construction activities	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-feiling fauna inspections	Negligble	Low	Low	Unlikely	Negligible

Fauna	Butterfly	No	Telicata colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injunymortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction on the construction of the construction of the construction on the construction of the constr	rect hoardings und worksites orking heavy iningy (i.e., Main inney	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	rect hoardings and worksites colving heavy inery (i.e., Main nuce) to prevent auna entry void fogging to night works t security-critical works) e-felling fauna spections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	rect hoardings und worksites colving heavy inery (i.e., Main ince) to prevent auna entry void fogging o night works t security-critical works) u-felling fauna nspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Zėla storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	Impact is not expected to happen during construction	rect hoardings und worksites choking heavy inery (i.e., Main nuce) to prevent auna entry void fogging on ight works 4 security-critical works) e-felling fauna nspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Bolga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injurymortality from construction activities	High	Possible	Impact could possibly happen or has been known to occur during construction (except s	rect hoardings und worksites choking heavy inery (i.e., Main nuce) to prevent auna entry void fogging o night works t security-critical works) u-felling fauna nspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injurymentally from construction archites	High	Possible	> Erec aroun invok machini Impact could possibly happen or has been known to occur during construction except s except s > Pre-	rect hoardings und worksites volving heavy inery (i.e., Main noce) to prevent	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trappady injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	aroun involvement of the property of the prope	rect hoardings und worksites choking heavy inery (i.e., Main nuce) to prevent auna entry void fogging o night works 4 security-critical works) e-felling fauna nspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on blodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trappady injured' dead' dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protecter (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erec aroun Impact could possibly happen or has been known to occur during construction excepts to v > No excepts v > Pre-	rect hoardings und worksites volving heavy inery (i.e., Main noce) to prevent	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on blodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trappady injured' dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Plyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injurymentally from construction activities	High	Possible	aroun involvement of the property of the prope	ouno entre	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on blodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trappady injured/dead/dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injurymortality from construction activities	High	Possible	> Erec aroun involvement invol	rect hoardings und worksites volving heavy inery (i.e., Main noe) to prevent	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildife > Formulate a wildiffe response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-marine turtle	No	Amyda carlllaginea	Asian softshell turtle	Vulnerable; CITES protectee (Appendix II)	Vuinerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activities	Low	Unlikely	> Erec aroun invol machine. Stream is far away from the trails - Av > No 1 (except s	rect hoardings und worksites volving heavy inery (i.e., Main noe) to prevent	Negligible		Low	Low	Unlikely	Negligible

Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable: CITES protected (Appendix II)	Near Threatened	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Impact could possibly happen or has been known to occur during construction (auna entity) > No night works (except security-critical works) > Pre felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on blodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erect hoardings around workslites involving heavy machinery (i.e., Main Entrance) to prevent happen or has been known to occur during ocnstruction on the control of the	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMM? See that the personnel on blodiversity searcroses and actions to take when encountering wildlife > Formular a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Medium	Species that are mobile but possibly susceptible to accidental injuryimortality from construction activities	Medium	Less Likely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry construction sites  Not known to happen at construction sites  > No night works  > No night works  > Pre-felling fauna inspections	Minor		Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable: CITES protected (Appendix I)	Endangered	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erect hoordings around worksites involving heavy manufact could possibly happen or has been known to occur during construction construction    No night works    > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead! dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erect hoardings around worksites with the property of the pr	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on blodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erect heardings around worksites involving heavy machinery (i.e., Main Envolving heavy machinery) (i.e., Main Envolving heavy machine	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering witdlife > Formulate a witdlife response plan to be executed when trapped/injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionalitrus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Accidental injury or mortality	High	High	Species with high susceptibility to accidental injury/mortality from construction activities	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Enricher) (i.e.	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/ dangerous fauna is found on-site	High	High	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	> Erect heardings around worksites involving heavy machinery (i.e., Main Impact is not expected to happen during construction on the construction of the construction	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/morality from construction activitie	Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry construction Award for Spring Prevent fauna entry construction No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Impact is not expected to happen during construction (authority of Avoid fogging > No right works (except security-critical works) > Pre-felling fauna entry	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	inspections  > Erect hoardings around worksites involving heavy  Impact is not expected to happen during construction  construction  > No right works  > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible

Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pro-folling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except securily-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injury/mortality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Species with low susceptibility to accidental injurymentality from construction activitie	Low	Unlikely	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > Avoid fogging > No night works (except security-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Cheiromeles torquatus	Naked buildog bat	Least Concern	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of sile personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No right works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vuinerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of sile personnel beyond the worksite	Medium	Medium	Less likely	Minor

Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Frect heardings around worksites involving heavy involving heavy involving heavy.  Not adversely affected Enterneop to limit site by human presence personnel movement to within worksites      No night works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence within worksites on ight works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect heardings around verticates involving heavy machinery (i.e., Main Not adversely affected by human presence by hu	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect heardings around worksites by human presence b	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect heardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence personnel movement to within worksites > No night works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA.	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected Entrace) to limit site by human presence personnel movement to within worksites     > No night works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA.	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Serich hardings around worksites invoking heavy machinery (i.e., Main Not adversely affected by human presence personnel movement to within worksites > No night works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile omata	NA	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence within worksites > No night works (except safety-critical	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ramera	NA.	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	works)  > Erect heardings around worksites involving heavy Not adversely affected by human presence by human presence personnel movement to within worksites  > No night works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA.	Not Assessed	Vulnerable	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Serich hardings around worksites invoking heavy machinery (i.e., Main Not adversely affected by human presence personel movement to within worksites > No night works (except safety-critical works)	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Nomia apicalis	NA.	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	> Erect hoardings around worksites involving heavy involving heavy machinery (i.e., Main Not adversely affected Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	vorks)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence within worksites No night works (evcopt safety-critical	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence within worksites > No night works (except safety-critical	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	works)  > Erect hoardings around worksites involving heavy maked by human presence by human presence  > No night works (except safety-critical works)	Minor	Medium	Medium	Unlikely	Minor

Fauna	Bird	No	Brachypodius melanocephalos	: Black-headed bulbul	Least Concern	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Human traffic confined within worksites within worksites Programme Involvement to within worksites No night works (except safely-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Eirect hoardings arrund vorficiste involving heavy machinery (i.e., Main Not adversely affected by human presence by h	Minor		High	High	Unlikely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect heardings around worksides involving heavy machinery (i.e., Main Not adversely affected by human presence by hum	Minor		High	High	Unlikely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchu	s Violet cuckoo	Least Concern	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect heardings around worksites inwolving heavy machinery (i.e., Main Not adversely affected by human presence between the consistence) to might works (except safety-rritical works)	Minor		High	High	Unlikely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence works) = No ingist works (except safety-rritical works)	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect heardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence within worksites No ingith works (except safety-rifical works)	Minor		High	High	Unlikely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site by human presence by human presence with machinery (i.e., Main Entrance) to limit site to within worksites > No night works (except safely-critical works)	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence value (i.e., Main Entrance) to limit site that the presence of the prese	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatch	ε Vulnerable	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence by human presence contains the second movement to within worksites > No night works (except safely-critical works)	Minor		High	High	Unlikely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence value (i.e., Main Entrance) to limit site to within worksites No night works (except safety-rifical works)	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Dicaeum chrysortheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence value (i.e., Main Entrance) to limit site that the properties of the propertie	Minor		High	High	Unlikely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect heardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence with the properties of t	Minor		High	High	Unlikely	Minor
Fauna	Bird	Yes	Hallaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by human presence by human presence within worksites No ingirth works (except safety-critical works)	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to with worksites > No night works (except safety-critical works)	Minor		High	High	Unlikely	Minor

Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Human traffic confined within worksites within worksites Programme Involvement to within worksites No night works (except safely-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect hoardings around worksites involving heavy machinery (ie., Main Entrance) to limit site by human presence by human presence by human presence within worksites > No night works (except safety-rifical works)	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect heardings around worksites involving heavy involving heavy machinery (i.e., Main Entrace) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect hoardings around worksiles involving heavy machinery (i.e., Main Not adversely affected Entrance) to limit sitle personnel movement to within worksiles No night works (except safely-critical works)	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safely-critical works)	Minor		High	High	Unlikely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable: CITES protected (Appendix II)	Near Threatened	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites  No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Human traffic confined within worksites personnel movement to within worksites > No night works (except safety-critical works)  > Erect hoardings	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	around worksites involving heavy machinery (i.e., Main Human traffic confined within worksites within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	within worksites personne movement to within worksites  > No night works  (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	> Erect hoardings around worksites involving heavy machinery (i.e., Main Human traffic confined within worksites within worksites + No night works (except safely-rifical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely	> Erect hoardings around worksites involving heavy machinery (i.e., Main Not adversely affected by human presence by hum	Minor		Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	> Erect heardings around worksites involving heavy machinery (i.e., Main Human traffic confined within worksites within worksites > No night works (except safely-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	> Erect hoardings around worksites inroking heavy machinery (ita, Main Finance) to limit site personnel movement to within worksites > No night works (except safely-critical works)	Minor		High	High	Unlikely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	> Erect heardings around vortisates involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites   > No night works (except safety-rifical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor

Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Unlikely	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to mitt site personel movement to within worksites > No night works (except safety-critical works)	Minor		High	High	Unlikely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA NA	Not Assessed	Nationally Extinct (Rediscovered)	) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except) safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Athopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except) safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksitles involving heavy machinery (i.e., Main Entrance) to limit sitle personnel movement to within worksitles > No night works (except) safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except) safely-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	personnel movement to within worksites > No night works (except safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksitles involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksitles > No night works (except) safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	works) > Erect heardings around worksites irwoking heavy machinery (e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor

Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works) > Erect heardings	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	around worksites involving heavy machinery (i.e., Main	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	rect hearings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works) > Erect hoardings	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	around worksites involving heavy machinery (i.e., Main	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Rachana jälindra burbona	Banded royal	Not Assessed	Critically Endangered Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered) Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor	Low	Low	Less likely	Minor

Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Zala storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Non-marine snake	No	Bolga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safely-critical	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible		personnel movement to within worksites > No night works (except safety-critical	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Unlikely		> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical	Minor		Medium	Medium	Unlikely	Minor
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	presence	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safely-critical	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Possible		personnel movement to within worksites > No night works (except safety-critical	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	lamys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible		personnel movement to within worksites > No night works (except safety-critical	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable: CITES protected (Appendix I)	Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	works)  > Erect hoardings around worksites involving heavy machinery (i.e., Main	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Less likely	Minor

Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered: CITES protected (Appendix I)	Critically Endangered	Construction	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main II Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionallurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Possible	Human traffic confined within worksites	> Erect hoardings around worksites involving heavy machinery (i.e., Main i Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Moderate	> Restrict entry of site personnel beyond the worksite	High	High	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Ödonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Ödonate	No	Chalybeothernis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect heardings around worksites involving heavy machinery (i.e., Main Entrance) to limit site personnel movement to within worksites > No night works (except safety-critical works)	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Construction	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Main	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked buildog bat	Least Concern	Critically Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect headings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor

Fauna	Bat	No	Emballorura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (a. Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bee	No	Amegilia insularis	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry  > No night works (except safety-critical works)  > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat: highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry  > No night works (except safety-critical works)  > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formutate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat: highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry  > No night works (except safety-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formutate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat, highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped injured dead' dangerous fauna is found on-site	Medium	Medium	Less likely	Minor

Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vuinerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry  > No night works (except safety-critical works)  > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on blodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	Entrance) to prevent	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat, highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat, highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	found onto	Moderate	> Conduct regular sile inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat, highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	Entrance) to prevent	Moderate	> Conduct regular sile inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/injured/ dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Medium	Possibly perceived as threat, highly tolerant of human presence	Medium	Possible	Impact could possibly happen or has been known to occur during construction	fauna entry	Moderate	Conduct regular sile inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found on-site	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible

Fauna	Bird	No	Chrysococcyx xanthorhynchi.	s Violet cuckoo	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vuinerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vuinerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Cyornis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dicaeum chrysortheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Hak-yon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Hallaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible

Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Law	Unlikely	Negligible
Fauna	Bird	No	Nettapus coromandellanus	Cotton pygmy goose	Least Concern	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Nyeticorax nyeticorax	Black-crowned night heron	Least Concern	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Pycnonolus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Strix selioputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites invoking heavy machinery (i.e., Main Entrance) to prevent fauna entry > No right works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible

Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	VeryLow	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical worksites) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Ancerna blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect heardings around worksteles involving heavy machinery (i.e., Main Entrance) to prevent faura entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as ruisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligibile	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	VeryLow	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-ortical works) > Pre-felling fauna inspections > Erect hoardings around worksites	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical worksites) > Pre-felling fauna inspections > Erect heardings around worksites	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around workstes involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical workstes) > Pre-felling fauna inspections > Erect hoardings around workstes	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	involving heavy machinery (i.e., Main Entrance) to prewent feauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect heardings around worksites	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	involving heavy machinery (i.e., Main Entrance) to prevent faune entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible

Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Negligble	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections > Frect hoardings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksles involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pro-felling fauna	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	personnel  Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	NA	inspections  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry  > No night works (except safety-critical works) > Pro-felling fauna	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	personnel  Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	NA	inspections  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry  > No night works (except safety-critical works) > Pre-felling fauna	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	personnel  Species that are not perceived as nuisances or	Very Low	Unlikely	NA	inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works)	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vuinerable	Construction	Human-wildlife conflict	High	Negligible	threats by construction personnel  Species that are not	Very Low	Unlikely	NA	> Pre-felling fauna inspections  > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry  > No night works (except safety-critical	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	works) > Prot-filling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	works) > Pre-filling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works	Negligible	Low	Low	Unlikely	Negligible
											Species that are not perceived as nuisances or threats by construction personnel				(except safety-critical works) > Pre-felling fauna inspections					

Fauna	Butterfly	Yes	Polanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA NA	> Erect hoardings around worksites involving heavy machinery (i.e., main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	involving heavy machinery (i.e., Main Entrance) to prevent fauna entry No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings around worksites	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	zelet hadungs around worksites involving heavy machinery (e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	High	Species that are typically perceived as both ruisances and threats by construction personnel, may deliver venonous bite if provoked	High	Possible	Impact could possibly happen or has been known to occur during construction	Entrance) to prevent	Moderate	> Conduct regular hoarding inpsections to ensure there are no gape to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped injured/ dead/dangerous fauna is found on-site > Train site personnel that feeding on wildlife is strictly prohibited	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	High	Species that are typically perceived as both ruisances and threats by construction personnel, may deliver venomous bite if provoked	High	Possible	Impact could possibly happen or has been known to occur during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Moderate	Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry     Conduct regular site inspections to ensure contractor compliance with the EMMIP     Train site personnel on biodiversity awareness and actions to take when encountering withing the second product of the second within the product of the executed when trapped injured ideal'd dangrous fauna is found on-site in Train site personnel that feeding on wildfile is strictly prohibited.	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both ruisiances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor

Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Human-wildlife conflict	High	High	Species that are typically perceived as both ruisances and threats by construction personnel, may deliver venomous bite if provoked	High	Possible	Impact could possibly happen or has been known to occur during construction	> Erect hoardings around worksites involving heavy machinery (ie. Main Entrance) to prevent fauna entry > No night works (except safety-critical worksites) > Pre-failing fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no ages to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped hijured/ dead 'dangerous fauna is found on-site > Train site personnel that feeding on wildlife is strictly prohibited	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	Predominantly ground- dwelling; can be excluded with hoarding	fauna entry	Minor		Low	Low	Less likely	Minor
Fauna	Non-marine snake	No	Sitrynophis melanocephalus	Black-headed collared snake	e Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	High	Species that are typically perceived as both ruisances and threats by construction personnel, may deliver venomous bite if provoked	High	Possible	Impact could possibly happen or has been known to occur during construction	> Erect hoardings around worksites involving heavy machinery (i.e. Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-feiling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering widtlife > Formulate a wildlife response plan to be executed when trapped hijured/ dead' dangerous fauna is found on-site > Train site personnel that feeding on wildlife is strictly prohibited	High	High	Less likely	Minor
Fauna	Non-marine turtle	No	Amyda cartileginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	lomys horsifieldii	Horsfield's flying squirrel	Least Concern	Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Construction	Human-wildlife conflict	High	Medium	Species that are typically perceived as nuisances and possibly as threats by construction personnel, highly tolerant of human presence and urban environments, and frequently implicated in human-wildlife	Medium	Possible	Impact could possibly happen or has been known to occur during construction	> Erect hoardings around worksites involving heavy machinery (ie. Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-failing fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent faune entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering widtlife > Formulate a wildlife response plan to be executed when trapped injured/ dead' dangerous fauna is found on-site > Train site personnel that feeding on wildlife is strictly prohibited	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable: CITES protected (Appendix II)	Least Concern	Construction	Human-wildlife conflict	High	High	Species that are typically perceived as both nuisances and threats by construction personnel, highly tolerant of human presence and urban environments, and are frequently implicated in human-wildlife conflict	High	Possible	Impact could possibly happen or has been known to occur during construction	> Erect hoardings around worksites involving heaving Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inpsections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped injured/ dead' dangerous fauna is found on-site or Train site personnel that feeding on wildlife is strictly prohibited.	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both ruisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-failing fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Prionallurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by construction personnel, less tolerant of human presence and urban environments	Low	Less Likely	No night works	> Erect hoardings around worksites involving heavin Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor

Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Construction	Human-widlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections > Erect hoardings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	around worksites involving heary machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nulsances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safely-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vuinerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA.	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	inspections  > Erect hoardings around worksites involving heavy machinery (i.e., main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Construction	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Main Entrance) to prevent fauna entry > No night works (except safety-critical works) > Pre-felling fauna	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night works only	inspections  No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Construction	Light disturbances	High	High	light levels Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Light disturbances	High	High	light levels Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels Species that are not	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible

											Species that are not									
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile omata	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Light disturbances	High	Negligible	Species that are not sensitive to changes in	Very Low	Less Likely	Safety-critical night works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Negligible	light levels Species that are not sensitive to changes in	Very Low	Less Likely	Safety-critical night	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
	_										light levels Species that are not			works only  Safety-critical night						
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Negligible	sensitive to changes in light levels	Very Low	Less Likely	works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive	Medium	Less Likely	Safety-critical night	No night works	Minor	Medium	Medium	Less likely	Minor
Farme	Died	No		Walet cooler			Occationalism				to changes in light levels Species that are extremely	History		works only  Safety-critical night			Heb	18-6		
Fauna	Bird	NO	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Light disturbances	High	High	sensitive to changes in light levels	High	Less Likely	works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night	No night works	Minor	High	High	Less likely	Minor
Farme	Bird	No					Occasionation			Medium	light levels  Species that are sensitive	-	Level Belo	works only  Safety-critical night				Medium	Lass Weeks	Minor
Fauna		NO	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Construction	Light disturbances	High		to changes in light levels  Species that are sensitive	Medium	Less Likely	works only  Safety-critical night	No night works	Minor	Medium		Less likely	
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Construction	Light disturbances	High	Medium	to changes in light levels  Species that are extremely	Medium	Less Likely	works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Light disturbances	High	High	sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Light disturbances	High	High	light levels Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night	No night works	Minor	High	High	Less likely	Minor
		163									light levels  Species that are sensitive			works only  Safety-critical night						
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Construction	Light disturbances	High	Medium	to changes in light levels	Medium	Less Likely	works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive	Medium	Less Likely	Safety-critical night	No night works	Minor	Medium	Medium	Less likely	Minor
	Bird	V	•	Cream-vented bulbul	Least Concern	Vulnerable				Medium	to changes in light levels  Species that are sensitive			works only  Safety-critical night	No night works		Medium	Medium		
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented builbui	Critically Endangered;	Vuinerable	Construction	Light disturbances	High		to changes in light levels  Species that are sensitive	Medium	Less Likely	works only  Safety-critical night	3	Minor		Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	CITES protected (Appendix I)	Endangered	Construction	Light disturbances	High	Medium	to changes in light levels	Medium	Less Likely	works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Construction	Light disturbances	High	Medium	light levels  Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive	Medium	Less Likely	Safety-critical night	No night works	Minor	Medium	Medium	Less likely	Minor
											to changes in light levels  Species that are sensitive			works only  Safety-critical night						
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	to changes in light levels  Species that are slightly	Medium	Less Likely	works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Svlhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	light levels Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night	No night works	Minor	Low	Low	Less likely	Minor
				.,							light levels Species that are slightly			works only  Safety-critical night						
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	sensitive to changes in light levels Species that are slightly	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Light disturbances	High	Low	sensitive to changes in light levels Species that are slightly	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
											<b>3</b>									

Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
_											light levels Species that are slightly			Safety-critical night						
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
F	D. H	No	toucldes also to soute des	Matellia	Not Assessed	Nationally Estimat (Dadison and	0	Links diek eine er er	I II - b	Law	Species that are slightly	Low	Loop Likely	Safety-critical night	No night works	Man	Low	Low	Less likely	Mari
Fauna	Butterfly	NO	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	sensitive to changes in light levels	LOW	Less Likely	works only	NO HIGHE WORKS	Minor	LOW	LOW	Less likely	Minor
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba kuraya nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night	No night works	Minor	Low	Low	Less likely	Minor
i auria	Butterity	NO	Nacaduba Kulava Hemana	Transparent sixine blue	Not Assessed	realionally Extinct (rediscovered)	Cuisaucaui	Light disturbances	riigii	COM	light levels Species that are slightly	LOW	2000 Emoly	works only	Tro tight works	WIIIC	2011	2011	2000 intoly	WIIITO
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night	No night works	Minor	Low	Low	Less likely	Minor
	,		,			, , , , , , , , , , , , , , , , , , , ,		•	3		light levels Species that are slightly		,	works only						
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night	No night works	Minor	Low	Low	Less likely	Minor
											light levels Species that are slightly			works only						
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
											light levels Species that are slightly			•						
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
											light levels Species that are slightly			Safety-critical night						
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
_											light levels Species that are slightly			Safety-critical night						
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Vaccana ainha ainha	Voucout	Not Assessed	Nationally Estinat (Padioses aread)	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night	No night works	Minor	Low	Low	Less likely	Minor
raulia	Butterily	NO	Vagrans sinha sinha	Vagrant	NUL ASSESSEU	Nationally Extinct (Rediscovered)	Construction	Light disturbances	High	LOW	light levels Species that are slightly	LOW	Loos Lindly	works only	No night works	WINO	LOW	Low	Less likely	IVIIIIOI
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night	No night works	Minor	High	High	Less likely	Minor
i auria	Nor-marile stake	NO	Doga melanota	Gud-Illiged cat shake	Least Concern	Vullerable	Constitution	Light disturbances	riigii	riigii	light levels	riigii	Loos Lindiy	works only	No night works	THE SEC	riigii	riigii	Less likely	WIIITO
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night	No night works	Minor	High	High	Less likely	Minor
			3					3	3	J	light levels	J	,	works only			3	3		
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night	No night works	Minor	High	High	Less likely	Minor
											light levels			works only						
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snak	e Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
					Vulnerable; CITES protected						light levels Species that are extremely			Safety-critical night						
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	(Appendix II)	Near Threatened	Construction	Light disturbances	High	High	sensitive to changes in light levels	High	Less Likely	works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
-	Non-volant	v									light levels Species that are extremely		Lana Libratio	Safety-critical night	No elektronia		History	I II - b	Lane Block	
Fauna	mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Construction	Light disturbances	High	High	sensitive to changes in light levels	High	Less Likely	works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Non-volant	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected	Least Concern	Construction	Light disturbances	High	Medium	Species that are sensitive	Medium	Less Likely	Safety-critical night	No night works	Minor	Medium	Medium	Less likely	Minor
i auria	mammal	163	wacaca rascicularis	Long-tailed macaque	(Appendix II)  Critically Endangered;	Least Guidein	Constitution	Light disturbances	riigii	Wedulii	to changes in light levels Species that are extremely	Weduii	2000 Emoly	works only	To high Hono	THE SEC	modum	Wodan	2000 mary	WIIITO
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	CITES protected (Appendix I)	Critically Endangered	Construction	Light disturbances	High	High	sensitive to changes in	High	Less Likely	Safety-critical night works only	No night works	Minor	High	High	Less likely	Minor
Fauna	Non-volant	No	Prionallurus bengalensis	Leopard cat	Least Concern; CITES	Critically Endangered	Construction	Light disturbances	High	High	Species that are extremely sensitive to changes in	High	Less Likely	Safety-critical night	No night works	Minor	High	High	Less likely	Minor
	mammal				protected (Appendix I)	, ,		•		-	light levels		,	works only	-		-	-	•	
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Construction	Light disturbances	High	Medium	to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
											light levels Species that are slightly			Safety-critical night						
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
											light levels Species that are slightly			Safety-critical night						
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Less Likely	Safety-critical night works only	No night works	Minor	Medium	Medium	Less likely	Minor
_											Species that are slightly			Safety-critical night						
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Construction	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Less Likely	Safety-critical night works only	No night works	Minor	Low	Low	Less likely	Minor
-	Oder :	N-	Desirate and a second	College	1 2	V-4	0	Colorador -	I II - b	Levi	light levels Species that are slightly	1	Lengt Book	Safety-critical night	No night work-	Mari			Long Wester	Ma
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Construction	Light disturbances	High	Low	sensitive to changes in light levels	Low	Less Likely	works only	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction		Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during		Minor	High	High	Unlikely	Minor
Fauna	Ddl	NU	Empalionura monticola	Cossor Siledur-tälled bål	Least ConfCern	Griddaily Eridangered	CONSTRUCTION	connectivity for faunal movement	1 11/11	- ngri	dispersal	- ngri	Jillinoly	construction Impact is not expected		ATTEN	i ngi i	riigii	Jillikoly	WIIITO
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	to happen during construction		Minor	Medium	Medium	Unlikely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Construction	Loss of/reduction in ecological	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during		Minor	High	High	Unlikely	Minor
		-						connectivity for faunal movement	<u> </u>	ŭ	dispersal	J		construction			<u>.</u>	ŭ		•

Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES	Critically Endangered	Construction	Loss of/reduction in ecological	High	Negligible	dispersal  Not dependent on connected habitats for dispersal and able to	Very Low	Unlikely	construction  Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	protected (Appendix II)  Least Concern	Vulnerable	Construction	connectivity for faunal movement  Loss of/reduction in ecological	High	High	traverse urban infrastructure Highly dependent on connected habitats for	High	Unlikely	construction  Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
i dulla	Dat	140	r yionyclens laivida	Lesser barrisos bat	Least Curcerii	Vulliel able	Construction	connectivity for faunal movement	riigii	riigii	dispersal Highly dependent on	rigi	Officery	construction Impact is not expected	PRINTAL	riigii	riigii	Officely	WILLION
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal Slightly dependent on	High	Unlikely	to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
											Slightly dependent on								
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
											Slightly dependent on								
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	dispersal  Slightly dependent on connected habitats for dispersal and adaptable to traverse urban	Low	Unlikely	construction  Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological	High	High	infrastructures if needed  Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
								connectivity for faunal movement  Loss of/reduction in ecological			dispersal Highly dependent on			construction Impact is not expected					
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Construction	connectivity for faunal movement	High	High	connected habitats for dispersal Highly dependent on	High	Unlikely	to happen during construction Impact is not expected	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Not dependent on	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Slightly dependent on	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Not dependent on	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
	Bird	No						connectivity for faunal movement  Loss of/reduction in ecological			dispersal Highly dependent on			construction Impact is not expected					
Fauna	Bird	INO	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	to happen during construction	Minor	High	High	Unlikely	Minor

Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Not dependent on	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	infrastructures if needed  Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction	Minor	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	construction Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
					Critically Endangered;			connectivity for faunal movement  Loss of/reduction in ecological			dispersal Highly dependent on			construction Impact is not expected					
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	CITES protected (Appendix I)	Endangered	Construction	connectivity for faunal movement	High	High	connected habitats for dispersal Slightly dependent on	High	Unlikely	to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	construction Impact is not expected to happen during	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Loss of/reduction in ecological	High	High	Highly dependent on connected habitats for	High	Unlikely	construction Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
								connectivity for faunal movement  Loss of/reduction in ecological			dispersal Highly dependent on			construction Impact is not expected					
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	connectivity for faunal movement	High	High	connected habitats for dispersal Highly dependent on	High	Unlikely	to happen during construction Impact is not expected	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal Not dependent on	High	Unlikely	to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure Not dependent on	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	construction Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High	Low	dispersal  Slightly dependent on connected habitats for dispersal and adaptable to	Low	Unlikely	construction  Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	traverse urban infrastructures if needed Highly dependent on connected habitats for	High	Unlikely	construction  Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological	High	Negligible	dispersal  Not dependent on connected habitats for dispersal and able to	Very Low	Unlikely	construction  Impact is not expected to happen during	Negligble	Negligible	Very Low	Unlikely	Negligible
		-		,		,		connectivity for faunal movement	a	·	traverse urban infrastructure Highly dependent on	, <del></del>	y	construction  Impact is not expected		J-9	<del></del>	,	
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
											uispersai			Construction					

Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to	Very Low	Unlikely	Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological	High	High	traverse urban infrastructure Highly dependent on connected habitats for	High	Unlikely	construction  Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
	,		, , , , , , , , , , , , , , , ,					connectivity for faunal movement	3	J	dispersal Not dependent on	J		construction		-		,	
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure Not dependent on	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Impact is not expected to happen during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal  Not dependent on	High	Unlikely	Impact is not expected to happen during construction	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Impact is not expected to happen during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological	High	High	Highly dependent on connected habitats for	High	Unlikely	Impact is not expected to happen during	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Construction	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	construction  Hoarding will not be erected at trails during	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	construction  Hoarding will not be erected at trails during	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal  Highly dependent on connected habitats for	High	Unlikely	construction  Hoarding will not be erected at trails during	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	dispersal  Dependent on connected habitats for dispersal	Medium	Unlikely	construction  Hoarding will not be erected at trails during	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	construction  Hoarding will not be erected at trails during construction	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	e Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	Hoarding will not be erected at trails during	Minor	High	High	Unlikely	Minor
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	dispersal  No change to waterbody	Very Low	Unlikely	construction Stream is far away fom the trails	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	No change to waterbody	Very Low	Unlikely	Stream is far away fom the trails	Negligible	Negligible	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Hoarding will not be erected at trails during construction	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Not dependent on	High	Unlikely	Hoarding will not be erected at trails during construction	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure Not dependent on	Very Low	Unlikely	Hoarding will not be erected at trails during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	Hoarding will not be erected at trails during construction	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	Hoarding will not be erected at trails during construction	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Hoarding will not be erected at trails during construction	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact could possibly happen or has been known to occur during	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	construction Impact could possibly happen or has been known to occur during	Minor	High	High	Unlikely	Minor
								,			dispersal Slightly dependent on			construction					
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact could possibly happen or has been known to occur during construction	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact could possibly happen or has been known to occur during construction	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact could possibly happen or has been known to occur during construction	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact could possibly happen or has been known to occur during construction	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	Impact could possibly happen or has been known to occur during construction	Minor	High	High	Unlikely	Minor

Fauna	Bat	No	Cheiromeles torquatus	Naked buildog bat	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only,	Low	Low	Possible	Minor
Eauno	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible	replant somewhere else in BBTP	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	sources  Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksless involving heavy machinery (i.e., Main Entrance) (i.e., Main Entrance). The vorticalises involving manual work or worksless involving manual work or worksless incohold produced which, insure the extent of the working space is clearly demancated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only, replant somewhere sele in BBTP	Low	Low	Possible	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible	replant somewhere eise in 551 P	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Amegilla insularis	NA.	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure clearly democrated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Frect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only, replant comewhere elde in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Frect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only, replant somewhere tels in BSTP	Low	Low	Possible	Minor
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value  > Frect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)  > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance  > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value  > Frect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)  > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance  > Remove understory plants only, replants comewhere site in BSTP	Low	Low	Possible	Minor
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Megachile indonesica	NA.	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) (i	Low	Low	Possible	Minor

Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vuinerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnocesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	Audid areas of high conservation value     Erect hoardings to delineate worksless involving heavy machinery (i.e., Main Entrance)     For worksless involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnocesary vegetation clearance     Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value of the conservation value of the conservation of the variety of the conservation of the variety pace is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., Trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Fiora Specialist to avoid unnecessary vegetation clearance > Remove understry plants only, replant somewhere ets in BSTP	Low	Low	Possible	Minor
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., Trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnocessary wegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible	•	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus		Least Concern	Vulnerable	sources  Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnocesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	Yes	Collocalie affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erish hoartings to delineate varies involving heavy machinery varies involving heavy machinery varies involving heavy machinery value in varies involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnocesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vuinerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect heardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work, only (i.e., Trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnocessary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction Loss of/reduction in habitals and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Frect hoardings to delineate workslises involving heavy machinery (i.e., Main Estranophing manual work only (i.e., Tails and boardwales), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Fiora Specialist to avoid unnecesary wegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor

Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vuinerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Frect hoardings to delineate workslites involving heavy machinery (i.e., Main Entrance) > For workstes involving manual work only (i.e., trails and boardwalks), ensure the elern of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
		No					Construction Loss of/reduction in habitats and food	High									Unlikely	
Fauna	Bird		Halcyon coromanda	Ruddy kingfisher	Least Concern  Near Threatened; CITES	Critically Endangered	Construction sources  Loss of/reduction in habitats and food		Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	•	Negligible
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	protected (Appendix II)	Vulnerable		High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.a., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pyamy goose	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Law	Unlikely	Negligible
					Least Concern Least Concern; CITES	Critically Endangered	Long of traduction in habitate and food		Negligible	No loss of habitat	Very Low		Negligible			Very Low		Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	protected (Appendix II)	Vulnerable	Sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value  > Erect hoardings to delineate  worksites involving heavy machinery (i.a., Mair Entrance)  > For worksites involving manual work only (i.e., trials and boardwaks), ensure clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance  > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Sources  Construction  Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
			,,				sources				,			> Avoid areas of high conservation value > Erect hoardings to delineate		,	,	
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	worksites involving heavy machinery (i.a., Main Entrance)  > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance  > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (ie., Trails and boardwalks), ensure the extent of the working space is clearly demarcated on-atte and cross- checked by a Flora Specialist to avoid unneces ary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vuinerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
							Construction Loss of/reduction in habitats and food							> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance) > For worksites involving manual work				
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Construction Loss of/reduction in habitals and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP > Avoid areas of high conservation	Low	Low	Possible	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	value  > Erect hoardings to delineate worksites involving heavy machinery (i.a., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecessary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor

														> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)				
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction Loss offreduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> For worksites involving manual work only (ie, trails and boardwals), ensure the extent of the working space is clearly demancated on-site and cross- checked by a Flora Specialist to avoid unnecessary vegetalion clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)		High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Svihet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction Sources Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
	Butterfly				Not Assessed	Nationally Extinct (Rediscovered)	Lancardination to be believe and food		Negligible			Unlikely			Negligible	Very Low	Unlikely	
Fauna	Butterny	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction sources	High	Negligible	No loss of habitat	Very Low	Officery	Negligible		Negligible	Very LOW	Utilikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction Loss offreduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> Avoid areas of high conservation value  > Frect hoardings to delineate worksites imotiving heavy machinery (i.e., Main Entrance)  > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-	Low	Low	Possible	Minor
							Loss offestivation in babilion and food							checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP				
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
							Sources							> Avoid areas of high conservation				
														Note aleas of high conservation     value     Frect hoardings to delineate     worksites involving heavy machinery     (i.e., Main Entrance)     For worksites involving manual work				
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction Loss offreduction in habitals and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
							Sources							> Avoid gross of high concentration				
														> Avoid areas of high conservation value > Erect hoardings to delineate				
														worksites involving heavy machinery (i.e., Main Entrance)				
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss offreduction in habilitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
							Construction Loss of/reduction in habitats and food											
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible	Avoid areas of high conservation value     Frect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss offreduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	> For worksites involving manual work only (i.e., trails and boardwalks), ensure the extert of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
, solid	Dationly	. 40	repos nana nana	CHOCOLOG SONO!	1100,710000000	• Ultidiable	sources	- ng-/	· • · · · · · · · · · · · · · · · · · ·	THE HOUSE OF FIREMENT	***, 20W	C. IIIC. J	· vogagibio		1109:19:010	* 0. , LOW	diy	. rog.igible
							Loss offreduction in habitats and food							Avoid areas of high conservation value     Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)     For worksites involving manual work				
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary wegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
														> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery				
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction Loss offreduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	Moderate	(i.e., Main Entrance) > For workstiles involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to work unrecessary vegetation clearance > Remove understory plants only, regiant sconwhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely	Negligible		Negligible	Very Low	Unlikely	Negligible
ı aulid	Dutterlly	140	Guasius everyx everyx	vvilke pallii DUD	1101 03363360	Lindangered	Construction sources	riigii	rediffine	IND IOSS OF FIGURES.	voly LUW	Uninoly	rvogrigible		regugible	voly LUW	OTHINGIY	regugible

															> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery				
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain		Moderate	(i.e., Main Entrance) > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecessry vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible	•	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain		Moderate	> Avoid areas of high conservation value > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance); (manual work > Hoard Hoard Hoardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed		Construction Loss of/reduction in habitats and food sources  Construction Loss of/reduction in habitats and food	High	Low	Loss of <10% of habitat	Low	Certain		Moderate	> Avoid areas of high conservation value  > Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)  > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance  > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction  Construction  Construction  Construction  Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine snake	No No	Boiga melanota	Gold-ringed cat snake  Red-tailed racer	Least Concern	Vulnerable Vulnerable	Construction sources  Construction  Loss of/reduction in habitats and food	High High	Negligible	No loss of habitat  No loss of habitat	Very Low	Unlikely		Negligible Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Gonyosoma oxycephalum Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction Loss of/reduction in habitats and food	High	Negligible Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible Negligible	Very Low Very Low	Unlikely	Negligible Negligible
Fauna	Non-marine snake	No	Ophiophagus hannah		Vulnerable; CITES protected (Appendix II)		Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain		Moderate	> Avoid areas of high conservation value > Erect heardings to delineate worksites involving heavy machinery (i.e., Main Entrance) - For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Fora Specialist to avoid unnecesary vegetation clearance - Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain		Moderate	Avoid areas of high conservation value     Erect hoardings to delineate worksites involving heavy machinery (i.e., Main Entrance)     For worksites involving manual work only (i.e., trills and boardwalks), ensure the extent of the working space is clearly demarcated on-eits and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance     Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction Loss offreduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain		Moderate	> Avoid areas of high conservation value > Errect hoardings to defineate workstes involving heavy machinery (i.e., Main Entrance) > For workstes involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Remove understory plants only, replant somewhere else in BBTP	Low	Low	Possible	Minor
Fauna	Non-volant mammal	No	Prionallurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction  Construction  Construction  Construction  Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Construction  Construction  Loss of/reduction in habitats and food  construction	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Lose of/reduction in habitate and food	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna Fauna	Odonate Odonate	No No	Chalybeothemis fluviatilis  Copera vittata	Green-eyed percher  Variable featherlegs	Not Assessed Least Concern	Vulnerable Vulnerable	Construction Loss of/reduction in habitats and food	High High	Negligible Negligible	No loss of habitat  No loss of habitat	Very Low Very Low	Unlikely		Negligible Negligible		Negligible Negligible	Very Low Very Low	Unlikely	Negligible Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Sources Loss of/reduction in habitats and food	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Construction Sources Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat	Very Low	Unlikely		Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Operation Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Operation Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operation Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Operation Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible

Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
_			0.		Near Threatened; CITES									operation Impact is not expected					
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	protected (Appendix II)	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
_										1			Hallinde	operation Impact is not expected		1	1	H-Block.	
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Poo	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected	Maglioble	Low	Low	Unlikely	Nagligible
raulia	B66	NO	Anunuleilam Smalii	NA.	NOLASSESSEU	v uli lei able	Operation	Accidental Injury or mortality	rigii	Low	volarit - low susceptibility	LOW	Offlikely	to happen during construction Impact is not expected	Negligible	LOW	Low	Offlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Ree	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
radia	500		Coralina raicyr		1101/1000000	Vallidadio	Орогалог	recording injury or morality	· ··g··	Low	Total to Total Capability	2011	O'llineary	construction Impact is not expected	**Cgngand	2011	2011	Official	regigible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA.	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
									-					construction Impact is not expected					
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
														construction Impact is not expected					
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
	_													construction Impact is not expected					
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Phys saved kinefisher	110	Endounced	Operation	A and described for horse or an analysis.	High	Medium	Resident with known	Martine	Llolikoh		Marr	Medium	Medium	Unlikely	Man
rauna	Bild	NO	-	Blue-eared kingfisher	Least Concern	Endangered	Operation	Accidental injury or mortality	High	Wedidili	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Wediam	Wediam	Offlikely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision Resident with known	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Operation	Accidental injury or mortality	High	Medium	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	Migratory Low susceptibility to bird	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern; CITES	Vulnerable	Operation	Accidental injury or mortality	High	Low	building collision Resident with known	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	protected (Appendix II)	Endangered	Operation	Accidental injury or mortality	High	Medium	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Medium	Resident with known records of bird-building	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	collision Low susceptibility to bird	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	•	3rown-chested jungle flycatche		Vulnerable	Operation	Accidental injury or mortality	High	High	building collision Migratory	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision Resident with known	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Operation	Accidental injury or mortality	High	Medium	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operation	Accidental injury or mortality	High	High	Migratory Resident with known	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Operation	Accidental injury or mortality	High	Medium	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Accidental injury or mortality	High	Medium	Resident with known records of bird-building	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	collision Migratory	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Accidental injury or mortality	High	Medium	Resident with known records of bird-building	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Operation	Accidental injury or mortality	High	Low	collision Low susceptibility to bird	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Psittacula longicauda		Vulnerable; CITES protected		Operation	Accidental injury or mortality	High	High	building collision Forest-edge frugivore	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	(Appendix II)  Near Threatened; CITES	Endangered	Operation	Accidental injury or mortality	High	Medium	Resident with known records of bird-building	Medium	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
i dulla	Bild	NO	r skulus Cyalialus	Dide-tumped partor	protected (Appendix II)	Litualigateu	Operation	Accidental injury of mortality	riigii	Medidiii	collision Resident with known	Wedidiii	Offinery	No major buildings	WILLIAM	riigii	riigii	Officery	WILLOW
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Medium	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern Critically Endangered;	Vulnerable	Operation	Accidental injury or mortality	High	High	Forest-edge frugivore	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	CITES protected (Appendix I)	Endangered	Operation	Accidental injury or mortality	High	High	Forest-edge frugivore	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES	Critically Endangered	Operation	Accidental injury or mortality	High	Medium	Resident with known records of bird-building	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
					protected (Appendix II)						collision Resident with known								
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Accidental injury or mortality	High	Medium	records of bird-building collision	Medium	Unlikely	No major buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna Fauna	Bird Bird	Yes No	Surniculus lugubris Tachybaptus ruficollis	Square-tailed drongo-cuckoo Little grebe	Least Concern Least Concern	Vulnerable Critically Endangered	Operation Operation	Accidental injury or mortality  Accidental injury or mortality	High High	High Low	Migratory Low susceptibility to bird	High Low	Unlikely Unlikely	No major buildings No major buildings	Minor Negligible	High Low	High Low	Unlikely Unlikely	Minor Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	building collision Forest-edge frugivore	High	Unlikely	No major buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Unlikely	No major buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
Ec	Dutte-fi-	N	Arbanala atit	b.a.	Not Access	Nationally F. direct (P)	On	Applicated International	Di-F		Volent Investor of the	1	F 8-80*	operation Impact is not expected	Medidate			Helliot.	Modifield
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	operation Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
. auria	Donally	.40	. пторого виторная тахмеш	C. John Ganzille	1101 20000980		SperauUti	. wordernal rigary or filefully	- agri	LOW	vocas row auaceptionity	20W	Jillindly	operation Impact is not expected	••-อนูแนนาย	Low	LOW	Crincoly	. rogiigibio
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
	•													operation Impact is not expected				•	
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible

														Impact is not expected					
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
_														operation Impact is not expected					
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
														operation Impact is not expected					
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
								,,,	,		,			operation Impact is not expected				,	
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
											, , , , , , , , , , , , , , , , , , , ,			operation Impact is not expected				,	
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
rauna	Datemy		r cropiado agria agria	Dailya Own	110171333333	Linuxigurou	Орогалог	7 to to the injury of mortality	· ··g·	2011	vous or ousepassing	2011	Orintary	operation Impact is not expected	**Cgriguito			O'llinoity	Hogilgibio
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus evervx evervx	White palm bob	Not Assessed	Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
i dulla	Dutterny	140	Suastus everyx everyx	Write pain bob	Nuc Assessed	Litualigateu	Operation	Accidental injury or mortality	riigii	LOW	Volatit - IOW Susceptibility	LOW	Officery	operation Impact is not expected	reginginie	2511	2011	Officery	regilgible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	operation Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
i dulla	Dutterny	140	Troides fieletta Cerberas	Common bildwing	protected (Appendix II)	v un loi abio	Operation	Accidental injury or mortality	riigii	LOW	Volatit - IOW Susceptibility	LOW	Officery	operation Impact is not expected	reginginie	Low	LOW	Officery	regilgible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high	High	Less Likely	operation Impact is not likely to	Minor	High	High	Less likely	Minor
			g					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			susceptibility		,	happen during operation				,	
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Impact is not likely to happen during operation	Minor	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Impact is not likely to happen during operation	Minor	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected	l Vulnerable	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high	High	Less Likely	Impact is not likely to	Minor	High	High	Less likely	Minor
i dulla	Non-marine snake	140	Opinopiagus rialilari	King Cobia	(Appendix II)	v dili di abid	Operation	Accidental injury of mortality	riigii	riigii	susceptibility	i igi	Loss Likely	happen during operation	WIIIA	riigii	riigir	Loss intery	WIIIO
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Impact is not likely to happen during operation	Minor	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Impact is not likely to happen during operation	Minor	High	High	Less likely	Minor
					Vulnerable; CITES protected									Impact could possibly happen or has been					
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	(Appendix II)	Vulnerable	Operation	Accidental injury or mortality	High	Low	Aquatic - low susceptibility	Low	Unlikely	known to occur during construction	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Unlikely	Impact is not likely to happen during operation	Minor	High	High	Unlikely	Minor
_	Non-volant										Arboreal mammal - mobile								
Fauna	mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Operation	Accidental injury or mortality	High	Medium	but possibly susceptible to roadkills Arboreal mammal - mobile	Medium	Unlikely	Arboreal	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Operation	Accidental injury or mortality	High	Medium	but possibly susceptible to roadkills	Medium	Unlikely	Arboreal	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Operation	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to	High	Less Likely	Impact is not likely to happen during operation	Minor	High	High	Less likely	Minor
	Non-volant				Vulnerable; CITES protected						roadkills Known to cross roads -			Impact is not likely to					
Fauna	mammal	Yes	Macaca fascicularis	Long-tailed macaque	(Appendix II)	Least Concern	Operation	Accidental injury or mortality	High	High	highly susceptible to roadkills	High	Less Likely	happen during operation	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operation	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Less Likely	Impact is not likely to happen during operation	Minor	High	High	Less likely	Minor
Fauna	Non-volant	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES	Critically Endangered	Operation	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to	High	Less Likely	Impact is not likely to	Minor	High	High	Less likely	Minor
	mammal				protected (Appendix I)		•				roadkills			happen during operation Impact is not expected					
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
														operation Impact is not expected					
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
														operation Impact is not expected					
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Operation	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Unlikely	Impact is not expected to happen during	Negligible	Low	Low	Unlikely	Negligible
								•	-					operation				•	

Fauna	Bat	No	Cheiromeles torquatus	Naked buildog bat	Least Concern	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for some landscaping along the sides of the proposed trails and boardwalks order visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trafs/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected faura species  - Design the boardwalks and trails to deter visitors from ventruring off-trail (e.g., install railings)  - Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trafs/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g. install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular post-construction	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and traffs/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vuinerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Not adversely affected by human presence	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Not adversely affected by human presence	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Not adversely affected by human presence	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Not adversely affected by human presence	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Negligible	Species not sensitive to human presence	Very Low	Unlikely	Not adversely affected by human presence	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	Species not sensitive to human presence Species not sensitive to	Very Low	Unlikely	Not adversely affected by human presence Not adversely affected	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	human presence Species not sensitive to	Very Low	Unlikely	by human presence  Not adversely affected	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operation	Human disturbances	High	Negligible	human presence Species not sensitive to	Very Low	Unlikely	by human presence Not adversely affected	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna Fauna	Bee	No No	Megachile ramera  Nomada malayana	NA NA	Not Assessed Not Assessed	Vulnerable Vulnerable	Operation Operation	Human disturbances Human disturbances	High High	Negligible Negligible	human presence Species not sensitive to	Very Low Very Low	Unlikely	by human presence Not adversely affected	Negligible		Negligible	Very Low Very Low	Unlikely	Negligible
Fauna	Bee	No	Nomia apicalis	NA NA	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Negligible	human presence Species not sensitive to	Very Low	Unlikely	by human presence Not adversely affected	Negligible Negligible		Negligible Negligible	Very Low	Unlikely	Negligible Negligible
Fauna	Bee	No	Patellapis intricata	NA.	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Negligible	human presence Species not sensitive to	Very Low	Unlikely	by human presence Not adversely affected	Negligible		Negligible	Very Low	Unlikely	Negligible
			,								human presence Species that are extremely			by human presence  Human traffic confined		Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to			·	
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operation	Human disturbances	High	High	sensitive to human presence	High	Less Likely	within bull-up areas and trails/boardwalks	Minor	deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected	High	High	Less likely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trafts/boardwalks	Minor	fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor

Fauna	Bird	No	Brachypodius melanocephalo	s Black-headed bulbul	Least Concern	Critically Endangered	Operation	Human disturbances	High	High	Species that are entremely sensitive to human presence	High	Less Likely	Human traffic confined within buil-up areas and trafs/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faruna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g. install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular post-construction	High	High	Less likely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trais/boardwalks	Minor	> Consider regular post-construction biodinests) monitoring to determine if the increased visitoriship has affected to the property of the construction of the con- cept of the construction of the con- detervisions from venturing off-trail (e.g. install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faruna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchu	s Violet cuckoo	Least Concern	Vulnerable	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bulli-up areas and trais/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitoriship has affected to be seen to be a seen to be a seen to be a loss of the book of the seen to be a defer visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalls to deter visitors from	High	High	Less likely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor	venturing off-trail	Low	Low	Less likely	Minor
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faruna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g. install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail      Conduct regular post-construction	High	High	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and traits/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected faruns species  > Design the boardwalfs and trails to deter visitors from venturing off-trail (e.g. install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalfs to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna speciese > Design the boardwalks and trails to deter visitors from verturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction blodiversity monitoring to determine if the increased visitorship has affected farura species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected farua species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trals/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Haliaeetus Ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected farua species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	> Conduct regular post-construction biodisversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor

Fauna	Bird	No	Kelupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and tralls/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vuinerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardvalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardvalks to deter visitors from venturing off-teal	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trafs/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Operation	Human disturbances	High	High	Species that are entremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense Indiscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vuinerable	Operation	Human disturbances	High	High	Species that are entremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardvalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardvalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Operation	Human disturbances	High	High	Species that are entremely sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected faun a species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trafs/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to defer visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor

Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vuinerable	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visionship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     Conduct regular post-construction	High	High	Less likely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail  > Conduct regular post-construction	High	High	Less likely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trafs/boardwalks	Minor	biodiversity monitoring to determine if the increased visitors hip has affected fauna species  > Design the boardwalks and traits to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected	High	High	Less likely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed		Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	presence  Tolerant of human	Minor		Low	Low	Less likely	Minor
											presence Species that are slightly			presence Tolerant of human						
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operation	Human disturbances	High	Low	sensitive to human presence Species that are slightly	Low	Less Likely	presence Tolerant of human	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	sensitive to human presence Species that are slightly	Low	Less Likely	presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	presence Tolerant of human	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	presence  Tolerant of human	Minor		Low	Low	Less likely	Minor
	Butterfly										presence Species that are slightly			presence Tolerant of human	Minor					
Fauna	,	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	sensitive to human presence Species that are slightly	Low	Less Likely	presence Tolerant of human			Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operation	Human disturbances	High	Low	sensitive to human presence Species that are slightly	Low	Less Likely	presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	sensitive to human presence Species that are slightly	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Low	sensitive to human presence Species that are slightly	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operation	Human disturbances	High	Low	sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
											presence									

Fauna	Non-marine snake	No	Bolga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails boardwalks	Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail     venturing off-trail     venturing off-trail     venturing off-trail     venturing off-trail     venturing off-trail     venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vuinerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable: CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails boardwalks	Minor	<ul> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitoriship has affected fauna species</li> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> <li>Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail</li> </ul>	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Piyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity moritoring to determine if the increased visitorship has affected fauma species > Design the beardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Operation	Human disturbances	High	Medium	Species that are possibly sensitive to human presence	Medium	Unlikely	Human traffic confined within built-up areas and trails/boardwalks	Minor		Medium	Medium	Unlikely	Minor
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Human disturbances	High	Low	Species slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visionship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along	High	High	Less likely	Minor
														Human traffic confined		the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail  > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to				
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence  Species that are slightly	Medium	Less Likely	within bull-up areas and trails/boardwalks	Minor	deter visitors from venturing off-trail (e.g., install railings).  Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operation	Human disturbances	High	Low	sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operation	Human disturbances	High	Medium	Species that are sensitive to human presence	Medium	Less Likely	Human traffic confined within built-up areas and trails/boardwalks	Minor	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from	Medium	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operation	Human disturbances	High	High	Species that are extremely sensitive to human presence	High	Less Likely	Human traffic confined within bull-up areas and trails/boardwalks	Minor	venturing off-trail  > Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species  > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., instail railings)  > Design for dense landscaping along the sides of the proposed trails and boardwalks to obter visitors from	High	High	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor	venturing off-trail	Low	Low	Less likely	Minor
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operation	Human disturbances	High	Low	presence Species that are slightly sensitive to human	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
											presence			•						

											Species that are slightly									
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Operation	Human disturbances	High	Low	sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Operation	Human disturbances	High	Low	Species that are slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both ruisances and threats by members of the public, less tolerant of human presence and urban environments Species that are possibly	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Operation	Human-wildlife conflict	High	Low	species that are possibly perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments Species that are possibly	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Low	perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments Species that are possibly	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Operation	Human-wildlife conflict	High	Low	perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both ruisances and threats by members of the public, less tolerant of human presence and urban environments Species that are possibly	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Low	perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human- wildlife conflict	Minor	<ul> <li>Put up signages to educate visitors on appropriate behaviours when encountering fauna</li> </ul>	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of	Medium	Less Likely	Aculeata - possibly implicated in human-	Minor	> Put up signages to educate visitors on appropriate behaviours when	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	human presence Possibly perceived as threat; highly tolerant of	Medium	Less Likely	wildlife conflict Aculeata - possibly implicated in human-	Minor	encountering fauna  > Put up signages to educate visitors on appropriate behaviours when	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Medium	human presence Possibly perceived as threat; highly tolerant of	Medium	Less Likely	wildlife conflict Aculeata - possibly implicated in human-	Minor	encountering fauna > Put up signages to educate visitors on appropriate behaviours when	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	human presence Possibly perceived as threat; highly tolerant of	Medium	Less Likely	wildlife conflict Aculeata - possibly implicated in human-	Minor	encountering fauna > Put up signages to educate visitors on appropriate behaviours when	Medium	Medium	Less likely	Minor
Found	Pee	No	·	NA.							human presence Possibly perceived as			wildlife conflict Aculeata - possibly		encountering fauna > Put up signages to educate visitors		Medium	,	Minor
rauna	Dee	NO	Megachile indonesica	NA.	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	threat; highly tolerant of human presence Possibly perceived as	Medium	Less Likely	implicated in numar- wildlife conflict Aculeata - possibly	Minor	on appropriate behaviours when encountering fauna > Put up signages to educate visitors	Medium		Less likely	
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	threat; highly tolerant of human presence Possibly perceived as	Medium	Less Likely	implicated in human- wildlife conflict Aculeata - possibly	Minor	on appropriate behaviours when encountering fauna > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	threat; highly tolerant of human presence Possibly perceived as	Medium	Less Likely	implicated in human- wildlife conflict Aculeata - possibly	Minor	on appropriate behaviours when encountering fauna > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Medium	threat; highly tolerant of human presence	Medium	Less Likely	implicated in human- wildlife conflict	Minor	on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Less Likely	Aculeata - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation  Impact is not expected	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation  Impact is not expected	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible

											Species that are not perceived as nuisances or			Impact is not expected					
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Operation	Human-Wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Operation	Human-Wildlife conflict	High	Negligible	public Species that are not perceived as nuisances or threats by members of the	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	d Near Threatened	Operation	Human-wildlife conflict	High	Negligible	public  Species that are not perceived as nuisances or threats by members of the	Very Low	Unlikely	Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Operation	Human-wildlife conflict	High	Negligible	public  Species that are not perceived as nuisances or threats by members of the	Very Low	Unlikely	operation  Impact is not likely to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	public  Species that are not perceived as nuisances or threats by members of the	Very Low	Unlikely	Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	public  Species that are not perceived as nuisances or threats by members of the	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix	c Endangered	Operation	Human-wildlife conflict	High	Negligible	public Species that are not perceived as nuisances or	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	I) Least Concern; CITES	Critically Endangered	Operation	Human-Wildlife conflict	High	Negligible	threats by members of the public Species that are not perceived as nuisances or	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	protected (Appendix II)  Least Concern; CITES	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	threats by members of the public Species that are not perceived as nuisances or	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	protected (Appendix II)  Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	threats by members of the public Species that are not perceived as nuisances or	Very Low	Unlikely	operation  Impact is not expected to happen during		Negligible	Very Low	Unlikely	Negligible
	Bird	No									threats by members of the public Species that are not perceived as nuisances or			operation Impact is not expected	Negligible				
Fauna		No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	threats by members of the public Species that are not perceived as nuisances or	Very Low	Unlikely	to happen during operation  Impact is not expected	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Operation	Human-Wildlife conflict	High	Negligible	threats by members of the public  Species that are not perceived as nuisances or	Very Low	Unlikely	to happen during operation  Impact is not expected	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA NA	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Low	Low	Unlikely	Negligible
											personnel								

										Nortoble	Species that are not perceived as nuisances or		Helliste	Impact is not expected			1	Levi	Hallish.	
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operation	Human-wildlife conflict	High	Negligible	threats by construction personnel Species that are not perceived as nuisances or	Very Low	Unlikely	to happen during operation  Impact is not expected	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	threats by construction personnel Species that are not	Very Low	Unlikely	to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel Species that are not	Very Low	Unlikely	to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction personnel	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operation	Human-wildlife conflict	High	Negligible	personnel Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operation	Human-wildlife conflict	High	Negligible	personnel Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	Impact is not expected to happen during	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	personnel Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	personnel Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Human-wildlife conflict	High	Negligible	personnel Species that are not perceived as nuisances or threats by construction	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible		Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	personnel Species that are not perceived as nuisances or	Very Low	Unlikely	operation  Impact is not expected to happen during	Negligible		Low	Low	Unlikely	Negligible
	,		,	7.7.					,		threats by construction personnel Species that are typically perceived as both			operation  Reptile - possibly		> Put up signages to educate visitors			,	
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	High	nuisances and threats by public, may deliver venomous bite if provoked	High	Less Likely	implicated in human- wildlife conflict	Minor	on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	High	Species that are typically perceived as both nuisances and threats by public, may deliver venomous bite if provoked	High	Less Likely	Reptile - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
											Species that are possibly perceived as both nuisances and threats by			Species less tolerant of						
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operation	Human-wildlife conflict	High	Low	public, less tolerant of human presence and urban environments	Low	Less Likely	human	Minor		Low	Low	Less likely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	Operation	Human-wildlife conflict	High	High	Species that are typically perceived as both nuisances and threats by public, may deliver venomous bite if provoked	High	Less Likely	Reptile - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by public, less tolerant of human presence and	Low	Less Likely	Species less tolerant of human	Minor		Low	Low	Less likely	Minor
											urban environments  Species that are typically					> Put up signages to educate visitors				
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	High	perceived as both nuisances and threats by public, may deliver venomous bite if provoked	High	Less Likely	Reptile - possibly implicated in human- wildlife conflict	Minor	on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by public Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible		Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are possibly	Very Low	Less Likely	Impact is not likely to happen during operation	Negligible		Negligible	Very Low	Less likely	Negligible
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Operation	Human-wildlife conflict	High	Low	perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Operation	Human-wildlife conflict	High	Medium	Species that are typically perceived as nuisances and possibly as threats by construction personnel, highly tolerant of human presence and urban environments, and	Medium	Less Likely	Mammal - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	Medium	Medium	Less likely	Minor
											frequently implicated in human-wildlife									
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operation	Human-wildlife conflict	High	High	Species that are typically perceived as both nuisances and threats by members of the public, highly tolerant of human presence and urban environments, and are frequently implicated in human-wildlife conflict	High	Less Likely	Mammal - possibly implicated in human- wildlife conflict	Minor	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor

Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor	Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Prionaillurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operation	Human-wildlife conflict	High	Low	Species that are possibly perceived as both nuisances and threats by members of the public, less tolerant of human presence and urban environments	Low	Less Likely	Impact is not likely to happen during operation	Minor	Low	Low	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	Species that are not perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	Impact is not expected to happen during operation  Impact is not expected	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern  Not Assessed	Vulnerable	Operation Operation	Human-wildlife conflict  Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not perceived as nuisances or	Very Low	Unlikely	to happen during operation	Negligible	Negligible	Very Low	Unlikely Unlikely	Negligible
rauna	Odunate	No	Drepanosticta quadrata	Singapore shadowdamsel	NUL ASSESSEU	Vulnerable	Operation	numai riviidille comice	High	Negligible	threats by members of the public Species that are not perceived as nuisances or	Very Low	Officery	to happen during operation  Impact is not expected	Negligible	Negligible	Very Low	Officery	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation  Impact is not expected	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public Species that are not	Very Low	Unlikely	to happen during operation	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Operation	Human-wildlife conflict	High	Negligible	perceived as nuisances or threats by members of the public	Very Low	Unlikely	Impact is not expected to happen during operation Lighting will only be	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in light levels	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Negligible	Very Low	Unlikely	Negligible

Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Negligible	Species that are not sensitive to changes in	Very Low	Unlikely	Lighting will only be provided at Main Entrance, which is	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Negligible	light levels  Species that are not sensitive to changes in	Very Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Brachypodius melanocephalos		Least Concern	Critically Endangered	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Operation	Light disturbances		Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
			·	, Ç					High		to changes in light levels  Species that are extremely		Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main					
Fauna	Bird	No	Chrysococcyx xanthorhynchus		Least Concern	Vulnerable	Operation	Light disturbances	High	High	sensitive to changes in light levels  Species that are sensitive	High		Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern  Least Concern; CITES	Vulnerable	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	protected (Appendix II)	Endangered	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are extremely	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche		Vulnerable	Operation	Light disturbances	High	High	sensitive to changes in light levels  Species that are sensitive	High	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are sensitive	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are extremely	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operation	Light disturbances	High	High	sensitive to changes in light levels	High	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered  Least Concern; CITES	Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels Species that are extremely	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	protected (Appendix II)	Vulnerable	Operation	Light disturbances	High	High	sensitive to changes in light levels  Species that are extremely	High	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operation	Light disturbances	High	High	sensitive to changes in light levels	High	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern  Least Concern; CITES	Critically Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels  Species that are sensitive	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	protected (Appendix II)	Vulnerable	Operation	Light disturbances	High	Medium	to changes in light levels  Species that are extremely	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Operation	Light disturbances	High	High	sensitive to changes in light levels	High	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern  Critically Endangered;	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	CITES protected (Appendix	Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Unlikely	Minor

Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Unlikely	off from baseline. Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Unlikely	off from baseline. Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed		Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata		Not Assessed	Critically Endangered	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)		Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)		Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operation	Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba kuraya nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)		Light disturbances	High	Low	light levels  Species that are slightly sensitive to changes in	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Not Assessed						light levels Species that are slightly		Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is		Low	Low	Unlikely	
	Butterfly	No.	Nacaduba pactolus odon	Large fourline blue		Nationally Extinct (Rediscovered)  Nationally Extinct (Rediscovered)		Light disturbances	High	Low	sensitive to changes in light levels  Species that are slightly sensitive to changes in	Low		entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Negligible	Low	Low	Unlikely	Negligible
Fauna	,	No.	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed		Operation	Light disturbances	High	Low	light levels  Species that are slightly	Low	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible				Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operation	Light disturbances	High	Low	sensitive to changes in light levels Species that are slightly	Low	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operation	Light disturbances	High	Low	sensitive to changes in light levels Species that are slightly	Low	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operation	Light disturbances	High	Low	sensitive to changes in light levels  Species that are slightly	Low	Unlikely	Entrance, which is currently lif (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operation	Light disturbances	High	Low	sensitive to changes in light levels Species that are slightly	Low	Unlikely	Entrance, which is currently lif (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	sensitive to changes in light levels	Low	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible

Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse	Negligble	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	off from baseline. Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligble	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be	Negligble	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels  Species that are extremely	Medium	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operation	Light disturbances	High	High	sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels Species that are extremely	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operation	Light disturbances	High	High	sensitive to changes in light levels: nocturnal, crepuscular fauna	High	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No No	Sibynophis melanocephalus  Amyda cartilaginea	Black-headed collared snake  Asian softshell turtle	Least Concern  Vulnerable; CITES protected	Vulnerable  Vulnerable	Operation Operation	Light disturbances  Light disturbances	High	Medium High	to changes in light levels  Species that are extremely sensitive to changes in	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	(Appendix II)  Vulnerable; CITES protected		Operation	Light disturbances	High High	High	light levels  Species that are extremely sensitive to changes in	High High	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	High High	High High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	(Appendix II)  Least Concern	Near Threatened	Operation	Light disturbances	High	High	light levels: nocturnal, crepuscular fauna  Species that are extremely sensitive to changes in	High	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Operation	Light disturbances	High	High	light levels  Species that are extremely sensitive to changes in light levels	High	Unlikely	currently lit (i.e., worse off from baseline. Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	off from baseline. Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	off from baseline. Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operation	Light disturbances	High	High	Species that are extremely sensitive to changes in light levels	High	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels	Medium	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be	Minor	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be	Negligble	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels Species that are slightly	Low	Unlikely	provided at Main Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel		Vulnerable	Operation	Light disturbances	High	Low	sensitive to changes in light levels	Low	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operation	Light disturbances	High	Medium	Species that are sensitive to changes in light levels Species that are slightly	Medium	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline. Lighting will only be provided at Main	Minor	Medium	Medium	Unlikely	Minor
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Operation	Light disturbances	High	Low	sensitive to changes in light levels	Low	Unlikely	Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible

Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Operation	Light disturbances	High	Low	Species that are slightly sensitive to changes in light levels	Low	Unlikely	Lighting will only be provided at Main Entrance, which is currently lit (i.e., worse off from baseline.	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	dispersal  Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitals for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligble	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological	High	Negligible	Not dependent on connected habitats for dispersal and able to	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
					Least Concern; CITES			connectivity for faunal movement  Loss of/reduction in ecological			traverse urban infrastructure Highly dependent on								
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	protected (Appendix II)	Endangered	Operation	connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor

Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Not dependent on	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	: Vulnerable	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	I)  Least Concern; CITES protected (Appendix II)	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	dispersal  Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Sumiculus lugubris	Square-tailed drongo-cuckoo	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	dispersal  Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
								Loss of/reduction in ecological			dispersal  Not dependent on connected habitats for								
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operation	connectivity for faunal movement  Loss of/reduction in ecological	High	Negligible	dispersal and able to traverse urban infrastructure Dependent on connected	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operation	connectivity for faunal movement  Loss of/reduction in ecological	High	Medium	habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	a NA	Not Assessed	Nationally Extinct (Rediscovered)	Operation	connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Highly dependent on	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal Highly dependent on	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Not dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	dispersal and able to traverse urban infrastructure Not dependent on	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	2 Common duffer	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor

Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	infrastructures if needed  Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	infrastructure Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological	High	High	dispersal  Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operation	connectivity for faunal movement  Loss of/reduction in ecological	High	Negligible	dispersal  Not dependent on connected habitats for dispersal and able to	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operation	connectivity for faunal movement  Loss of/reduction in ecological	High	High	traverse urban infrastructure Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
T dd ld	Butturny	110	r apilio provaspos provaspos	Dido Halaii	110171333333	Validado	орогазан	connectivity for faunal movement	· ··g··		dispersal Not dependent on		2	No major now buildings				<b>-</b> ,	THE CO.
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure Not dependent on	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological	High	Negligible	Not dependent on connected habitats for dispersal and able to	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
radita	Bulliny	110	ronota color canga	Common pain dure	110171000000	Nationally Extinot (Neutroportion)	Operation	connectivity for faunal movement	· ··g··	regigue	traverse urban infrastructure	vay zon	O'IIIIOI)	no mga non balango	· vogregue	regigio	vary con	Onlinesty	regigiolo
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligble	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
								connectivity for faunal movement  Loss of/reduction in ecological			dispersal Highly dependent on								
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern  Vulnerable; CITES protected	Endangered	Operation	connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	(Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Highly dependent on	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	e Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian softshell turtle	Vulnerable; CITES protected (Appendix II)	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	No change to waterbody	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	No change to waterbody Highly dependent on	Very Low	Unlikely	No major new buildings	Negligible	Negligible	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal Not dependent on	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Unlikely	No major new buildings	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Unlikely	No major new buildings	Minor	Medium	Medium	Unlikely	Minor
Fauna	Non-volant mammal	No	Prionallurus bengalensis	Leopard cat	I) Least Concern; CITES protected (Appendix I)	Critically Endangered	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Operation	Loss of/reduction in ecological	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
								connectivity for faunal movement  Loss of/reduction in ecological			dispersal Highly dependent on								
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Operation	connectivity for faunal movement	High	High	connected habitats for dispersal	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Operation	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Gynacantha basiquttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operation	Loss of/reduction in ecological	High	High	dispersal Highly dependent on connected habitats for	High	Unlikely	No major new buildings	Minor	High	High	Unlikely	Minor
Fauna	Odonate	No	Indothemis carnatica	White-tipped demon	Near Threatened	Critically Endangered	Operation	connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High	Low	dispersal  Slightly dependent on connected habitats for dispersal and adaptable to	Low	Unlikely	No major new buildings	Negligible	Low	Low	Unlikely	Negligible
											traverse urban infrastructures if needed								

								Loss of/reduction in ecological			Highly dependent on					-				
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Operation	connectivity for faunal movement  Loss of/reduction in ecological	High	High	connected habitats for dispersal Highly dependent on	High	Unlikely	No major new buildings		Minor	High	High	Unlikely	Minor
Fauna	Odonate	NO	Prodasineura collaris	Collared threadtail	Least Concern	Vulnerable	Operation	connectivity for faunal movement	High	High	connected habitats for dispersal Species with negligible	High	Unlikely	No major new buildings		Minor	High	High	Unlikely	Minor
Fauna	Bat	No	Cheiromeles torquatus	Naked bulldog bat	Least Concern	Critically Endangered	Operation	Poaching	High	Negligible	susceptibility to poaching  Species with negligible	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Emballonura monticola	Lesser sheath-tailed bat	Least Concern	Critically Endangered	Operation	Poaching	High	Negligible	susceptibility to poaching  Species with negligible	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	Yes	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	susceptibility to poaching  Species with negligible	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Hipposideros bicolor	Bicoloured roundleaf bat	Least Concern	Endangered	Operation	Poaching	High	Negligible	susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Penthetor lucasi	Dusky fruit bat	Least Concern	Critically Endangered	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached  Currently already	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching;	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
r dans	5.10	110	Access Monarally	Diad dated languares	Least Concern	Litaligated	Operation	r deciming	· ··g··	25#	not commonly known to be traded as pets	LOW	oay	Not likely to be postuled	Triumo / tot	recynyma	25	25#	Onincay	regilgible
Fauna	Bird	No	Ardea purpurea	Purple heron	Least Concern	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Brachypodius melanocephalos	Black-headed bulbul	Least Concern	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Chloropsis cyanopogon	Lesser green leafbird	Near Threatened	Critically Endangered	Operation	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chloropsis sonnerati	Greater green leafbird	Endangered	Critically Endangered	Operation	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Less Likely	illegal wildlife trade Currently already accessible to public; Singapore's zero- tolerance stance to	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
											Species with low			illegal wildlife trade						
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Bird	No	Copsychus malabaricus	White-rumped shama	Least Concern; CITES protected (Appendix II)	Endangered	Operation	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operation	Poaching	High	Medium	Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Less Likely	illegal wildlife trade Currently already accessible to public; Singapore's zero- tolerance stance to	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
											Species with low			illegal wildlife trade						
Fauna	Bird	Yes	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Cyomis brunneatus	3rown-chested jungle flycatche	Vulnerable	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Dendrocygna javanica	Lesser whistling duck	Least Concern	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Dicaeum chrysorrheum	Yellow-vented flowerpecker	Least Concern	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Haliaeetus ichthyaetus	Grey-headed fish eagle	Near Threatened; CITES protected (Appendix II)	Vulnerable	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
														moyal Wildlife trade						

Fauna	Bird	No	Heliopais personatus	Masked finfoot	Endangered	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Nettapus coromandelianus	Cotton pygmy goose	Least Concern	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached  Currently already	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Nycticorax nycticorax	Black-crowned night heron	Least Concern	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets Species that are highly	Low	Unlikely	Not likely to be poached  Currently already	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	d Near Threatened	Operation	Poaching	High	High	susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade Currently already	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Psittinus cyanurus	Blue-rumped parrot	Near Threatened; CITES protected (Appendix II)	Endangered	Operation	Poaching	High	High	susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Pycnonotus brunneus	Asian red-eyed bulbul	Least Concern	Vulnerable	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets  Species that are possibly	Low	Unlikely	Not likely to be poached  Currently already accessible to public;	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Pycnonotus simplex	Cream-vented bulbul	Least Concern  Critically Endangered;	Vulnerable	Operation	Poaching	High	Medium	susceptible to poaching; commonly traded as pets Species that are highly	Medium	Less Likely	Singapore's zero- tolerance stance to illegal wildlife trade Currently already accessible to public;	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus		CITES protected (Appendix I)  Least Concern; CITES		Operation	Poaching	High	High	susceptible to poaching; listed on CITES Appendix I or II Species that are highly susceptible to poaching;	High	Less Likely	Singapore's zero- tolerance stance to illegal wildlife trade Currently already accessible to public;	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna Fauna	Bird Bird	No No	Spilornis cheela Strix seloputo	Crested serpent eagle  Spotted wood owl	protected (Appendix II)  Least Concern; CITES	Critically Endangered  Vulnerable	Operation  Operation	Poaching Poaching	High High	High High	listed on CITES Appendix I or II  Species that are highly susceptible to poaching;	High High	Less Likely  Less Likely	Singapore's zero- tolerance stance to illegal wildlife trade Currently already accessible to public; Singapore's zero-	Wildlife Act Wildlife Act	Minor	High High	High High	Less likely  Less likely	Minor Minor
Fauna	Bird	Yes	Surniculus lugubris	Square-tailed drongo-cuckoo	protected (Appendix II)  Least Concern	Vulnerable	Operation	Poaching	High	Low	listed on CITES Appendix I or II Species with low susceptibility to poaching;	Low	Unlikely	tolerance stance to illegal wildlife trade	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Tachybaptus ruficollis	Little grebe	Least Concern	Critically Endangered	Operation	Poaching	High	Low	not commonly known to be traded as pets  Species with low susceptibility to poaching; not commonly known to	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	No	Treron curvirostra	Thick-billed green pigeon	Least Concern	Vulnerable	Operation	Poaching	High	Low	be traded as pets  Species with low susceptibility to poaching; not commonly known to	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operation	Poaching	High	Medium	be traded as pets  Species that are possibly susceptible to poaching; commonly traded as pets	Medium	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to	Wildlife Act	Minor	Medium	Medium	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	illegal wildlife trade  Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet cakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets Species with low	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligibie	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets Species with low	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets Species with low	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets Species with low susceptibility to poaching;	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operation	Poaching	High	Low	not commonly forown to be traded as pets  Species with low susceptibility to poaching;	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible  Medicible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operation	Poaching	High	Low	not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible

Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	Yes	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets Species with low	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets Species with low	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Boiga melanota	Gold-ringed cat snake	Least Concern	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operation	Peaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Ophiophagus hannah	King cobra	Vulnerable; CITES protected (Appendix II)	d Vulnerable	Operation	Poaching	High	High	Species that are highly susceptible to peaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-marine snake	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operation	Poaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine snake	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operation	Peaching	High	Low	Species with low susceptibility to poaching; not commonly known to be traded as pets Species that are highly	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible
Fauna	Non-marine turtle	No	Amyda cartilaginea	Asian sonshell turtle	Vulnerable; CITES protected (Appendix II)	vuii lei able	Operation	Poaching	High	High	susceptible to poaching; listed on CITES Appendix I or II Species that are highly	High	Less Likely	Species spends most time in stream, which is far away from trails Currently already accessible to public;	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-marine turtle	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	d Near Threatened	Operation	Poaching	High	High	susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Galeopterus variegatus	Sunda colugo	Least Concern	Near Threatened	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching Species with low	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Non-volant mammal	Yes	lomys horsfieldii	Horsfield's flying squirrel	Least Concern	Endangered	Operation	Poaching	High	Low	susceptibility to poaching; not commonly known to be traded as pets	Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Unlikely	Negligible

Fauna	Non-volant mammal	Yes	Lutrogale perspicillata	Smooth otter	Vulnerable; CITES protected (Appendix I)	Endangered	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operation	Poaching	High	High	Species that are highly susceptible to poaching; listed on CITES Appendix I or II	High	Less Likely	Currently already accessible to public; Singapore's zero- tolerance stance to illegal wildlife trade	Wildlife Act	Minor	High	High	Less likely	Minor
Fauna	Odonate	No	Acrogomphus malayanus	Malayan hooktail	Near Threatened	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Amphicnemis gracilis	Will-o-wisp	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Chalybeothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Drepanosticta quadrata	Singapore shadowdamsel	Not Assessed	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Indothemis camatica	White-tipped demon	Near Threatened	Critically Endangered	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
Fauna	Odonate	No	Podolestes orientalis	Blue-spotted flatwing	Least Concern	Vulnerable	Operation	Poaching	High	Negligible	Species with negligible susceptibility to poaching	Very Low	Unlikely	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Unlikely	Negligible
F	04	N-	One design of the de	College of the condition	110	V6-tbl-	Oncortion	Describion	Heb	Mantable	Species with negligible		Hellish.	Not Buch to be accepted	18/11-015- A -4	Manifolds	Mandalla	Manufacci		

Receptor Type	Туре	Habitat	Phase	Impact type	Impact category		) Key minimum conntrols	Impact intensity (I)	Reason	Consequence (C = S × I)	Likelihood (L)	Reason	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual consequence	Residual likelihood	Residual impact significance
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Construction	Loss of habitat	Direct	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest	Construction	Loss of habitat	Direct	Priority 2		Negligible	0.64% (0.11 ha)	Negligible	Unlikely	Overlaps with worksite	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Scrubland	Construction	Loss of habitat	Direct	Priority 3	Hoarding installation, TPZ	Negligible	0.14% (0.006 ha)	Negligible	Unlikely	Overlaps with worksite	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Farm	Construction	Loss of habitat	Direct	Priority 3	installation, daily checks	Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Urban vegetation	Construction	Loss of habitat	Direct	Priority 3	by EM	Low	7.29% (0.18 ha)	Very Low	Certain	Overlaps with worksite	Minor	Not applicable	Low	Very Low	Certain	Minor
Habitat	Aquatic	Stream D1a	Construction	Loss of habitat	Direct	Priority 2	by Lin	Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD1	Construction	Loss of habitat	Direct	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD2	Construction	Loss of habitat	Direct	Priority 2		Negligible	No loss (boardwalk)	Negligible	Unlikely	No development (boardwalk)	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Construction	Habitat degradation	Indirect	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest	Construction	Habitat degradation	Indirect	Priority 2		Low	4.66% (0.79 ha)	Very Low	Less likely	Minimum controls	Negligible	Not applicable	Low	Very Low	Less likely	Negligible
Habitat	Terrestrial	Scrubland	Construction	Habitat degradation	Indirect	Priority 3	ECM implementation,	Low	1.02% (0.04 ha)	Very Low	Less likely	Minimum controls	Negligible	Not applicable	Low	Very Low	Less likely	Negligible
Habitat	Terrestrial	Farm	Construction	Habitat degradation	Indirect	Priority 3	proper stockpiling, DCM	Low	3.00% (0.003 ha)	Very Low	Less likely	Minimum controls	Negligible	Not applicable	Low	Very Low	Less likely	Negligible
Habitat	Terrestrial	Urban vegetation	Construction	Habitat degradation	Indirect	Priority 3	implementation, ensure	High	40.46% (0.97 ha)	Low	Less likely	Minimum controls	Minor	Not applicable	High	Low	Less likely	Minor
Habitat	Aquatic	Stream D1a	Construction	Habitat degradation	Indirect	Priority 2	noise levels within approved limits, daily	Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD1	Construction	Habitat degradation	Indirect	Priority 2	checks by EM, avoid fogging	Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD2	Construction	Habitat degradation	Indirect	Priority 2	33 3	Medium	Considerable changes in surface water quality	Low	Less likely	Minimum controls	Minor	Not applicable	Medium	Low	Less likely	Minor
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Construction	Formation of edge effects	Indirect	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest	Construction	Formation of edge effects	Indirect	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Scrubland	Construction	Formation of edge effects	Indirect	Priority 3		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Farm	Construction	Formation of edge effects	Indirect	Priority 3		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Urban vegetation	Construction	Formation of edge effects	Indirect	Priority 3	NA	High	44.37% increase in P/A	Low	Less likely	Considerable development (arrival node) but habitat is already edge habitat		Not applicable	High	Low	Less likely	Minor
Habitat	Aquatic	Stream D1a	Construction	Formation of edge effects	Indirect	Priority 2		NA	NA	NA	NA	NA	Negligible	Not applicable	NA	NA	NA	Negligible
Habitat	Aquatic	Quarry Lake QD1	Construction	Formation of edge effects	Indirect	Priority 2		NA NA	NA NA	NA.	NA.	NA	Negligible	Not applicable	NA NA	NA NA	NA.	Negligible
Habitat	Aquatic	Quarry Lake QD2	Construction	Formation of edge effects	Indirect	Priority 2		NA NA	NA	NA.	NA.	NA NA	Negligible	Not applicable	NA NA	NΔ	NA.	Negligible
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Operational	Habitat degradation	Indirect	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible	Not applicable	Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest	Operational	Habitat degradation	Indirect	Priority 2			•	Negligible	Unlikely		Negligible				Unlikely	Negligible
Habitat	Terrestrial	Scrubland	Operational		Indirect	Priority 3		Low Low	No overlap No overlap		Unlikely	No development No development			Negligible	Negligible	Unlikely	
Habitat	Terrestrial	Farm	Operational	Habitat degradation						Negligible			Negligible		Negligible	Negligible		Negligible
Habitat	Terrestrial	Urban vegetation	Operational	Habitat degradation Habitat degradation	Indirect	Priority 3 Priority 3	Avoid fogging	Low High	No overlap 40.46% (0.97 ha)	Negligible Low	Unlikely Possible	No development Accessible terrain and habitat degradation already	Negligible Minor		Negligible High	Negligible Low	Unlikely Less likely	Negligible Minor
Habitat	Aquatic	Stream D1a	Operational	Habitat degradation	Indirect	Priority 2	, waa logging	Negligible	No overlap	Negligible	Unlikely	present No development	Negligible		Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD1	Operational	Habitat degradation	Indirect	Priority 2		Negligible	No overlap	Negligible	Unlikely	No development	Negligible		Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD2	Operational	Habitat degradation	Indirect	Priority 2		Low	Some changes in surface water quality	Very Low	Possible	Boardwalk with railing, surface runoff controlled but	Minor		Low	Very Low	Less likely	Negligible
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Operational	Changes in microclimatic conditions	Indirect	Priority 2		Negligible	No overlap	Negligible	Unlikely	some littering expected No development	Negligible		Negligible	Negligible	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest	Operational	Changes in microclimatic conditions	Indirect	Priority 2		Low	4.66% (0.79 ha)	Very Low	Unlikely	Development is largely green	Negligible		Low	Very Low	Unlikely	Negligible
Habitat	Terrestrial	Scrubland	Operational	Changes in microclimatic conditions	Indirect	Priority 3	Ensure noise levels within	Low	1.02% (0.04 ha)	Very Low	Unlikely	Development is largely green	Negligible		Low	Very Low	Unlikely	Negligible
Habitat	Terrestrial	Farm	Operational	Changes in microclimatic conditions	Indirect	Priority 3	approved limits, ensure	Low	3.00% (0.003 ha)	Very Low	Unlikely		Negligible		Low	Very Low	Unlikely	Negligible
Habitat	Terrestrial	Urban vegetation	Operational	Changes in microclimatic conditions	Indirect	Priority 3	dust levels within	High	40.46% (0.97 ha)	Low	Unlikely	Development is largely green Development is largely green	Negligible		High	low	Unlikely	Negligible
Habitat	Aguatic	Stream D1a	Operational		Indirect	Priority 2	approved limits	Negligible		Negligible	Unlikely		Negligible		Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD1	Operational	Changes in microclimatic conditions Changes in microclimatic conditions	Indirect	Priority 2		Negligible	No overlap No overlap	Negligible	Unlikely	No development No development	Negligible		Negligible	Negligible	Unlikely	Negligible
Habitat	Aquatic	Quarry Lake QD2	Operational	Changes in microclimatic conditions	Indirect	Priority 2		Low	2.45% (0.08 ha)	Very Low	Unlikely	Development is largely green	Negligible		Low	Very Low	Unlikely	Negligible
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Operational	Introduction of exotic species	Indirect	Priority 2		NA NA	2.43 % (0.06 Ha)	NA.	NA	NA	NA NA		NA.	NA NA	NA	NA NA
Habitat	Terrestrial	Abandoned-land forest	Operational	(aquatic habitats only) Introduction of exotic species	Indirect	Priority 2		NA.	NA	NA	NA	NA.	NA		NA	NA	NA	NA
Habitat	Terrestrial	Scrubland	Operational	(aquatic habitats only) Introduction of exotic species				NA.	NA NA	NA.	NA NA	NA NA	NA NA		NA.	NΔ	NA.	NA NA
				(aquatic habitats only) Introduction of exotic species	Indirect	Priority 3												
Habitat	Terrestrial	Farm	Operational	(aquatic habitats only)	Indirect	Priority 3	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Terrestrial	Urban vegetation	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 3		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA
Habitat	Aquatic	Stream D1a	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2		High	Detrimental to native-dominated habitat	Medium	Less likely	Aquatic habitat not easily accessible	Minor		High	Medium	Less likely	Minor
Habitat	Aquatic	Quarry Lake QD1	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2		Low	Some impact to exotic-dominated habitat	Very Low	Less likely	No development	Negligible		Low	Very Low	Less likely	Negligible
Habitat	Aquatic	Quarry Lake QD2	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2		Low	Some impact to exotic-dominated habitat	Very Low	Less likely	Aquatic habitat currently already easily accessible	Negligible		Low	Very Low	Less likely	Negligible

Receptor Type	Туре	Receptor	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequence (C = S × I)	Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual consequence		Residual impact significance
Flora	Indirect	Abrodictyum obscurum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Actinostachys digitata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Agelaea macrophylla	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Aglaia tomentosa ssp. cordata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Aidia densiflora	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Ampelocissus ascendiflora	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Ampelocissus gracilis	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Arundina graminifolia	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Aspidopterys concava	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Bambusa heterostachya	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Bambusa vulgaris	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Bouea oppositifolia	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Brachypterum scandens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Breynia discigera	Construction	Decline in plant health	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Calamus cf. melanochaetes	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Calophyllum tetrapterum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Canarium pilosum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Capparis micracantha subsp. korthalsiana	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Cephalomanes javanicum var. javanicum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Chassalia curviflora	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Connarus semidecandrus	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Cratoxylum formosum	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Curculigo capitulata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible

Flora	Indirect Cyrtococcum patens	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	Formation of some forest edges in forested and mix of urban area; plant specimens previously in forested areas now exposed to some edge effects	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect Diplazium tomentosum	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect Elaeocarpus ferrugineus ssp. ferrugineus	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect Ficus caulocarpa	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures Implement	Negligible	No change	No change No change	e Negligible
Flora	Indirect Ficus sagittata	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	e Negligible
Flora	Indirect Ficus variegata	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	e Negligible
Flora	Indirect Ficus vasculosa	Construction Decline in plant health I	ligh Negligible	indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	e Negligible
Flora	Indirect Ficus villosa	Construction Decline in plant health I	ligh Negligible	indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible	No change	No change No change	e Negligible
Flora	Indirect Garcinia cf. forbesii	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development  No specimen affected	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions  No specimen will lie within impact	soil erosion control measures Implement soil erosion	Negligible	No change	No change No change	e Negligible
Flora	Indirect Garcinia griffithii	·	ligh Negligible	indirectly by development  No specimen affected	Very Low	to Occur	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion	Negligible	No change	No change No change	
Flora	Indirect Gardenia cf. subcarinata	·	ligh Negligible	indirectly by development  No specimen affected	Very Low	to Occur	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion	Negligible	No change	No change No change	
Flora	Indirect Glochidion zeylanicum var. zeylanicum Indirect Guioa pleuropteris		ligh Negligible	indirectly by development  No specimen affected	Very Low	to Occur	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion	Negligible  Negligible	No change  No change	No change No change  No change No change	
Flora	Indirect Gynochthodes rigida	·	ligh Negligible	No specimen affected	Very Low	Not Expected	zones of proposed constructions  No specimen will lie within impact	control measures Implement soil erosion	Negligible	No change	No change No change	
Flora	Indirect Heritiera elata		ligh Negligible	No specimen affected	Very Low	to Occur  Not Expected to Occur	zones of proposed constructions  No specimen will lie within impact zones of proposed constructions	control measures Implement soil erosion control	Negligible	No change	No change No change	
Flora	Indirect Horsfieldia polyspherula var. polyspherula	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	e Negligible
Flora	Direct Litsea cf. castanea	Construction Decline in plant health I	ligh Negligible	No specimen affected	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	e Negligible
Flora	Indirect Litsea grandis	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control	Negligible	No change	No change No change	e Negligible
Flora	Indirect Litsea umbellata	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	measures Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect Lomariopsis lineata	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect Macaranga griffithiana	Construction Decline in plant health I	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect <i>Macaranga hullettii</i>	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible
Flora	Indirect Mapania cuspidata	Construction Decline in plant health I	ligh Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible	No change	No change No change	e Negligible

Flora	Indirect Melicope lunu-ankenda	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Morinda elliptica	Construction Decline in plant health	High High	Only 1 specimen (only specimen recorded) affected indirectly by development of main entrance	High	Less likely	Formation of forest edges in forested area; plant specimens previously in forested areas now exposed to new edge habitats	Implement soil erosion control measures	Minor	> Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP	No change	No change	No change	Minor
Flora	Indirect Nepenthes rafflesiana	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Nervilia singaporensis	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Oncosperma tigillarium	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Oxyceros bispinosus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Oxyceros longiflorus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Pandanus houlletii	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Pellacalyx saccardianus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Phaeanthus intermedius	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Phytocrene bracteata	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Piper cf. ribesioides	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Piper ramipilum	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Psychotria maingayi	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures	Negligible		No change	No change	No change	Negligible
Flora	Indirect Psychotria ovoidea	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	Implement soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Psychotria polycarpa	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Ptemandra coerulescens	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Radermachera quadripinnata ssp. lobbii	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Rourea mimosoides	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Rourea minor	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Rubus moluccanus var. moluccanus	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures Implement	Negligible		No change	No change	No change	Negligible
Flora	Indirect Sandoricum koetjape	Construction Decline in plant health	High Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control measures	Negligible		No change	No change	No change	Negligible

											Implement					
Flora	Indirect	Strophanthus caudatus	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
							indirectly by development		to Occui	zones of proposed constructions	measures					
							No specimen affected		Not Expected	No specimen will lie within impact	Implement soil erosion					
Flora	Indirect	Tectaria semipinnata	Construction	Decline in plant health	High	Negligible	indirectly by development	Very Low	to Occur	zones of proposed constructions	control	Negligible	No change	No change	No change	Negligible
											measures Implement					
Flora	Indirect	Teratophyllum ludens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
											measures					
Flana	la dian at	Tatus and facility was because in	Canatavatian	Dealine in plant health	Link	Nauliaibla	No specimen affected	\/a=.1 a	Not Expected	No specimen will lie within impact	Implement soil erosion	Nasisika	No shanna	No shanna	No shanna	N a aliatible
Flora	Indirect	Tetracera fagifolia var. borneensis	Construction	Decline in plant health	High	Negligible	indirectly by development	Very Low	to Occur	zones of proposed constructions	control measures	Negligible	No change	No change	No change	Negligible
											Implement					
Flora	Indirect	Uncaria cf. elliptica	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
											measures					
Flora	Indirect	Uncaria cordata	Construction	Decline in plant health	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will lie within impact	Implement soil erosion	Negligible	No change	No change	No change	Negligible
Tiola	manect	oncaria cordata	CONSTRUCTION	Decline in plant nealth	riigii	regligible	indirectly by development	very Low	to Occur	zones of proposed constructions	control measures	regligible	140 change	140 change	140 change	regiigible
											Implement					
Flora	Indirect	Ziziphus elegans	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Not Expected to Occur	No specimen will lie within impact zones of proposed constructions	soil erosion control	Negligible	No change	No change	No change	Negligible
							No specimen affected		Not Expected	No specimen will be affected by	measures					
Flora	Direct	Abrodictyum obscurum	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Actinostachys digitata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Agelaea macrophylla	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
							directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by	NIII		No observe	No observe	_	
Flora	Direct	Aglaia tomentosa ssp. cordata	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Aidia densiflora	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ampelocissus ascendiflora	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ampelocissus gracilis	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Arundina graminifolia	Construction	Mortality	High	Nogligiblo	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
		•		•		Negligible	directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by			· ·	No change	-	
Flora	Direct	Aspidopterys concava	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Bambusa heterostachya	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Bambusa vulgaris	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Bouea oppositifolia	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
				Mortality			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL		No obongo	No obongo	_	
Flora	Direct	Brachypterum scandens	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by		Negligible	No change	No change	No change	Negligible
Flora	Direct	Breynia discigera	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Calamus cf. melanochaetes	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Calophyllum tetrapterum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Canarium pilosum	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
		·		•			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by			· ·	· ·	-	
Flora	Direct	Capparis micracantha subsp. korthalsiana	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Cephalomanes javanicum var. javanicum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Chassalia curviflora	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Connarus semidecandrus	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Cratoxylum formosum	Construction	Mortality	High	Nogligiblo	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Nogligible	No change	No change	No change	Negligible
i iora	Direct	•		•	riigii	Negligible	directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by		Negligible	No change	No change	No change	
Flora	Direct	Curculigo capitulata	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Cyrtococcum patens	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Diplazium tomentosum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Elaeocarpus ferrugineus ssp. ferrugineus	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
				•			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by						
Flora	Direct	Ficus caulocarpa	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus sagittata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus variegata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus vasculosa	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Ficus villosa	Construction	Mortality			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL			No change	No change	Negligible
				•	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by		Negligible	No change		-	
Flora	Direct	Garcinia cf. forbesii	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Garcinia griffithii	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct	Gardenia cf. subcarinata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible	No change	No change	No change	Negligible
							, _, acrosopmone		.5 00001	p.so. or mortality						

							No enocimon affected		Not Expected	No enocimon will be affected by							
Flora	Direct	Glochidion zeylanicum var. zeylanicum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Guioa pleuropteris	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Gynochthodes rigida	Construction	Mortality	High	Low	No specimen affected	Low	Certain	No specimen will be affected by	NIL	Negligible		Negligible	No change	No change	Negligible
Flora	Direct	Heritiera elata	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No chango	No change	No change	Negligible
				-			directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by				No change			
Flora	Direct	Horsfieldia polyspherula var. polyspherula	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Litsea cf. castanea	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Litsea grandis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Litsea umbellata	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Lomariopsis lineata	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
		•					directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by				-	ŭ		
Flora	Direct	Macaranga griffithiana	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Macaranga hullettii	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Mapania cuspidata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Melicope lunu-ankenda	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Morinda elliptica	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
		·		-			directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by							
Flora	Direct	Nepenthes rafflesiana	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Nervilia singaporensis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Low	Certain	No specimen will be affected by impact of mortality	NIL	Negligible		Negligible	No change	No change	Negligible
Flora	Direct	Oncosperma tigillarium	Construction	Mortality	High	Negligible	No specimen affected directly by development	Low	Certain	No specimen will be affected by impact of mortality	NIL	Negligible		Negligible	No change	No change	Negligible
Flora	Direct	Oxyceros bispinosus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Oxyceros longiflorus	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
							directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by					_		
Flora	Direct	Pandanus houlletii	Construction	Mortality	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Pellacalyx saccardianus	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Phaeanthus intermedius	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Phytocrene bracteata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Piper cf. ribesioides	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
							directly by development No specimen affected		to Occur Not Expected	impact of mortality  No specimen will be affected by							
Flora	Direct	Piper ramipilum	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Psychotria maingayi	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Psychotria ovoidea	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Psychotria polycarpa	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Pternandra coerulescens	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Radermachera quadripinnata ssp. lobbii	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
							directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by							
Flora	Direct	Rourea mimosoides	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Rourea minor	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Rubus moluccanus var. moluccanus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Sandoricum koetjape	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Strophanthus caudatus	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
							directly by development No specimen affected	-	to Occur Not Expected	impact of mortality  No specimen will be affected by							
Flora	Direct	Tectaria semipinnata	Construction	Mortality	High	Negligible	directly by development  No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Teratophyllum ludens	Construction	Mortality	High	Negligible	directly by development	Very Low	to Occur	impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Tetracera fagifolia var. borneensis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Uncaria cf. elliptica	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not Expected to Occur	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Uncaria cordata	Construction	Mortality	High	Negligible	No specimen affected	Very Low	Not Expected	No specimen will be affected by	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Ziziphus elegans	Construction	Mortality	High	Negligible	directly by development No specimen affected	Very Low	to Occur Not Expected	impact of mortality  No specimen will be affected by	NIL	Negligible		No change	No change		Negligible
ιωα	חוופנו	Elephus Glogans	ConstructiOH	iviortailty	ragn	r vegiigibi <del>ld</del>	directly by development	voly LOW	to Occur	impact of mortality	INIL	racyligible	•Design the hoggiturally and trails to date:	ino criarige	i vo criange	ino change	regugible
							Some plant specimens of						Design the boardwalks and trails to deter visitors from trampling/ venturing off-trail (e.g.,				
Flora	Indirect	Bambusa heterostachya	Operational	Poaching	High	Medium	this species could get stolen (i.e.,have	Medium	Not Expected	Specimen is too large to be poached	NIL	Minor	install railings) •Put up signages to remind visitors not to stray	No change	No change	No change	Minor
	ruii GUL		operational	. cashing	911	ouidiii	charismatic and/or	ouidiii	to Occur			IVIII IOI	off-trail •Design for dense landscaping along the sides	ondinge	oridinge	. to sharige	············
							ethnobotanical value)						of the proposed trails and boardwalks to deter visitors from venturing off-trail				

Flora	Indirect Bambusa vulgaris	Operational	Poaching	High	Medium	Some plant specimens of this species could get stolen (i.e.,have charismatic and/or ethnobotanical value)	Medium	Not Expected to Occur	Specimen is too large to be poached	NIL	Minor	Design the boardwalks and trails to deter visitors from trampling/ venturing off-trail (e.g., install railings) Put up signages to remind visitors not to stray off-trail Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	No change	No change N	No change	Minor
Flora	Indirect Guioa pleuropteris	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect Nepenthes rafflesiana	Operational	Poaching	High	High	Most plant specimens of this species could get stolen (i.e., orchids, pitcher plants), and are of small to medium sizes, which can be removed	High	Not Expected to Occur	Only specimen recorded on site, and are not accessible to members of public	NIL	Minor	Design the boardwalks and trails to deter visitors from trampling/ venturing off-trail (e.g., install railings)  Put up signages to remind visitors not to stray off-trail Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	No change	No change N	No change	Minor
Flora	Indirect Arundina graminifolia	Operational	Poaching	High	High	Most plant specimens of this species could get stolen (i.e., orchids, pitcher plants), and are of small to medium sizes, which can be removed	High	Not Expected to Occur	Only specimen recorded on site, and are not accessible to members of public	NIL	Minor	Design the boardwalks and trails to deter visitors from trampling/ venturing off-trail (e.g., install railings)  Put up signages to remind visitors not to stray off-trail  Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	No change	No change N	No change	Minor
Flora	Indirect Abrodictyum obscurum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Actinostachys digitata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change N	No change	Negligible
Flora	Indirect Agelaea macrophylla	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Aidia densiflora	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Aspidopterys concava	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Breynia discigera	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Cephalomanes javanicum var. javanicum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect Connarus semidecandrus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Curculigo capitulata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Cyrtococcum patens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change 1	No change	Negligible
Flora	Indirect Ficus sagittata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change N	No change	Negligible
Flora	Indirect Ficus vasculosa	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect Garcinia cf. forbesii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible		No change	No change N	No change	Negligible

Flora	Indirect Garcinia griffithii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Glochidion zeylanicum var. zeylanicum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Direct Gynochthodes rigida	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Horsfieldia polyspherula var. polyspherula	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Litsea cf. castanea	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Litsea grandis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Litsea umbellata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Lomariopsis lineata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Macaranga griffithiana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Macaranga hullettii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Mapania cuspidata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Melicope lunu-ankenda	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Oncosperma tigillarium	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Oxyceros bispinosus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Oxyceros longiflorus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Pandanus houlletii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Pellacalyx saccardianus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Phytocrene bracteata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Piper cf. ribesioides	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible

Flora	Indirect Psychotria polycarpa	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Ptemandra coerulescens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Radermachera quadripinnata ssp. lobbii	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Rubus moluccanus var. moluccanus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Strophanthus caudatus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Teratophyllum ludens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Tetracera fagifolia var. borneensis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Uncaria cf. elliptica	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Uncaria cordata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Aglaia tomentosa ssp. cordata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Ampelocissus ascendifiora	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Ampelocissus gracilis	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Brachypterum scandens	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Calamus cf. melanochaetes	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Calophyllum tetrapterum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Canarium pilosum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Capparis micracantha subsp. korthalsiana	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Chassalia curviflora	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect Cratoxylum formosum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change	No change	Negligible

Flora	Indirect Diplazium tomentosum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Elaeocarpus ferrugineus ssp. ferrugineus	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Ficus villosa	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Gardenia cf. subcarinata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Heritiera elata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Nervilia singaporensis	Operational	Poaching	High	High	Most plant specimens of this species could get stolen (i.e., orchids, pitcher plants), and are of small to medium sizes, which can be removed	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Phaeanthus intermedius	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Piper ramipilum	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Psychotria maingayi	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Psychotria ovoidea	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Rourea mimosoides	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Rourea minor	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Tectaria semipinnata	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Ziziphus elegans	Operational	Poaching	High	Low	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Low	Not Expected to Occur	Specimen is inaccessible	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Bouea oppositifolia	Operational	Poaching	High	Negligible	No specimen can be stolen as the only record on site is a large specimen	Very Low	Not Expected to Occur	Specimen is too large to be poached	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Ficus caulocarpa	Operational	Poaching	High	Negligible	No specimen can be stolen as the only record on site is a large specimen	Very Low	Not Expected to Occur	Specimen is too large to be poached	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Ficus variegata	Operational	Poaching	High	Negligible	No specimen can be stolen as the only record on site is a large specimen	Very Low	Not Expected to Occur	Specimen is too large to be poached	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Morinda elliptica	Operational	Poaching	High	Negligible	No specimen can be stolen as the only record on site is a large specimen	Very Low	Not Expected to Occur	Specimen is too large to be poached	NIL	Negligible	No change	No change N	No change	Negligible
Flora	Indirect Sandoricum koetjape	Operational	Poaching	High	Negligible	Few plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Not Expected to Occur	Specimen is too large to be poached	NIL	Negligible	No change	No change N	No change	Negligible

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Appendix 1C Environmental Impact and Mitigation Register - BBHNP Appendix 1C - Environmental Impact and Mitigation Register

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity		Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	Residents staying adjacent / near to the proposed project	Construction	Potential human annoyance to receptors residing in the vicinity of the construction footprint.	Priority 2	Negligible	Predicted noise levels are less than 3 dB(A) above the regulatory limits	Negligible	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	Restricted Working Hours (RWH): The Contractor shall ensure that general construction activities are confined to daytime (0800-1800 hours) only, Monday to Saturday for all parks, while noisy activities are only limited to 1000 – 1700 hours for BBNP.  The noise levels should not exceed the maximum permissible noise levels for construction set out in the Schedule to the Environmental Protection and Management (Control of Noise at Construction Sites) Regulations, and the project-specific maximum permissible noise levels of 75 dB (Leq 1 hour) and 90 dB (Leq 5 min) at the boundary.	Negligible	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Human	Students from the nearby schools	Construction	Potential human annoyance to receptors residing in the vicinity of the construction footprint.	Priority 1	Negligible	Predicted noise levels are less than 3 dB(A) above the regulatory limits	Very Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	The Contractor shall ensure that hoarding is installed around the work zones to reduce noise propagation to surrounding area.  The Contractor shall ensure that workers are trained in noise-reduction behaviours such as reducing the drop height of materials, and turning off equipment and vehicle engines when not in use.  Daily toolbox briefings should include reminders on the need to implement noise-reduction behaviours, in particular during demolition activities.  The Contractor shall select quieter construction equipment and construction methods in accordance with Singapore Standard SS 602-2014 Code of Practice for Noise Control on Construction and Demolition Site, Annex G where necessary to achieve the permissible noise limits.	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Fauna	Species that use sounds for communication, foraging, and breeding, or are known to have their behaviours disrupted by sound, and are of conservation significance  > Birds, non-volant mammals and bats of conservation significance	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	High	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	having sound pressure levels at least 5 dB quieter than other models readily available locally, when measured 1 m from the equipment body while the equipment is operating at its rated load.  > Provide acoustic shed / enclosure for construction equipment, where viable.  > Site noisy machinery or equipment Plant away from the nearby noise	Moderate	Noise pollution mitigation measures shall be implemented in line with the Singapore Standards Code of Practice for Noise Control at Construction Sites, 2014 (SS602:2014), where practicable,	High	High	Less Likely / Rare	Minor	> Conduct pre-construction noise baseline monitoring for seven (7) days, one (1) month before commencement of construction work > Conduct continuous monitoring throughout the construction phase by installing real time continuous 24-hour "live" monitoring devices to monitor the noise levels > Conduct Weekly EMMP Inspection
Fauna	Species that are less affected by airborne noise but are of conservation significance  > Aculeate hymenopterans, odonates, butterflies, decapods and reptiles of conservation significance	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	Medium	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	The Contractor shall ensure that vehicles and equipment are not left idling when not in use.  The Contractor shall ensure that all equipment and machinery is maintained and operated in a manner such that it does not give rise to excessive noise emissions. A list of equipment shall be submitted demonstrating consideration of alternatives.	Moderate	Noise pollution mitigation measures shall be implemented in line with the Singapore Standards Code of Practice for Noise Control at Construction Sites, 2014 (SS602:2014), where practicable,	High	Medium	Less Likely / Rare	Minor	Conduct pre-construction noise baseline monitoring for seven (7) days, one (1) month before commencement of construction work     Conduct continuous monitoring throughout the construction phase by installing real time continuous 24-hour "live" monitoring devices to monitor the noise levels     Conduct Weekly EMMP Inspection
Fauna	Species that are not of conservation significance  > all other species	Construction	Potential fauna disturbance, affecting ecological foraging behaviour, intra- and inter-species communication.		High	Predicted maximum noise levels are more than 10 dB(A) above the baseline background noise	Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	>The Contractor shall use quieter (non-percussive) piling methods, for example bored, jack-in or micropiling methods.  > The Contractor shall install noise barriers around the work areas before any work commences assessment show that the stipulated noise criteria will be breached by the works. Noise barriers shall be in accordance with Singapore Standard SS 602:2014 Code of Practice for Noise Control on Construction and Demolition Site, Annex F Noise Control Techniques, Section F3.3 and the any specific noise mitigation measures to be stipulated by the Board. The noise barriers shall be designed to achieve a minimum reduction of 5 dB(A).  > Daily toolbox briefings should include reminders on the need to implement noise-reduction behaviours, in particular during piling activities.	Minor	N/A	High	Low	N/A	N/A	> Conduct Weekly EMMP Inspection

Appendix 1C - Environmental Impact and Mitigation Register

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity		Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	> Residents staying adjacent / near to the proposed project >Students from the nearby schools	Construction	Potentially result in adverse impacts on air quality, and public and ecosystem health  Potentially generate significant nuisance at receptors (human receptors) in the vicinity of the construction footprint/ proposed development.	Priority 1	Negligible - Medium	Earthwork footprint >2,500 m2 - 10,000 m2, soil type with large grain size and total materials to be moved <5,000 tonnes	Very Low - Medium	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls			A site-specific Air Pollution Control Plan ("APCP") should be developed to put in place measures such as establishing communications, implementation of site management measures, monitoring, etc.	Negligible - Medium	Very Low - Medium	Less Likely / Rare	Negligible - Minor	> Conduct pre-construction ambient air baseline monitoring for seven (7) days, one (1) month before commencement of construction work by installing real time continuous 24-hour "live" monitoring devices to monitor the PM10 and PM2.5 levels > In the event of a valid complaint, once a month for as long as the particular complaint related construction activity continues. > Conduct Weekly EMMP Inspection
Nature Areas	Nature areas of nationally designated site	Construction	N/A	Priority 2	Negligible - Medium	Earthwork footprint >2,500 m2 - 10,000 m2, soil type with large grain size and total materials to be moved <5,000 tonnes	Negligible - Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	Ensure that workers clean up any spoil/earth spillage onto the haulage routes immediately and undertake proper housekeeping of the construction site, as well as roadways linked to the entrances of the worksites, to ensure that roadways, vehicle wheels and equipment tracks are clear of dust or mud, and that appropriate barriers, tarpaulin covers/erosion blankets (fully biodegradable, wildlife-friendly) have been repaired and/or reinstated.  Impose a maximum-speed-limit of 25 kilometres per hour (km/hr) on paved or surfaced haul roads and 15 km/hr on unpaved haul roads and work areas.  Ensure all stockpiles of demolished items, debris or good earth / aggregates are covered under canvas sheets or erosion control blankets (fully biodegradable, wildlife-friendly).  Minimise the volume of spoil stockpiled and potential for dust generation and erosion/runoff, schedule removal of spoil from the contract area at least once every five (5) days.	Negligible - Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection

Appendix 1C - Environmental Impact and Mitigation Register

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity		Likelihood (L)	Rationale for likelihood	d Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance	Description of monitoring and inspection requirements
Human	Visitors / members of public	Construction	Potential for direct soil and/or groundwater, and sediment contamination within the Study Area.  Potential pollution to the adjacent areas within the immediate vicinity of the project due to migration of soil and/or gro	Priority 3	Low	Only small scale localised soil and/or sediment contamination is expected, which is not likely to extend beyond the Study Area and possible to remediate	Very Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	Practice due diligence in proper storage and handling of machinery to prevent release of chemicals, fuels or other potentially harmful materials.      Transfer of fuel shall be done over contaminant trays and mats to prevent spillage into the ground.      Ensure oil-containing equipment or machineries are inspected for leaks before being put into use.      Provide emergency spill kits on site in the event of any fuel spillages. The emergency response team shall also be competent in the use of these spill kits.      Chemical and fuel in drums, carboys, containers, etc shall be stored in a designated storage area within a building or covered shed with concrete floors and containment facilities to contain any leak or spillage.      A full containment should be provided for bulk storage oil tanks, including skid tanks.      Ensure all hazardous substance and chemical containers are labelled as per the GHS requirement      Ensure a chemical inventory is maintained to track the movement of all hazardous substance and chemicals.	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection
Nature N Areas	ature areas of nationally designated site	Construction	Potential for direct soil and/or groundwater, and sediment contamination within the Study Area.  Potential pollution to the adjacent areas within the immediate vicinity of the project due to migration of soil and/or groundwater contamination, off-site.	Priority 2	Low	Only small scale localised soil and/or sediment contamination is expected, which is not likely to extend beyond the Study Area and possible to remediate	Very Low	Possible / Occasional	Not expected to regularly happen at construction sites, upon implementation of minimum controls	Neturn the chemicals back to its designated storage areas when not in use.  Transfer of chemicals shall be done over contaminant trays and mats to prevent spillage into the ground.  All leaks and spillages in the storage area or construction site shall be collected and sent to a licensed toxic waste collector for proper disposal.  Provide emergency spill kits on site in the event of any chemical spillages. The emergency response team shall also be competent in the use of these spill kits.  Sensure toxic industrial wastes (TIWs) are stored in a designated storage area within a building or covered shed with concrete floors and containment facilities to contain any leak or spillage.  Maintains a TIW register, which is to be updated on a weekly basis.  TIW shall be collected regularly by a licensed TIW collector for off-site disposal.  Ensure leaks and spillages in the TIW storage area or construction site are collected and sent to a licensed toxic waste collector for proper disposal.	Minor	N/A	N/A	N/A	N/A	N/A	> Conduct Weekly EMMP Inspection

Receptor Type	Туре	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity			Rationale for likelihood	i Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence		Residual impact significance	Description of monitoring and inspection requirements
	A near-pristine nature of this water body stream at the southern section	Construction	Hydrology:  Increased stormwater peak flow contributions to the channel can lead to increased water level and subsequent flooding of surrounding areas adjacent to the stream/drain due to the land use change from land clearing; and  Stormwater run-off from exposed and unstable slopes may cause soil erosion.  Water contamination:  Elevated levels of suspended solids leading to increased turbidity and sedimentation rates solid waste, toxic material, etc; and Increase in the levels of oil, grease, and other chemical substances.  Liquid effluent generation: Inappropriate discharge of wastewater to the watercourse will result in contamination in nearby water sources; and Inappropriate discharge of domestic sewage and poor maintenance of the portable toilet (e.g. overflow or overload) can result in run-off to nearby water sources and potentially contaminate the waterbodies located adjacent to the construction sites.  Solid wastes:  Solid wastes:  Solid wastes:  Solid waste generated can lead to elevated levels of suspended solids entering waterbodies warun-off or improper handling/disposal.  Improper storage, handling, disposal or leakage of toxic waste generated at temporary work areas can lead to water contamination.  Improper management of chemical substances:  Contaminated stormwater due to improper storage/disposal/transport of chemical materials handled and stored on site leading to an increase in the levels of oil, grease and other chemical substances in the nearby waterbodies; and  Fuel and lubricants spillage from maintenance of construction vehicles and mechanical equipment can also lead to elevation in levels of oil in the nearby waterbodies.	Priority 1	Low	Construction work is likely to be restricted to the banks only; no activities are expected in the flooded areas of the stream. The increased surface runoff expected during the construction stage is minimal given the small footprint and short-term nature of the construction works relative to the much larger catchment area of the stream. However, there remains a risk of erosion given the steep topography at this area.	e Low f	Possible / Occasional	happen at construction	> Design criteria: The Erosion Control Measures ("ECM") shall be	Minor	N/A	N/A	N/A	N/A	N/A	> Perform real-time TSS monitoring > Monitor water quality at the natural stream on-site on a monthly basis during the period of in-water or near-water > Conduct Weekly EMMP Inspection

Receptor Type	Туре	Recorded	Receptor (Scientific Name)	Receptor (Common Name)	Global Status (IUCN/CITES)	National Status	Phase	Impact type	Sensitivity (S)	Impact intensity (I)	Rationale for impact intensity	Consequenc e (C = S × I)		Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual Impact intensity (I)	Residual consequence	Residual likelihood	Residual impact significance
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary regetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor

Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Megachile omata	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not	> Erect hoardings around worksites involving heavy	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not	> Erect hoardings around worksites involving heavy	Negligible		Low	Low	Not Exepected to Occur	Negligible

Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid foging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile omata	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections		> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections		> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections		> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No .	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor

Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found on- site	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile omata	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite	Medium	Medium	Less likely	Minor
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Low	Low	Not Exepected to Occur	Negligible

Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	High	Very Low	Less likely	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	High	Very Low	Less likely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	High	Very Low	Less likely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	Low	Very Low	Less likely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	Medium	Very Low	Less likely	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	High	Very Low	Less likely	Negligible

Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low		Night works expected to be minimal; safety- critical works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low		Night works expected to be minimal; safety- critical works only	No night works	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Less Likely	Night works expected to be minimal; safety- critical works only	No night works	Negligible	High	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low		Night works expected to be minimal; safety- critical works only	No night works	Negligible	High	Very Low	Less likely	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	INOL	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile omata	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Construction	Human disturbance	High	Negligible	Not adversely affected by human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	> No night works > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Negligible	High	Very Low	Not Exepected to Occur	Negligible

Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat (stream enhancement and wetland creation only)	Very Low	Not Exepected to Occur	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat (stream enhancement and wetland creation only)	Very Low	Not Exepected to Occur	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat (stream enhancement and wetland creation only)	Very Low	Not Exepected to Occur	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works	Negligible		High	Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	Impact is not expected to happen during construction	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	Impact is not	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		High	Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible		High	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible		High	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible		High	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Possible	Changes to watercourse	> Pre-felling fauna inspections	Moderate	Ensure unobstructed flow of water along existing watercourse during construction of Wetland and stream enhancement works	High	High	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Possible	Changes to watercourse		Moderate	Ensure unobstructed flow of water along existing watercourse during construction of Wetland and stream enhancement works	High	High	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Possible	Changes to watercourse		Moderate	Ensure unobstructed flow of water along existing watercourse during construction of Wetland and stream enhancement works	High	High	Less likely	Minor

Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not likely to happen during construction	No night works	Minor		Low	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not likely to happen during construction Impact is a	No night works	Minor		High	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Crepuscular odonate - sensitive	Medium	Less Likely	common occurrence during construction Impact is not	No night works	Minor		High	Medium	Less likely	Minor
Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction	No night works	Minor		Negligible	Low	Less likely	Minor
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works > Erect hoardings around worksites involving heavy	Minor		Medium	Low	Less likely	Minor
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Minor		High	Low	Less likely	Minor
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> No night works > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Minor		Negligible	Low	Less likely	Minor
Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> No night works > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Negligible	Low	Possible	Minor
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor

Fauna Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Negligible	Low	Possible	Minor
Fauna Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Negligible	Low	Possible	Minor
Fauna Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor
Fauna Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor
Fauna Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Negligible	Low	Possible	Minor
Fauna Butterfly	No .	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor

Fauna Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor
Fauna Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor
Fauna Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor
Fauna Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Medium	Low	Possible	Minor
Fauna Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor

Fauna Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	High	Low	Possible	Minor
Fauna Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor

Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecessary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry  > Avoid fogging  > No night works  > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible

Fauna Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	Impact is not expected to nappen during construction	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	Impact is not expected to nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	expected to nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	expected to nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to h	nappen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible

Fa	una	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry  > Avoid fogging  > No night works  > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections > Erect hoardings around	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fa	una	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry  > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible

Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections > Erect hoardings around	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> No night works > Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible

Fauna	Butterfl	y No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of freduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium		Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butterfl	y No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of freduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfl	y No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Loss of freduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low		Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	y No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Loss of freduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High		Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfi	y No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor

Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible

Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vuinerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected t Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to	No night works	Minor	Low	Low	Less likely	Minor

Fauna	Ви	utterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not likely to happen during construction	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	Impact is not likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive Odonate - slightly	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	construction Impact is not	No night works	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Less Likely	likely to happen during construction	No night works  > Erect hoardings around	Minor	Low	Low	Less likely	Minor
Fauna	Ви	utterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor

Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> No night works > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Minor	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor	Low	Low	Less likely	Minor

Fauna	a Bu	utterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	a Bu	utterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Minor		Low	Low	Less likely	Minor
Fauns	a Re	eptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Construction <sup>L</sup>	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> No night works  > Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross- checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor

Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary.	Low	Low	Possible	Minor
																replanted elsewhere in BBHNP				
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction Loss of/reduction in habitats and food sources	High	Negligible	No loss of habitat (stream enhancement and wetland creation only)	Very Low	Not Exepected to Occur	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Negligible	replanted elsewhere in BBHNP	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Reptiles  Reptiles	No No	Cuora amboinensis  Boiga cynodon	Malayan box terrapin  Dog-toothed cat snake		Near Threatened  Vulnerable		High	Negligible High	(stream enhancement and	Very Low High	Exepected to Occur	NA Known to occur at construction sites	worksites involving heavy machinery (i.e., Arrival Node and Wetland)  > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent found	Negligible  Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife esponse plan to be executed when trapped/injured/dead/dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	Negligible High	Very Low		Negligible  Minor

Fauna Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped injured/dead/dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife esponse plan to be executed when trapped/injured/dead/ dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Possible	Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Possible		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Train site personnel that feeding of wildlife is strictly prohibited	High	High	Less likely	Minor

Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High	Possible	at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/injured/dead/dangerous fauna is found onsite     Train site personnel that feeding of wildlife is strictly prohibited	Low	High	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Predominantly ground- dwelling; can be excluded with hoarding	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	be excluded with hoarding	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	High	Typically perceived as threat	High		Known to occur at construction sites	> Erect hoardings around worksites involving heavy	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Train site personnel that feeding of wildlife is strictly prohibited	High	High	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Less Likely	Ground- dwelling species; hoarding around Study Area may limit movement between other forest patches; currently fragmented by roads		Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Arboreal species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Less Likely	Ground- dwelling species; hoarding around Study Area may limit movement between other forest patches; currently fragmented by roads		Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Less Likely	Ground- dwelling species; hoarding around Study Area may limit movement between other forest patches; currently fragmented by roads		Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Less Likely	Ground- dwelling species; hoarding around Study Area may limit movement between other forest patches; currently fragmented by roads		Minor		High	High	Less likely	Minor

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Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Considerable changes in waterbody that may affect connectivity for aquatic species	High	Possible	Changes to watercourse		Moderate	Ensure unobstructed flow of water along existing watercourse during construction of Wetland and stream enhancement works	High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Impact is a common occurrence during construction Impact could	No night works	Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Diurnal reptile	Medium	Less Likely	possibly happen or has been known to occur during construction	No night works	Minor		Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Impact is a common occurrence during construction Impact is a	No night works	Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	common	No night works	Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Diurnal reptile	Medium	Less Likely	possibly happen or has been known to occur during construction Impact is a	No night works	Minor		Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Light disturbance	High	High	Noctumal	High	Less Likely	common	No night works	Minor		High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> No night works > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Minor		Low	Low	Less likely	Minor
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor

Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Construction Loss	s of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor

> Avoid areas of high conservation

Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction <sup>L</sup>	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	<ul> <li>Avoid areas of high conservation value</li> <li>For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance</li> <li>Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP</li> </ul>	Low	Low	Possible	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction L	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction L	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction <sup>L</sup>	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction <sup>L</sup>	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bird	No	Nisaetus ciπhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible

Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry  > Avoid fogging  > No night works  > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	n NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible

F	auna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections > Erect hoardings around	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections > Erect hoardings around	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	> Pre-felling fauna inspections > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low		Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	> Pre-felling fauna inspections	Negligible	Low	Low	Not Exepected to Occur	Negligible
F	auna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible

Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Cyomis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area	Minor	Medium	Medium	Not Exepected to Occur	Minor

Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	Impact could possibly happen or has been known to occur during construction	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Light disturbance	High	Medium	Diumal bird	Medium	Less Likely	Impact could possibly happen or has been known to occur during construction Impact could	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Light disturbance	High	Medium	Diumal bird	Medium	Less Likely	possibly happen or has been known to occur during construction Impact could	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Light disturbance	High	High	Migratory	High	Less Likely	possibly happen or has been known to occur during construction Impact could	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Diumal bird	Medium	Less Likely	possibly happen or has been known to occur during construction Impact could	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	possibly happen or has been known to occur during construction Impact could	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Migratory	High	Less Likely	possibly happen or has been known to occur during construction Impact could	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Migratory	High	Less Likely	possibly happen or has been known to occur during construction Impact could possibly	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	happen or has been known to occur during construction Impact could possibly	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Construction	Light disturbance	High	High	Migratory	High	Less Likely	happen or has been known to occur during construction Impact could possibly	No night works	Minor	High	High	Less likely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	happen or has been known to occur during construction Impact could possibly	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	happen or has been known to occur during construction Impact is a common	No night works	Minor	Medium	Medium	Less likely	Minor
Fauna Fauna	Bird Bird	No No	Ketupa ketupu Strix seloputo	Buffy fish owl Spotted wood owl	Least Concern; CITES protected (Appendix II)  Least Concern; CITES protected (Appendix II)	Vulnerable  Vulnerable	Construction	Light disturbance Light disturbance	High High	High High	Noctumal Noctumal	High High	Less Likely	occurrence during construction Impact is a common occurrence	No night works  No night works	Minor Minor	High High	High High	Less likely  Less likely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Light disturbance	High	Medium	Diurnal bird	Medium	Less Likely	during construction Impact could possibly happen or has been known to occur during	No night works	Minor	Medium	Medium	Less likely	Minor
														construction						

Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works		> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Minor		Low	Low	Less likely	Minor
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Minor		Low	Low	Less likely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate

Fauna Non-volant Non-wolant N	⁄es	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction <sup>L</sup>	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction L	.oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Non-volant Fauna mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction L	oss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna Non-volant Non-walant N	/es	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Accidental injury or mortality	High	High	Attracted to construction sites	High		Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry Avoid fogging No night works Pre-felling fauna inspections	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High		Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry	Moderate	> Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High		Known to occur at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Moderate	> Conduct regular hoarding inspections to ensure there are no gaps to prevent fauna entry > Conduct regular site inspections to ensure contractor compliance with the EMMP > Use only fully biodegradable erosion control blankets to avoid trapping fossorial fauna such as snakes > Train site personnel on biodiversity awareness and actions to take when encountering wildlife > Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite > Ensure good housekeeping such as provision of wildlife-proof food waste bins and enclosed eating areas	High	High	Less likely	Minor
Fauna Non-volant Non-want N	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High		at construction sites	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Moderate	Conduct regular site inspections to ensure contractor compliance with the EMMP     Train site personnel on biodiversity awareness and actions to take when encountering wildlife     Formulate a wildlife response plan to be executed when trapped/ injured/ dead/ dangerous fauna is found onsite     Train site personnel that feeding of wildlife is strictly prohibited	High	High	Less likely	Minor

Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	be excluded with hoarding	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections > Erect hoardings around	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	be excluded with hoarding	worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Arboreal species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Less Likely	Ground- dwelling species; hoarding around Study Area may limit movement between other forest patches; currently fragmented by roads		Minor		High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Less Likely	Ground- dwelling species; hoarding around Study Area may limit movement between other forest patches; currently fragmented by roads		Minor		Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Light disturbance	High	Medium	Diumal mammal	Medium	Less Likely	Impact could possibly happen or has been known to occur during construction	No night works	Minor		Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Impact is a common occurrence during construction Impact is a	No night works	Minor		High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	common occurrence during construction	No night works	Minor		High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Construction	Human disturbance	High	Low	Tolerant of human presence	Low	Less Likely	Tolerant of human presence	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites	Minor		Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> No night works > Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Construction	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Major	> Restrict entry of site personnel beyond the worksite	High	High	Possible	Moderate
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor

Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Loss of/reduction in habitats and food sources	High	Low	Loss of <10% of habitat	Low	Certain	NA	> Erect hoardings to delineate worksites involving heavy machinery (i.e., Arrival Node and Wetland)	Moderate	> Avoid areas of high conservation value > For worksites involving manual work only (i.e., trails and boardwalks), ensure the extent of the working space is clearly demarcated on-site and cross-checked by a Flora Specialist to avoid unnecesary vegetation clearance > Trail construction, only understory plants are removed when necessary, replanted elsewhere in BBHNP	Low	Low	Possible	Minor
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to	happen during construction	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Susceptible to injury or mortality during bamboo felling	High	Possible	2 bamboo clusters directly affected	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Moderate	> Conduct bamboo bat rescue and translocation	High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Accidental injury or mortality	High	High	Susceptible to injury or mortality during bamboo felling	High	Possible	directly affected	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > Avoid fogging > No night works > Pre-felling fauna inspections	Moderate	> Conduct bamboo bat rescue and translocation	High	High	Less likely	Minor
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely I		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely 1		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely 1		> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely 1		> Erect hoardings around worksites involving heavy machinery (i.e., Arival Node and Wetland) to prevent fauna entry > No night works > Pre-felling fauna inspections	Minor		Low	Low	Less likely	Minor
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	/olant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor		Medium	Medium	Not Exepected to Occur	Minor

Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	Volant species; loss of habitat mainly at the edge of the forest; no fragmentation within Study Area		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Impact is a common occurrence during construction	No night works	Minor		High	High	Less likely	Minor
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	during construction	No night works	Minor		High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Impact is a common occurrence during construction	No night works	Minor		High	High	Less likely	Minor
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Light disturbance	High	High	Nocturnal	High	Less Likely	Impact is a common occurrence during construction	No night works	Minor		High	High	Less likely	Minor
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites  > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Construction	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within worksites but construction areas are extensive	> Erect hoardings around worksites involving heavy machinery (i.e., Arrival Node and Wetland) to limit site personnel movement to within worksites > No night works	Moderate	> Restrict entry of site personnel beyond the worksite	Medium	Medium	Possible	Moderate
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible

Fauna	Bee	•	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to	Impact is not expected to happen during		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bee		No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low	Low	Occur Not Exepected to	operation Impact is not expected to		Negligible		Low	Low	Not Exepected	Negligible
												susceptibility  Volant - low		Occur	happen during operation Impact is not expected to						to Occur  Not Exepected	
Fauna	Bee	•	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	susceptibility  Volant - low	Low	Exepected to Occur Not	happen during operation Impact is not expected to		Negligible		Low	Low	to Occur  Not Exepected	Negligible
Fauna	Bee	•	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	susceptibility  Possibly perceived	Low	Exepected to Occur	happen during operation Aculeata -		Negligible	> Put up signages to educate visitors	Low	Low	to Occur	Negligible
Fauna	Bee	•	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	as threat; highly tolerant of human presence	Medium	Possible	possibly implicated in human-wildlife conflict		Moderate	on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Aculeata - possibly implicated in human-wildlife conflict		Moderate	> Put up signages to educate visitors on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Aculeata - possibly implicated in human-wildlife conflict		Moderate	<ul> <li>Put up signages to educate visitors on appropriate behaviours when encountering fauna</li> <li>Put up signages to educate visitors</li> </ul>	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Aculeata - possibly implicated in human-wildlife conflict		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Aculeata - possibly implicated in human-wildlife conflict		Moderate	Tu up signages to educate visitors on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	Aculeata - possibly implicated in human-wildlife conflict Aculeata -		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	possibly implicated in human-wildlife conflict Aculeata -		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	possibly implicated in human-wildlife conflict Aculeata -		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	possibly implicated in human-wildlife conflict Aculeata -		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	possibly implicated in human-wildlife conflict Aculeata -		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible	possibly implicated in human-wildlife conflict Aculeata -		Moderate	on appropriate behaviours when encountering fauna  > Put up signages to educate visitors	Medium	Medium	Less likely	Minor
Fauna	Bee	•	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Medium	Possibly perceived as threat; highly tolerant of human presence	Medium	Possible Not	possibly implicated in human-wildlife conflict		Moderate	on appropriate behaviours when encountering fauna	Medium	Medium	Less likely	Minor
Fauna	Bee		No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching Negligible	Very Low	Exepected to Occur Not	poacned  Not likely to be	Wildlife Act	Negligible			Very Low	Not Exepected to Occur	Negligible
Fauna Fauna	Bee		No	Ceratina fuliginosa  Ceratina ridleyi	NA NA	Not Assessed  Not Assessed	Vulnerable  Vulnerable	Operational Operational	Poaching  Poaching	High High	Negligible Negligible	susceptibility to poaching Negligible susceptibility to		Occur Not Exepected to	Not likely to be	Wildlife Act Wildlife Act	Negligible Negligible		Negligible Negligible	Very Low	to Occur  Not Exepected to Occur	Negligible Negligible
Fauna	Bee	•	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	poaching Negligible susceptibility to poaching	Very Low	Occur Not Exepected to Occur	Not likely to be	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	•	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching Negligible	Very Low	Not Exepected to Occur Not	poacned	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee		No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	susceptibility to poaching Negligible	-	Exepected to Occur Not	Not likely to be	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna Fauna	Bee		No No	Nomia apicalis Patellapis intricata	NA NA	Not Assessed  Not Assessed	Critically Endangered  Critically Endangered	Operational Operational	Poaching  Poaching	High High	Negligible Negligible	susceptibility to poaching Negligible susceptibility to	Very Low	Occur Not Exepected to	poached  Not likely to be	Wildlife Act Wildlife Act	Negligible Negligible		Negligible Negligible	Very Low	to Occur  Not Exepected	Negligible Negligible
Fauna	Bee		No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	poaching Negligible susceptibility to		Occur Not Exepected to	poacned  Not likely to be	Wildlife Act	Negligible		Negligible	Very Low	to Occur  Not Exepected to Occur	Negligible
Fauna	Bee	•	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	poaching Negligible susceptibility to poaching	Very Low	Occur Not Exepected to Occur	Not likely to be	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible

Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Not Exepected to Occur	Not adversely affected by light		Negligible	Negligible	Very Low	Less likely	Negligible

													Not	Not adversely					
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Exepected to Occur		Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Not Exepected to Occur	Not adversely affected by light	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Not Exepected to Occur		Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Not Exepected to		Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not	Very Low	Occur Not Exepected to	light Not adversely affected by	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operational	Light disturbance	High	Negligible	sensitive  Aculeata - not		Occur Not	light  Not adversely  affected by	Negligible	Negligible	Very Low	Less likely	Negligible
			,			, ,		-			sensitive  Aculeata - not	,	Occur Not	light Not adversely					
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operational	Light disturbance	High	Negligible	sensitive	Very Low	Exepected to Occur Not	light Not adversely	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Anthidiellum smithii	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Exepected to Occur Not	affected by light Not adversely	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low			Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Exepected to Occur	affected by light	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operational	Light disturbance	High	Negligible	Aculeata - not sensitive	Very Low	Not Exepected to Occur	Not adversely affected by light	Negligible	Negligible	Very Low	Less likely	Negligible
Fauna	Bee	No	Amegilla insularis	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Exepected to Occur	Not adversely affected by human	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
											Not sensitive to		Not	presence Not adversely affected by				Not Exepected	
Fauna	Bee	No	Ceratina fuliginosa	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	human presence	Very Low	Exepected to Occur	human presence	Negligible	Low	Very Low	to Occur	Negligible
Fauna	Bee	No	Ceratina ridleyi	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Exepected to Occur	Not adversely affected by human presence	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Nomada malayana	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to	Very Low	Not Exepected to	Not adversely affected by	Negligible	Low	Very Low	Not Exepected	Negligible
			•						J	3 3	human presence		Occur	human presence Not adversely	55,1			to Occur	
Fauna	Bee	No	Lasioglossum semirussatum	NA	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Exepected to Occur	affected by human presence	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Lipotriches takauensis	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Exepected to	Not adversely affected by human	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
											Not sensitive to		Occur	presence Not adversely affected by				Not Exepected	
Fauna	Bee	No	Nomia apicalis	NA	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Negligible	human presence	Very Low	Exepected to Occur	human presence	Negligible	Low	Very Low	to Occur	Negligible
Fauna	Bee	No	Patellapis intricata	NA	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Exepected to Occur	Hullidii	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Found	Poo	No	Anthidiellum smithii	NA	Not Assessed	Vulnorable	Operational	Human dieturbanea	High	Negliaible	Not sensitive to	Von Low	Not	Presence Not adversely affected by	Modificible	Low	Vondow	Not Exepected	Negligible
Fauna	Bee	No	Anunalellarii Sililalii	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	human presence	very Low	Exepected to Occur	human presence Not adversely	Negligible	Low	Very Low	to Occur	Negligible
Fauna	Bee	No	Megachile indonesica	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Exepected to Occur	affected by	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Bee	No	Megachile ornata	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Not Exepected to	Not adversely affected by	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
													Occur	human presence Not adversely					
Fauna	Bee	No	Megachile ramera	NA	Not Assessed	Vulnerable	Operational	Human disturbance	High	Negligible	Not sensitive to human presence	Very Low	Exepected to Occur	affected by human presence	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to	Impact is not expected to happen during	Negligible	Low	Low	Not Exepected to Occur	Negligible
											Volant - low		Occur	operation Impact is not expected to				Not Exepected	
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	susceptibility	Low	Exepected to Occur	happen during operation	Negligible	Low	Low	to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	nappen duning	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low	Low	Not Exepected to	operation Impact is not expected to	Negligible	Low	Low	Not Exepected	Negligible
i dulla	Gunale	140	onary station in inviaums	Groom eyeu pertitier	Not Assessed	vuillerable		Accidental injury or mortality	i ligit	LOW	susceptibility	LOW	Occur Not	happen during operation	regugiore	LOW	LOW	to Occur	regugible
Fauna	Odonate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		) NA	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur	) NA	Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	) NA	Negligible	Low	Very Low	Not Exepected to Occur	Negligible

Fauna	Odonat	ate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		o NA		Negligible		Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonat	ate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Occur Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonat	ate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonat	ate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonat	ate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching Highly dependent	Very Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Odonat	ate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		Low	High	Not Exepected to Occur	Minor
Fauna	Odonat	ate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		Low	High	Not Exepected to Occur	Minor
Fauna	Odonat	ate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		Low	High	Not Exepected to Occur	Minor
Fauna	Odonat	ate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Odonat	ate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Operational	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Likely	Park expected to be opened till 2200h		Moderate	> Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night (1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Odonat	ate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operational	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Likely	Park expected to be opened till 2200h		Moderate	Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night (1900-0700 h) Incorporate wildlife-friendly lighting	Low	Low	Less likely	Minor
Fauna	Odonat	ate	No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operational	Light disturbance	High	Medium	Crepuscular odonate - sensitive	Medium	Likely	Park expected to be opened till 2200h		Moderate	> Close the park and associated facilities to the public during the night (1900-0700 h) > Incorporate wildlife-friendly lighting	Low	Medium	Less likely	Minor
Fauna	Odonat	ate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operational	Light disturbance	High	Low	Odonate - slightly sensitive	Low	Likely	Park expected to be opened till 2200h Tolerant of		Moderate	> Close the park and associated facilities to the public during the night (1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Odonat	ate	No	Aciagrion hisopa	Blue slim	Least Concern	Vulnerable	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely			Minor		Low	Low	Less likely	Minor
Fauna	Odonat	ate	No	Copera vittata	Variable featherlegs	Least Concern	Vulnerable	Operational	Human disturbance	High	Low	Slightly sensitive to human presence Slightly sensitive to	Low	Less Likely	human presence Tolerant of		Minor		High	Low	Less likely	Minor
Fauna	Odonat		No	Gynacantha basiguttata	Spoon-tailed duskhawker	Least Concern	Vulnerable	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of		Minor		Medium	Low	Less likely	Minor
Fauna	Odonat	ate	No	Chalybiothemis fluviatilis	Green-eyed percher	Not Assessed	Vulnerable	Operational	Human disturbance	High	Low	human presence	Low	Less Likely Not	presence Impact is not		Minor		High	Low	Less likely	Minor
Fauna	Butterfl	fly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to Occur	expected to happen during operation Impact is not		Negligible		High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to		Negligible		Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to		Negligible		High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to happen during operation		Negligible		Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation		Negligible		High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfl	fly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		High	Low	Not Exepected to Occur	Negligible

Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation	Negligible	Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation	Negligible	Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation	Negligible	Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation Impact is not	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur Not	expected to happen during operation Impact is not	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to Occur	expected to happen during operation Impact is not	Negligible	Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Exepected to Occur Not	operation Impact is not	Negligible	Medium	Low	Not Exepected to Occur  Not Exepected	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	(Rediscovered)	Operational	Accidental injury or mortality	High	Low	susceptibility  Volant - low	Low	Exepected to Occur	happen during operation Impact is not expected to	Negligible	High	Low	to Occur	Negligible
Fauna Fauna	Butterfly	No No	Nacaduba sanaya elioti Rachana jalindra burbona	Jewel fourline blue  Banded royal	Not Assessed  Not Assessed	(Rediscovered)  Critically Endangered	Operational Operational	Accidental injury or mortality  Accidental injury or mortality	High High	Low	susceptibility  Volant - low	Low	Occur  Not Exepected to	happen during operation Impact is not expected to	Negligible Negligible	High High	Low	to Occur	Negligible  Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Occur Not Exepected to	happen during operation Impact is not expected to happen during	Negligible	High	Low	to Occur  Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Occur  Not Exepected to Occur	operation Impact is not expected to happen during	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation Impact is not expected to happen during operation	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not	Negligible	Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	operation	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation Impact is not	Negligible	High	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable  Nationally Extinct	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur Not	expected to	Negligible	Medium	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	(Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	nuisance or threat  Not perceived as	Very Low	Exepected to Occur Not	NA	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered  Nationally Extinct	Operational	Human-Wildlife conflict	High	Negligible	nuisance or threat	Very Low	Exepected to Occur Not	NA	Negligible	Low	Very Low	to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	(Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur Not	NA	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur Not	NA	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		NA	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		NA	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur Not	NA	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur Not	NA	Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur Not	NA	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Exepected to Occur	NA	Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA	Negligible	Low	Very Low	Not Exepected to Occur	Negligible

Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to	NA		Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur Not Exepected to	NA		Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low		NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur Not Exepected to Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	Low	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	High	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur Not	NA		Negligible	Medium	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat Not commonly	Very Low	Exepected to Occur	NA		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur Not	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	Not likely to be poached  Not likely to be	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	poached  Not likely to be	Wildlife Act	Negligible	Low	Low	to Occur  Not Exepected	Negligible
	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	poached  Not likely to be	Wildlife Act	Negligible	Low	Low	to Occur  Not Exepected	Negligible
	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct  Nationally Extinct	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	poached  Not likely to be	Wildlife Act	Negligible	Low	Low	to Occur  Not Exepected	Negligible
	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	(Rediscovered)  Nationally Extinct	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	poached  Not likely to be	Wildlife Act	Negligible	Low	Low	to Occur  Not Exepected	Negligible
	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	(Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	poached  Not likely to be	Wildlife Act	Negligible	Low	Low	to Occur  Not Exepected	Negligible
	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable  Nationally Extinct	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Occur Not	poached  Not likely to be	Wildlife Act	Negligible	Low	Low	to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	(Rediscovered)	Operational	Poaching	High	Low	known to be traded as pets	Low	Exepected to Occur	poached	Wildlife Act	Negligible	Low	Low	to Occur	Negligible

Fauna	Butterl	rfly No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operational	Poaching	High	Low	Not commonly known to be traded	Low	Not Exepected to	Not likely to be	Wildlife Act	Negligible	Low	Low	Not Exepected	Negligible
Fauna	Butterl	rfly No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	as pets Not commonly known to be traded	Low	Occur Not Exepected to	poached  Not likely to be poached	Wildlife Act	Negligible	Low	Low	to Occur  Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	as pets Not commonly known to be traded	Low	Occur Not Exepected to	Not likely to be	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	as pets  Not commonly  known to be traded  as pets	Low	Occur Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butter	rfly No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets Not commonly	Low	Not Exepected to Occur Not	poacned	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operational	Poaching	High	Low	known to be traded as pets Not commonly	Low	Exepected to Occur Not	poacned	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butter	rfly No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operational	Poaching	High	Low	known to be traded as pets	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible	Low	Low	Not Exepected to Occur	Negligible
Fauna	Butter	rfly No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse	Very Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
											urban infrastructure  Not dependent on									
Fauna	Butter	rfly No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	connected habitats	Very Low	Not Exepected to Occur	No major new buildings		Negligible	Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterl	rfly No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	No major new buildings		Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butter	rfly No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Not Exepected to Occur	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
								Loss of/reduction in ecological			dispersal  Not dependent on connected habitats		Not	No major new					Not Exepected	
Fauna	Butterl	rfly No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operational	connectivity for faunal movement	High	Negligible	for dispersal and able to traverse urban infrastructure	Very Low	Exepected to Occur	buildings		Negligible	Negligible	Very Low	to Occur	Negligible
Fauna	Butterl	rfly No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct	Operational	Loss of/reduction in ecological	High	Negligible	Not dependent on connected habitats for dispersal and	Very Low	Not Exepected to	No major new		Negligible	Negligible	Very Low	Not Exepected	Negligible
						(Rediscovered)		connectivity for faunal movement			able to traverse urban infrastructure Highly dependent	-	Occur	buildings				-	to Occur	
Fauna	Butter	rfly No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterl	rfly No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
_						Nationally Extinct		Loss of/reduction in ecological			Not dependent on connected habitats		Not	No major new					Not Exepected	
Fauna	Butterl	fly No	Telicota colon stinga	Common palm dart	Not Assessed	(Rediscovered)	Operational	connectivity for faunal movement	High	Negligible	for dispersal and able to traverse urban infrastructure	Very Low	Exepected to Occur	buildings		Negligible	Negligible	Very Low	to Occur	Negligible
Fauna	Butter	rfly No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butter	rfly No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	No major new buildings		Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butterl	rfly No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	No major new buildings		Minor	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butter	rfly No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterl	rfly No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Not Exepected to Occur	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
Fauna	Butterl	rfly No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for	High	Not Exepected to	No major new buildings		Minor	High	High	Not Exepected to Occur	Minor
											dispersal		Occur	Ū-					•	

Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed Slightly dependent	Low	Not Exepected to Occur	No major new buildings	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	No major new buildings	Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	dispersal Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	(1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated</li> <li>facilities to the public during the night</li> <li>(1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated</li> <li>facilities to the public during the night</li> <li>(1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated</li> <li>facilities to the public during the night</li> <li>(1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated</li> <li>facilities to the public during the night</li> <li>(1900-0700 h)</li> </ul>	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Moderate	Incorporate wildlife-friendly lighting Close the park and associated facilities to the public during the night (1900-0700 h)	Low	Low	Less likely	Minor

Fauna	Butterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate f	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	Vulnerable	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate / fa	Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	Nationally Extinct	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Close the park and associated acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	Park expected to be opened till 2200h	Mode	erate fa	Close the park and associated acilities to the public during the night 1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	to be opened till 2200h	Mode	erate fa ('	Close the park and associated acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	to be opened till 2200h	Mode	erate fa ('	Close the park and associated acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	Critically Endangered	Operational	Light disturbance	High	Low	Butterfly - slightly sensitive	Low	Likely	to be opened till 2200h	Mode	erate fa	Close the park and associated acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting Close the park and associated	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered		Light disturbance	High	Low	Butterfly - slightly sensitive Butterfly - slightly	Low	Likely	to be opened till 2200h	Mode	erate fa	Colose the park and associated acilities to the public during the night 1900-0700 h)  Incorporate wildlife-friendly lighting Close the park and associated	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered		Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Likely	to be opened till 2200h	Mode	erate fa	acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting Close the park and associated	Low	Low	Less likely	Minor
Fauna	Butterfly	No No	Neptis harita harita Vagrans sinha sinha	Chocolate sailor	Not Assessed  Not Assessed	Vulnerable  Nationally Extinct	Operational Operational	Light disturbance Light disturbance	High High	Low	sensitive  Butterfly - slightly	Low	Likely	to be opened till 2200h  Park expected to be opened	Mode	erale fa (' >	acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting Close the park and associated	Low	Low	Less likely  Less likely	Minor
	Butterfly	No	Pachliopta aristolochiae asteris	Vagrant Common rose	Not Assessed	(Rediscovered)  Vulnerable	Operational	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Likely	till 2200h  Park expected to be opened	Mode	(' ') >	acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting Close the park and associated	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Papilio prexaspes prexaspes	Blue helen	Not Assessed	Vulnerable	Operational	Light disturbance	High	Low	sensitive  Butterfly - slightly	Low	Likely	till 2200h  Park expected to be opened	Mode	(' '>	acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting Close the park and associated	Low	Low	Less likely	Minor
	Butterfly	No	Troides helena cerberus	Common birdwing	Not Assessed; CITES protected (Appendix II)	Vulnerable	Operational	Light disturbance	High	Low	sensitive  Butterfly - slightly sensitive	Low	Likely	till 2200h  Park expected to be opened	Mode	erate (	acilities to the public during the night 1900-0700 h) Incorporate wildlife-friendly lighting Close the park and associated acilities to the public during the night	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Astictopterus jama jama	Forest hopper	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	till 2200h  Tolerant of human presence	Mir	(	1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Butterfly	No	Borbo cinnara	Formosan swift	Not Assessed	Endangered	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Caltoris malaya	Malayan swift	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Gangara lebadea lebadea	Banded redeye	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Pelopidas agna agna	Bengal swift	Not Assessed	Endangered	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Potanthus trachala tytleri	Detached dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Suastus everyx everyx	White palm bob	Not Assessed	Endangered	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Tapena thwaitesi bornea	Dark flat	Not Assessed	Endangered	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence Tolerant of	Mir	nor		Low	Low	Less likely	Minor
Fauna	Butterfly	No	Telicota colon stinga	Common palm dart	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely		Mir	nor		Low	Low	Less likely	Minor

Fauna	Bu	ıtterfly	No	Zela storeyi	Storey's palmer	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Ancema blanka blanka	Silver royal	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Low	Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Arhopala amphimuta amphimuta	NA	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Arhopala antimuta antimuta	Small tailless oakblue	Not Assessed	Nationally Extinct	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Arhopala eumolphus maxwelli	Green oakblue	Not Assessed	Nationally Extinct (Rediscovered)	Operational	Human disturbance	High	Low	Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Arhopala silhetensis adorea	Sylhet oakblue	Not Assessed	Nationally Extinct	Operational	Human disturbance	High	Low	Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Catopyrops ancyra	Ancyra blue	Not Assessed	(Rediscovered)  Vulnerable	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna	Bu	ıtterfly	No	Jamides alecto ageladas	Metallic caerulean	Not Assessed	Nationally Extinct	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Manto hypoleuca terana	Green imperial	Not Assessed	(Rediscovered)  Nationally Extinct	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Nacaduba kurava nemana	Transparent sixline blue	Not Assessed	Nationally Extinct	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Nacaduba pactolus odon	Large fourline blue	Not Assessed	(Rediscovered)  Nationally Extinct	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Nacaduba sanaya elioti	Jewel fourline blue	Not Assessed	(Rediscovered)  Nationally Extinct	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Rachana jalindra burbona	Banded royal	Not Assessed	(Rediscovered)  Critically Endangered	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Charaxes solon echo	Black rajah	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Discophora sondaica despoliata	Common duffer	Not Assessed	Critically Endangered	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		ıtterfly	No	Neptis harita harita	Chocolate sailor	Not Assessed	Vulnerable	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		itterfly	No	Vagrans sinha sinha	Vagrant	Not Assessed	Nationally Extinct	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low	Low	Less likely	Minor
Fauna		itterfly	No	Pachliopta aristolochiae asteris	Common rose	Not Assessed	(Rediscovered)  Vulnerable	Operational	Human disturbance	High	Low	human presence Slightly sensitive to	Low	Less Likely	presence Tolerant of human	Minor	Low		Less likely	Minor
		itterfly	No		Blue helen	Not Assessed	Vulnerable	Operational	Human disturbance			human presence Slightly sensitive to			presence Tolerant of human	Minor		Low	Less likely	Minor
Fauna Fauna		itterfly	No	Papilio prexaspes prexaspes  Troides helena cerberus	Common birdwing	Not Assessed; CITES	Vulnerable	Operational	Human disturbance	High High	Low	human presence Slightly sensitive to	Low	Less Likely Less Likely	presence Tolerant of	Minor	Low	Low	Less likely	Minor
rauna	Би	itterny	NO	Troides helena cerperus	Common birdwing	protected (Appendix II)	vuillerable	Operational	nullari disturbance	riigii	LOW	human presence	LOW	Less Likely	human presence Target visitors	WIII JOI	Low	LOW	Less likely	WIITO
Fauna	De	eptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	High	Terrestrial reptile -	High	Lasa Likaba	are mostly residents from surrounding estates; no	Minor	l li ala	l limb	Less likely	Minor
rauna	Re	epules	NO	вогда суподоп	Dog-tootned cat shake	Least Concern	Vuirierable	Operational	Accidental injury or mortality	nigii	nigri	high susceptibility	nigri	Less Likely	carpark; increase in traffic not	MINOT	High	High	Less likely	Millor
															substantial Target visitors					
Faura	De		Na	Converse average halves	Red-tailed racer	Least Concern	Vulnerable	Operational		Hinh	liab	Terrestrial reptile -	lliab	Lasa Likaba	are mostly residents from surrounding	Mari	l li ala	l limb	Lana likak	Minan
Fauna	Re	eptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vuirierable	Operational	Accidental injury or mortality	High	High	high susceptibility	High	Less Likely	estates; no carpark; increase in traffic not	Minor	High	High	Less likely	Minor
															substantial Target visitors					
Faura	De		Na	Olimadan aireatus	Daniel kulpi aaska	Land Carrer	Fadanasad	Onestinal		I Eab	l Eab	Terrestrial reptile -	lliab	Lasa Likaba	are mostly residents from surrounding	Mari	l li ala	l limb	Lana likak	Minan
Fauna	Ke	eptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operational	Accidental injury or mortality	High	High	high susceptibility	High	Less Likely	estates; no carpark; increase in traffic not	Minor	High	High	Less likely	Minor
															substantial Target visitors					
Farme			N.	Diam from	Mich ball advantage	110	Webserble	Occupitant	A	IF-b	18-4	Terrestrial reptile -	I Fab	Land Park	are mostly residents from surrounding	Wass	I Fab	I P. de	Lana Planka	Maria
Fauna	Re	eptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	High	high susceptibility	High	Less Likely	estates; no carpark; increase in traffic not	Minor	High	High	Less likely	Minor
															substantial Target visitors					
_	_		N.	Otherworkiere	Physics and the second	Level C	W-1	Oti	A california di Tarino	IF-I	18-2	Terrestrial reptile -	15.5	1	are mostly residents from surrounding	W.		10-2	1 1" -	N.C.
Fauna	Re	eptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	High	high susceptibility	High	Less Likely	carpark; increase in	Minor	High	High	Less likely	Minor
															traffic not substantial					

Fauna	a R	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Accidental injury or mortality	High	High	Terrestrial reptile - high susceptibility	High	Less Likely	Target visitors are mostly residents from surrounding estates; no carpark; increase in traffic not substantial		Minor		High	High	Less likely	Minor
Fauna	a R	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Possible	Reptile - possibly implicated in human-wildlife conflict		Moderate	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof > Close park during the night (1900-0700h)	High	High	Less likely	Minor
Fauna	a R	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Reptile not known to be implicated in human-wildlife conflict Reptile not		Minor		Low	Low	Less likely	Minor
Fauna	a R	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	known to be		Minor		Low	Low	Less likely	Minor
Fauna	a R	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	known to be implicated in human-wildlife conflict Reptile -		Minor	> Put up signages to educate visitors	Low	Low	Less likely	Minor
Fauna	a R	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern  Vulnerable; CITES	Vulnerable	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat  Not perceived as	High	Possible Not	possibly implicated in human-wildlife conflict		Moderate	on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely  Not Exepected	Minor
Fauna	a R	Reptiles	No	Cuora amboinensis	Malayan box terrapin	protected (Appendix II)	Near Threatened	Operational	Human-Wildlife conflict	High	Negligible	nuisance or threat  Not commonly	Very Low	Exepected to Occur Not			Negligible		Negligible	Very Low	to Occur	Negligible
Fauna	a R	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Operational	Poaching	High	Low	known to be traded as pets	Low	Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	a R	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	a R	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	a R	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	a R	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
															Increased accessibility to carry out			> Conduct regular patrols to deter poaching activities				
Fauna	a R	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter visitors from venturing off-trail      Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna		Reptiles	No No	Cuora amboinensis Boiga cynodon	Malayan box terrapin  Dog-toothed cat snake		Near Threatened  Vulnerable		Poaching  Loss offreduction in ecological connectivity for faunal movement	High High	High High	or II  Highly dependent on connected habitats for dispersal	High High	Not Exepected to Occur	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to	High High	High High	Less likely  Not Exepected to Occur	Minor
	a R					protected (Appendix II)			Loss of/reduction in ecological	·	Ü	or II  Highly dependent on connected habitats for	Ü	Not Exepected to Occur Not Exepected to Occur	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade  No major new buildings	Wildlife Act	,	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to	·	J	Not Exepected	
Fauna	aR	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	protected (Appendix II)  Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement	High	High	or II  Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent on connected habitats for dispersal Highly dependent Highly dependent	High	Not Exepected to Occur  Not Exepected to	poaching activities; Singapore's zero-tolerance to illegal wildlife trade  No major new buildings  No major new buildings  No major new buildings	Wildlife Act	Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to	High	High	Not Exepected to Occur  Not Exepected to Occur  Not Exepected to Occur	Minor
Fauna Fauna Fauna Fauna	a R Raa R Raa R	Reptiles Reptiles Reptiles	No No No	Boiga cynodon  Gonyosoma oxycephalum  Oligodon signatus  Ptyas fusca	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake  White-bellied rat snake	protected (Appendix II)  Least Concern  Least Concern  Least Concern	Vulnerable  Vulnerable  Endangered  Vulnerable	Operational Operational Operational	Loss of/reduction in ecological connectivity for faunal movement	High High High	High High High	or II  Highly dependent on connected habitats for dispersal Highly dependent	High High High	Not Exepected to Occur	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade  No major new buildings  No major new buildings  No major new buildings  No major new buildings	Wildlife Act	Minor Minor Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to	High High High	High High High	Not Exepected to Occur  Not Exepected to Occur  Not Exepected to Occur  Not Exepected to Occur	Minor Minor Minor
Fauna Fauna Fauna	a R Raa R Raa R	Reptiles Reptiles Reptiles	No No	Boiga cynodon Gonyosoma oxycephalum Oligodon signatus	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake	protected (Appendix II)  Least Concern  Least Concern	Vulnerable  Vulnerable  Endangered	Operational Operational	Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological connectivity for faunal movement  Loss of/reduction in ecological	High High High	High High High	or II  Highly dependent on connected habitats for dispersal	High High High	Not Exepected to Occur	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade  No major new buildings  No major new buildings  No major new buildings  No major new buildings	Wildlife Act	Minor Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to	High High High	High High High	Not Exepected to Occur  Not Exepected to Occur  Not Exepected to Occur  Not Exepected	Minor Minor Minor
Fauna Fauna Fauna Fauna	aa R Raa R Raa R	Reptiles Reptiles Reptiles	No No No	Boiga cynodon  Gonyosoma oxycephalum  Oligodon signatus  Ptyas fusca	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake  White-bellied rat snake	protected (Appendix II)  Least Concern  Least Concern  Least Concern	Vulnerable  Vulnerable  Endangered  Vulnerable	Operational Operational Operational	Loss of/reduction in ecological connectivity for faunal movement	High High High	High High High	or II  Highly dependent on connected habitats for dispersal	High High High	Not Exepected to Occur	poaching activities; Singapore's zero-tolerance to illegal wildlife trade  No major new buildings	Wildlife Act	Minor Minor Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High High High	High High High	Not Exepected to Occur	Minor Minor Minor
Fauna Fauna Fauna Fauna	aRaR AARAR RaaR	Reptiles Reptiles Reptiles Reptiles	No No No	Boiga cynodon  Gonyosoma oxycephalum  Oligodon signatus  Ptyas fusca  Sibynophis melanocephalus	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake  White-bellied rat snake  Black-headed collared snake	protected (Appendix II)  Least Concern  Least Concern  Least Concern  Least Concern  Vulnerable; CITES	Vulnerable  Vulnerable  Endangered  Vulnerable  Vulnerable	Operational Operational Operational Operational	Loss of/reduction in ecological connectivity for faunal movement	High High High High	High High High High	or II  Highly dependent on connected habitats for dispersal	High High High	Not Exepected to Occur  Not Exepected to	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade  No major new buildings  Park expected to be opened till 2200h	Wildlife Act	Minor Minor Minor Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail  I Design for boardwalks and trails to deter visitors from venturing off-trail  I Design for boardwalks and trails to deter visitors from venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trail  I Design for boardwalks and trails to determine the venturing off-trails and trails an	High High High High	High High High High	Not Exepected to Occur	Minor Minor Minor Minor
Fauna Fauna Fauna Fauna Fauna	a R A R A A R A A R A A R	Reptiles Reptiles Reptiles Reptiles Reptiles Reptiles	No No No No	Boiga cynodon  Gonyosoma oxycephalum  Oligodon signatus  Ptyas fusca  Sibynophis melanocephalus  Cuora amboinensis	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake  White-bellied rat snake  Black-headed collared snake  Malayan box terrapin	protected (Appendix II)  Least Concern  Least Concern  Least Concern  Least Concern  Vulnerable; CITES protected (Appendix II)	Vulnerable  Vulnerable  Endangered  Vulnerable  Vulnerable  Near Threatened	Operational Operational Operational Operational	Loss of/reduction in ecological connectivity for faunal movement	High High High High	High High High High	or II  Highly dependent on connected habitats for dispersal	High High High High	Not Exepected to Occur	poaching activities; Singapore's zero-tolerance to illegal wildlife trade  No major new buildings  Park expected to be opened	Wildlife Act	Minor Minor Minor Minor Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail      Design for boardwalks and trails to deter visitors from venturing off-trail      Incorporate wildlife-friendly lighting Close the park and associated facilities to the public during the night (1900-0700 h)     Incorporate wildlife-friendly lighting Close the park and associated facilities to the public during the night (1900-0700 h)	High High High High	High High High High	Not Exepected to Occur	Minor Minor Minor Minor Minor
Fauna Fauna Fauna Fauna Fauna	aR RARRAR RARRAR RARRAR RARRAR RARRAR RARRAR	Reptiles Reptiles Reptiles Reptiles Reptiles Reptiles Reptiles	No No No No No No	Boiga cynodon  Gonyosoma oxycephalum  Oligodon signatus  Ptyas fusca  Sibynophis melanocephalus  Cuora amboinensis  Boiga cynodon	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake  White-bellied rat snake  Black-headed collared snake  Malayan box terrapin  Dog-toothed cat snake	Least Concern  Least Concern  Least Concern  Least Concern  Vulnerable; CITES protected (Appendix II)  Least Concern	Vulnerable  Vulnerable  Endangered  Vulnerable  Vulnerable  Near Threatened  Vulnerable	Operational Operational Operational Operational Operational	Loss of/reduction in ecological connectivity for faunal movement  Light disturbance	High High High High High	High High High High High	or II  Highly dependent on connected habitats for dispersal Noctumal	High High High High	Not Exepected to Occur  Likely	poaching activities; Singapore's zero-tolerance to illegal wildlife trade  No major new buildings  Park expected to be opened till 2200h  Park expected to be opened till 2200h	Wildlife Act	Minor Minor Minor Minor Minor Minor	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail      Design for boardwalks and trails to deter visitors from venturing off-trail      Close the visitors from venturing off-trail      Close the park and associated facilities to the public during the night (1900-0700 h)      Incorporate wildlife-friendly lighting Close the park and associated facilities to the public during the night (1900-0700 h)      Incorporate wildlife-friendly lighting Close the park and associated facilities to the public during the night (1900-0700 h)	High High High High High	High High High High	Not Exepected to Occur  Less likely	Minor Minor Minor Minor Minor Minor
Fauna Fauna Fauna Fauna Fauna Fauna	aR RAR RAR RAR RAR RAR RAR RAR RAR RAR R	Reptiles Reptiles Reptiles Reptiles Reptiles Reptiles Reptiles Reptiles	No No No No No No No	Boiga cynodon  Gonyosoma oxycephalum  Oligodon signatus  Ptyas fusca  Sibynophis melanocephalus  Cuora amboinensis  Boiga cynodon  Gonyosoma oxycephalum	Dog-toothed cat snake  Red-tailed racer  Barred kukri snake  White-bellied rat snake  Black-headed collared snake  Malayan box terrapin  Dog-toothed cat snake  Red-tailed racer	Least Concern  Least Concern  Least Concern  Least Concern  Vulnerable; CITES protected (Appendix II)  Least Concern  Least Concern	Vulnerable  Vulnerable  Endangered  Vulnerable  Vulnerable  Near Threatened  Vulnerable  Vulnerable	Operational Operational Operational Operational Operational Operational	Loss of/reduction in ecological connectivity for faunal movement  Light disturbance  Light disturbance	High High High High High	High High High High High Medium	or II  Highly dependent on connected habitats for dispersal Nocturnal	High High High High High Medium	Not Exepected to Occur  Likely	poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade  No major new buildings  Park expected to be opened till 2200h  Park expected to be opened till 2200h  Park expected to be opened till 2200h	Wildlife Act	Minor Minor Minor Minor Minor Moderate	Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to deter visitors from venturing off-trail      Incorporate wildlife-friendly lighting close the park and associated facilities to the public during the night (1900-0700 h)      Incorporate wildlife-friendly lighting close the park and associated facilities to the public during the night (1900-0700 h)      Incorporate wildlife-friendly lighting close the park and associated facilities to the public during the night (1900-0700 h)      Incorporate wildlife-friendly lighting close the park and associated facilities to the public during the night (1900-0700 h)	High High High High High Medium	High High High High High Medium	Not Exepected to Occur  Less likely  Less likely	Minor Minor Minor Minor Minor Minor Minor

Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Light disturbance	High	High	Nocturnal	High	Likely	Park expected to be opened till 2200h	Major	> Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night (1900-0700 h)	High	High	Less likely	Minor
Fauna	Reptiles	No	Boiga cynodon	Dog-toothed cat snake	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within built-up areas, trails/boardwal ks: park expected to be opened till 2200h	Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Gonyosoma oxycephalum	Red-tailed racer	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks	Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install raillings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Oligodon signatus	Barred kukri snake	Least Concern	Endangered	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h	Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install raillings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Ptyas fusca	White-bellied rat snake	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h	Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Sibynophis melanocephalus	Black-headed collared snake	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks	Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Reptiles	No	Cuora amboinensis	Malayan box terrapin	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h	Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install raillings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Low	Low	Possible	Minor
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Exepected to Occur	No major new buildings	Minor	venturing on-uan	Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Exepected to Occur	No major new buildings	Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Exepected to Occur	No major new buildings	Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Exepected to Occur	buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Exepected to Occur	operation	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Exepected to Occur	Impact is not expected to happen during operation	Negligible	3	Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Exepected to Occur Not	buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	High	Migratory	High	Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor

											Resident with		Not	Negaria						Not Formated	
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Medium	known records of bird-building collision	Medium	Occur	No major new buildings		Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Operational	Accidental injury or mortality	High	High	Migratory	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Accidental injury or mortality	High	High	Forest edge frugivore	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Operational	Accidental injury or mortality	High	High	Forest edge frugivore	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Exepected to Occur	No major new buildings		Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Accidental injury or mortality	High	Medium	Resident with known records of bird-building collision	Medium	Not Exepected to Occur	buildings		Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Low susceptibility to bird building collision	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Negligible	Not perceived as nuisance or threat	Very Low	Not Exepected to Occur	o NA		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Spilomis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter visitors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Occur	Not likely to be poached	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible

Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operational	Poaching	High	Medium	Commonly traded as pets	Medium	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Moderate	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail      Design for boardwalks and trails to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Operational	Poaching	High	Low	Not commonly known to be traded as pets	Low	Not Exepected to Occur	poached	Wildlife Act	Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operational	Poaching	High	Medium	Commonly traded as pets	Medium	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Moderate	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	No major new buildings		Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor

Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligibl		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings	Negligibl		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligibl		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	Slightly dependent on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings	Negligibl		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings	Minor		High	High	Not Exepected to Occur	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	Dependent on connected habitats for dispersal Slightly dependent	Medium	Not Exepected to Occur	No major new buildings	Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Low	on connected habitats for dispersal and adaptable to traverse urban infrastructures if needed	Low	Not Exepected to Occur	No major new buildings	Negligibl		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings	Negligibl		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Light disturbance	High	Medium	Diumal bird	Medium	Likely	Park expected to be opened till 2200h	Moderate	(1900-0700 h)	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operational	Light disturbance	High	Medium	Diurnal bird	Medium	Likely	Park expected to be opened till 2200h	Moderate	(1900-0700 h)	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operational	Light disturbance	High	Medium	Diumal bird	Medium	Likely	Park expected to be opened till 2200h	Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> <li>Incorporate wildlife-friendly lighting</li> </ul>	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operational	Light disturbance	High	High	Migratory	High	Likely	Park expected to be opened till 2200h	Major	> Close the park and associated facilities to the public during the night (1900-0700 h) > Incorporate wildlife-friendly lighting	High	High	Less likely	Minor
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operational	Light disturbance	High	Medium	Diurnal bird	Medium	Likely	Park expected to be opened till 2200h	Moderate	> Close the nark and associated	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operational	Light disturbance	High	Medium	Diumal bird	Medium	Likely	Park expected to be opened till 2200h	Moderate	> Close the park and accordated	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operational	Light disturbance	High	High	Migratory	High	Likely	to be opened till 2200h	Major	Close the park and associated facilities to the public during the night (1900-0700 h)     Incorporate wildlife-friendly lighting	High	High	Less likely	Minor
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operational	Light disturbance	High	High	Migratory	High	Likely	to be opened till 2200h	Major	<ul> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> <li>Incorporate wildlife-friendly lighting</li> </ul>	High	High	Less likely	Minor
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operational	Light disturbance	High	Medium	Diurnal bird	Medium	Likely	to be opened till 2200h	Moderate	(1900-0700 h)  Incorporate wildlife-friendly lighting	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Operational	Light disturbance	High	High	Migratory	High	Likely	to be opened till 2200h	Major	<ul> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> <li>Incorporate wildlife-friendly lighting</li> </ul>	High	High	Less likely	Minor
Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)  Critically Endangered;	Near Threatened	Operational	Light disturbance	High	Medium	Diurnal bird	Medium	Likely	to be opened till 2200h	Moderate	(1900-0700 h)  Incorporate wildlife-friendly lighting	Medium	Medium	Less likely	Minor
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	CITES protected (Appendix I)	Endangered	Operational	Light disturbance	High	Medium	Diurnal bird	Medium	Likely	to be opened till 2200h	Moderate	(1900-0700 h)  Incorporate wildlife-friendly lighting	Medium	Medium	Less likely	Minor
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Light disturbance	High	High	Noctumal	High	Likely	to be opened till 2200h	Major	Close the park and associated facilities to the public during the night (1900-0700 h)     Incorporate wildlife-friendly lighting     Close the park and associated.	High	High	Less likely	Minor
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Light disturbance	High	High	Noctumal	High	Likely	to be opened till 2200h	Major	Close the park and associated facilities to the public during the night (1900-0700 h)	High	High	Less likely	Minor

Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vulnerable	Operational	Light disturbance	High	Medium	Diurnal bird	Medium	Likely	Park expected to be opened till 2200h
Fauna	Bird	No	Nisaetus cirrhatus	Changeable hawk-eagle	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Spilornis cheela	Crested serpent eagle	Least Concern; CITES protected (Appendix II)	Critically Endangered	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Alcedo meninting	Blue-eared kingfisher	Least Concern	Endangered	Operational	Human disturbance	High	High	Sensitive to human presence	High	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Halcyon coromanda	Ruddy kingfisher	Least Concern	Critically Endangered	Operational	Human disturbance	High	High	Sensitive to human presence	High	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Collocalia affinis	Plume-toed swiftlet	Least Concern	Vulnerable	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human
Fauna	Bird	No	Corvus macrorhynchos	Large-billed crow	Least Concern	Vulnerable	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	presence Tolerant of human presence
Fauna	Bird	No	Chrysococcyx xanthorhynchus	Violet cuckoo	Least Concern	Vulnerable	Operational	Human disturbance	High	High	Sensitive to human presence	High	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	Yes	Lanius cristatus	Brown shrike	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Copsychus saularis	Oriental magpie-robin	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Cyornis brunneatus	Brown-chested jungle flycatcher	Vulnerable	Vulnerable	Operational	Human disturbance	High	High	Sensitive to human presence	High	Possible	Human traffic confined within built-up areas, trails/boardwal ks

Moderate	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> </ul>	Medium	Medium	Less likely	Mi
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Mir
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Mii
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., instal railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Mi
Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Mi
Minor		Low	Low	Less likely	Mi
Minor		Low	Low	Less likely	Mi
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Mi
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Mi
Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Mi
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Mi

Fauna	Bird	Yes	Psittacula longicauda	Long-tailed parakeet	Vulnerable; CITES protected (Appendix II)	Near Threatened	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	Yes	Pycnonotus zeylanicus	Straw-headed bulbul	Critically Endangered; CITES protected (Appendix I)	Endangered	Operational	Human disturbance	High	High	Sensitive to human presence	High	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Bird	No	Ketupa ketupu	Buffy fish owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h
Fauna	Bird	No	Strix seloputo	Spotted wood owl	Least Concern; CITES protected (Appendix II)	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within built-up areas, trails/boardwal ks: park expected to be opened till 2200h
Fauna	Bird	Yes	Zosterops simplex	Swinhoe's white-eye	Least Concern	Vuinerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operational	Accidental injury or mortality	High	High	Known to cross roads - highly susceptible to roadkills	High	Less Likely	Target visitors are mostly residents from surrounding estates; no carpark; increase in traffic not substantial
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operational	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Less Likely	Target visitors are mostly residents from surrounding estates; no carpark; increase in traffic not substantial
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operational	Accidental injury or mortality	High	High	Ground-dwelling mammal - highly susceptible to roadkills	High	Less Likely	Target visitors are mostly residents from surrounding estates; no carpark; increase in traffic not substantial
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operational	Human-Wildlife conflict	High	High	Typically perceived as both nuisance and threat	High	Possible	Mammal - possibly implicated in human-wildlife conflict
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Mammal not known to be implicated in human-wildlife conflict
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Mammal not known to be implicated in human-wildlife conflict

Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Less likely	Minor
Major	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Possible	Moderat
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Close park during the night (1900-0700h) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Minor		High	High	Less likely	Minor
Moderate	> Put up signages to educate visitors on appropriate behaviours when encountering fauna > Design bins to be wildlife-proof	High	High	Less likely	Minor
Minor		Low	Low	Less likely	Minor
Minor		Low	Low	Less likely	Minor

BBNP, BBTP and BBHNP EMMP

Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	Increased accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	dispersal  Dependent on connected habitats for dispersal	Medium	Not Exepected to Occur	No major new buildings		Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operational	Light disturbance	High	Medium	Diumal mammal	Medium	Likely	Park expected to be opened till 2200h		Moderate	> Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night (1900-0700 h)	Medium	Medium	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operational	Light disturbance	High	High	Noctumal	High	Likely	Park expected to be opened till 2200h		Major	> Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night (1900-0700 h)	High	High	Less likely	Minor
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operational	Light disturbance	High	High	Noctumal	High	Likely	Park expected to be opened till 2200h		Major	> Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night	High	High	Less likely	Minor
Fauna	Non-volant mammal	Yes	Macaca fascicularis	Long-tailed macaque	Vulnerable; CITES protected (Appendix II)	Least Concern	Operational	Human disturbance	High	Low	Slightly sensitive to human presence	Low	Less Likely	Tolerant of human presence		Minor	(1900-0700 h)	Low	Low	Less likely	Minor
Fauna	Non-volant mammal	No	Prionailurus bengalensis	Leopard cat	Least Concern; CITES protected (Appendix I)	Critically Endangered	Operational	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h		Major	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Possible	Moderate
Fauna	Non-volant mammal	No	Manis javanica	Sunda pangolin	Critically Endangered; CITES protected (Appendix I)	Critically Endangered	Operational	Human disturbance	High	High	Sensitive to human presence	High	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h		Major	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	High	High	Possible	Moderate
Fauna	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	Critically Endangered	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to happen during operation		Negligible		Low	Low	Not Exepected to Occur	Negligible
Fauna	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	Impact is not expected to		Negligible		Low	Low	Not Exepected to Occur	Negligible
														Impact is not							
Fauna	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operational	Accidental injury or mortality	High	Low	Volant - low susceptibility	Low	Not Exepected to Occur	expected to		Negligible		Low	Low	Not Exepected to Occur	Negligible

Appendix 1C - Environmental Impact and Mitigation Register

Fauna	a l	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	ritically Endangered	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Mammal not known to be implicated in human-wildlife conflict		Minor		Low	Low	Less likely	Minor
Fauna	a l	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	human-wildlife conflict		Minor		Low	Low	Less likely	Minor
Fauna	a l	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operational	Human-Wildlife conflict	High	Low	Possibly perceived as nuisance; less tolerant of human presence	Low	Less Likely	Mammal not known to be implicated in human-wildlife conflict		Minor		Low	Low	Less likely	Minor
Fauna	a l	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching	Very Low	Not Exepected to Occur	Not likely to be poached	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	a l	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	ritically Endangered	Operational	Poaching	High	High	CITES Appendix I or II	High	Likely	accessibility to carry out poaching activities; Singapore's zero-tolerance stance to illegal wildlife trade	Wildlife Act	Major	Conduct regular patrols to deter poaching activities     Design for dense landscaping along the sides of the proposed trails and baordwalks to deter vistors from venturing off-trail     Design for boardwalks and trails to deter visitors from venturing off-trail	High	High	Less likely	Minor
Fauna	a l	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	poaching	Very Low	Not Exepected to Occur Not	Not likely to be poached	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	a I	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operational	Poaching	High	Negligible	Negligible susceptibility to poaching Dependent on	Very Low	Exepected to Occur Not	poacried	Wildlife Act	Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	a l	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Medium	connected habitats for dispersal	Medium	Exepected to Occur	No major new buildings		Minor		Medium	Medium	Not Exepected to Occur	Minor
Fauna	a l	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	ritically Endangered	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	Negligible	Not dependent on connected habitats for dispersal and able to traverse urban infrastructure	Very Low	Not Exepected to Occur	No major new buildings		Negligible		Negligible	Very Low	Not Exepected to Occur	Negligible
Fauna	a l	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	a l	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operational	Loss of/reduction in ecological connectivity for faunal movement	High	High	Highly dependent on connected habitats for dispersal	High	Not Exepected to Occur	No major new buildings		Minor		High	High	Not Exepected to Occur	Minor
Fauna	a l	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operational	Light disturbance	High	High	Nocturnal	High	Likely	Park expected to be opened till 2200h		Major	> Incorporate wildlife-friendly lighting > Close the park and associated facilities to the public during the night (1900-0700 h)	High	High	Less likely	Minor
Fauna	a l	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	ritically Endangered	Operational	Light disturbance	High	High	Noctumal	High	Likely	Park expected to be opened till 2200h		Major	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> <li>Incorporate wildlife-friendly lighting</li> </ul>	High	High	Less likely	Minor
Fauna	a I	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operational	Light disturbance	High	High	Nocturnal	High	Likely	Park expected to be opened till 2200h		Major	> Close the park and associated facilities to the public during the night (1900-0700 h)	High	High	Less likely	Minor
Fauna	a l	Bat	No	Tylonycteris malayana	Greater bamboo bat	Least Concern	Vulnerable	Operational	Light disturbance	High	High	Nocturnal	High	Likely	Park expected to be opened till 2200h		Major	<ul> <li>Incorporate wildlife-friendly lighting</li> <li>Close the park and associated facilities to the public during the night (1900-0700 h)</li> </ul>	High	High	Less likely	Minor
Fauna	a l	Bat	No	Eonycteris spelaea	Cave nectar bat	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Possible	Human traffic confined within built-up areas, trails/boardwal ks		Moderate	> Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species > Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings) > Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor
Fauna	a l	Bat	No	Pteropus vampyrus	Large flying-fox	Near Threatened; CITES protected (Appendix II)	ritically Endangered	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h		Moderate	<ul> <li>Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species</li> <li>Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)</li> <li>Close park during the night (1900-0700h)</li> <li>Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail</li> </ul>	Medium	Medium	Less likely	Minor
Fauna	a l	Bat	No	Tylonycteris fulvida	Lesser bamboo bat	Least Concern	Vulnerable	Operational	Human disturbance	High	Medium	Possibly sensitive to human presence	Medium	Likely	Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h		Moderate	Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species     Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)     Close park during the night (1900-0700h)     Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail	Medium	Medium	Less likely	Minor

Human traffic confined within built-up areas, trails/boardwal ks; park expected to be opened till 2200h Possibly sensitive to human presence Medium Fauna Bat Least Concern Likely Tylonycteris malayana Greater bamboo bat Vulnerable Operational Human disturbance

Conduct regular post-construction biodiversity monitoring to determine if the increased visitorship has affected fauna species
 Design the boardwalks and trails to deter visitors from venturing off-trail (e.g., install railings)
 Close park during the night (1900-0700h)
 Design for dense landscaping along the sides of the proposed trails and boardwalks to deter visitors from venturing off-trail

Medium Less likely

Receptor Type	Туре	Habitat	Phase	Impact type	Impact category	Sensitivity (S)	Key minimum conntrols	Impact intensity (I)	Reason	Consequence (C = S × I)	Likelihood (L)	Reason	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual consequence	Residual likelihood	Residual impact significance	Remarks
Habitat	Terrestrial	Native-dominated secondary forest	Construction	Loss of habitat	Direct	Priority 1		Negligible	No overlap	Very Low	Unlikely	No development	Negligible		Negligible	Very Low	Unlikely	Negligible	
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Construction	Loss of habitat	Direct	Priority 2	Hoarding installation, TPZ	Low	< 10%	Very Low	Certain	Overlaps with worksite	Minor		Low	Very Low	Certain	Minor	
Habitat	Terrestrial	Abandoned-land forest	Construction	Loss of habitat	Direct	Priority 2	installation, daily checks by	Low	< 10%	Very Low	Certain	Overlaps with worksite	Minor		Low	Very Low	Certain	Minor	
Habitat	Terrestrial	Scrubland	Construction	Loss of habitat	Direct	Priority 3	EM	Low	< 10%	Very Low	Certain	Overlaps with worksite	Minor		Low	Very Low	Certain	Minor	
Habitat	Aquatic	Stream E1a	Construction	Loss of habitat	Direct	Priority 2		Negligible	No loss (stream enhancement and wetland creation)	Imperceptible	Unlikely	No loss (stream enhancement and wetland creation)	Negligible		Negligible	Imperceptible	Unlikely	Negligible	
Habitat	Terrestrial	Native-dominated secondary forest	Construction	Habitat degradation	Indirect	Priority 1		Negligible	No overlap	Very Low	Unlikely	No development	Negligible		Negligible	Very Low	Unlikely	Negligible	
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Construction	Habitat degradation	Indirect	Priority 2	ECM implementation, proper stockpiling, DCM	Medium	14.2% (1.06 ha)	Low	Less likely	Minimum controls	Minor		Medium	Low	Less likely	Minor	
Habitat	Terrestrial	Abandoned-land forest	Construction	Habitat degradation	Indirect	Priority 2	implementation, ensure	High	42.3% (1.06 ha)	Medium	Less likely	Minimum controls	Minor		High	Medium	Less likely	Minor	
Habitat	Terrestrial	Scrubland	Construction	Habitat degradation	Indirect	Priority 3	noise levels within approved limits, daily checks by EM,	Medium	12.1% (0.261 ha)	Very Low	Less likely	Minimum controls	Negligible		Medium	Very Low	Less likely	Negligible	
Habitat	Aquatic	Stream E1a	Construction	Habitat degradation	Indirect	Priority 2	avoid fogging	Low	Some changes in surface water	Very Low	Less likely	Minimum controls	Negligible		Low	Very Low	Less likely	Negligible	
Habitat	Terrestrial	Native-dominated secondary forest	Construction		Indirect	Priority 1		Negligible	quality No overlap	Very Low	Unlikely	No overlap	Negligible		Negligible	Very Low	Unlikely	Negligible	NIL
Habitat	Terrestrial	Abandoned-land forest with native recruitment			Indirect	Priority 2		High	> 40% increase in P/A	Medium	Less likely	Small development (trail)	Minor		High	Medium	Less likely	Minor	NIL
riabitat	rerresulai	Abandoned-land forest with hadve recruitment	CONSTRUCTION	Turnatur or eage effects	manoct	1 Horky 2		riigii	7 40 /0 IIICI GASG III I /A	Wedum	Loss indiy	Official development (trail)	WIIIO		riigir	Wedum	LG33 likely	WIIIO	INIL
Habitat	Terrestrial	Abandoned-land forest	Construction	Formation of edge effects	Indirect	Priority 2		High	> 40% increase in P/A	Medium	Less likely	The proposed entrance [i.e., arrival node] and wetland creation with be created mostly within the footprint of existing dot trails within BBHNP. Clearance within the understorey layer of this habitat type would be done se	Minor	> Design for dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions	High	Medium	Less likely	Minor	No change to impact significance. Impact cannot be lowered anymore.
Habitat	Terrestrial	Scrubland	Construction	Formation of edge effects	Indirect	Priority 3	NA	High	> 40% increase in P/A	Low	Less likely	Considerable development (main entrance and wetland creation) but habitat is already edge habitat	Minor	Infill planting at certain areas within this habitat type, especially near the proposed arrival node and wetland.	High	Low	Less likely	Minor	NIL
												This impact was qualitatively assessed.							
Habitat	Aquatic	Stream E1a	Construction	Formation of edge effects	Indirect	Priority 2		NA	NA	NA	NA NA	Currently, the stream is already exposed to changes to microclimate and edge effects due to the ongoing site clearance and development adjacent to BBHNP. Proposed trails will be created within the footprint of existing old trails within BBHNP. As such, clearance within the understory layer of this habitat type shall be done selectively to retain as much existing vegetation/forest structure as possible.	Minor	Enhancement works	NA	NA	NA	Minor	The proposed enhancement works to this habitat may result in positive impact significance during the operational phase.
Habitat	Terrestrial	Native-dominated secondary forest	Operational	Habitat degradation	Indirect	Priority 1		Negligible	No overlap	Very Low	Unlikely	No development	Negligible		Negligible	Very Low	Unlikely	Negligible	
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Operational	Habitat degradation	Indirect	Priority 2		Medium	14.2% (1.06 ha)	Low	Less likely	Trail with rope railing	Minor		Medium	Low	Less likely	Minor	
Habitat	Terrestrial	Abandoned-land forest	Operational	Habitat degradation	Indirect	Priority 2	Avoid fogging	High	42.3% (1.06 ha)	Medium	Less likely	Trail with rope railing	Minor		High	Medium	Less likely	Minor	
Habitat	Terrestrial	Scrubland	Operational	Habitat degradation	Indirect	Priority 3		Medium	12.1% (0.261 ha)	Very Low	Less likely	Trail with rope railing	Negligible		Medium	Very Low	Less likely	Negligible	
Habitat	Aquatic	Stream E1a	Operational	Habitat degradation	Indirect	Priority 2		Low	Some changes in surface water	Very Low	Less likely	Trails with rope railing, surface runoff controlled and littering not expected	Negligible		Low	Very Low	Less likely	Negligible	
Habitat	Terrestrial	Native-dominated secondary forest	Operational	Changes in microclimatic conditions	Indirect	Priority 1		Negligible	quality No overlap	Very Low	Unlikely	No development	Negligible		Negligible	Very Low	Unlikely	Negligible	
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Operational	Changes in microclimatic conditions	Indirect	Priority 2	Carrier to the second confidence	Medium	14.2% (1.06 ha)	Low	Unlikely	Development is largely green	Negligible		Medium	Low	Unlikely	Negligible	
Habitat	Terrestrial	Abandoned-land forest	Operational	Changes in microclimatic conditions	Indirect	Priority 2	Ensure noise levels within approved limits, ensure dust levels within approved limits	High	42.3% (1.06 ha)	Medium	Unlikely	Development is largely green	Negligible		High	Medium	Unlikely	Negligible	
Habitat	Terrestrial	Scrubland	Operational	Changes in microclimatic conditions	Indirect	Priority 3		Medium	12.1% (0.261 ha)	Very Low	Unlikely	Development is largely green	Negligible		Medium	Very Low	Unlikely	Negligible	
Habitat	Aquatic	Stream E1a	Operational	Changes in microclimatic conditions	Indirect	Priority 2		High	>40% overlap	Medium	Unlikely	Development is largely green	Negligible		High	Medium	Unlikely	Negligible	
Habitat	Terrestrial	Native-dominated secondary forest	Operational	(aquatic nabitats only)	Indirect	Priority 1		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Habitat	Terrestrial	Abandoned-land forest with native recruitment	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Habitat	Terrestrial	Abandoned-land forest	Operational	Introduction of exotic species (aquatic habitats only)	Indirect	Priority 2	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Habitat	Terrestrial	Scrubland	Operational	Introduction of avotic appoint	Indirect	Priority 3		NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	
Habitat	Aquatic	Stream E1a	Operational	Introduction of evotic enecies	Indirect	Priority 2		Low	Some impact to exotic-dominated habitat	Very Low	Certain	For members of public to visit, accessible to public	Minor		Low	Very Low	Certain	Minor	

Receptor Type	Туре	Species	Phase	Impact type	Sensitivity (S) Impa	act intensity	(I) Rationale for impact intensity	Consequence (C = S ×	Likelihood (L)	Rationale for likelihood	Key minimum controls	Impact significance (C × L)	Key mitigation measures	Residual impact intensity	Residual consequence	Residual likelihood	Residual impact significance
Flora	Indirect	Lomariopsis lineata	Construction	Decline in plant health	High	High	1 specimen (only sole specimen in Study Area) affected indirectly by development of entrance an hydrology changes to stream	d High	Likely	This species will likely be affected by the hydrological changes of the stream	NIL	Major	Design for and implement dense landscaping and infill planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions     conduct regular inspections to ensure contractor compliance with the EMMP     Adjust design footprint to ensure Priority 1 plant species are not within the impact zones     Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Negligible	Very Low	Unlikely	Negligible
Flora	Indirect	Bambusa vulgaris	Construction	Decline in plant health	High	Low	5/14 specimen affected indirectly by development of trails and southern entrance/pond area	t Low	Possible	Formation of some forest edges in a mix of forested and scrubland, areas; plant specimens previously in forested areas now exposed to some edge habitats	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Breynia discigera	Construction	Decline in plant health	High	Low	2/5 specimens affected indirectly by the development of trails	Low	Possible	Formation of some forest edges in a mix of forested and scrubland, areas; plant specimens previously in forested areas now exposed to some edge habitats	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Bridelia stipularis	Construction	Decline in plant health	High	Low	7/16 specimens affected indirectly by developmer of trails	nt Low	Possible	Formation of some forest edges in a mix of forested, scrubland, and urban vegetation areas; plant specimens previously in forested areas now exposed to some edge habitats	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Campnosperma auriculatum	Construction	Decline in plant health	High	Medium	1/2 specimen will be indirectly affected by the development of secondary entrance at the north	Medium	Unlikely	No formation of forest edges (i.e., construction activities will be at existing GFRC trail which is already non-forested)	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Clerodendrum villosum	Construction	Decline in plant health	High	High	All remaining specimens indirectly affected by the construction of arrival node and proposed wetland		Less likely	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats	Implement soil erosion control measures	Minor	> Design for and implement dense landscaping and infili planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions > conduct regular inspections to ensure contractor compliance with the EMMP > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect	Cyrtococcum patens	Construction	Decline in plant health	High	High	All specimens indirectly affected by the primary entrance and pond construction	High	Unlikely	No formation of forest edges. Plant specimens remain in their original forested habitats	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Ficus apiocarpa	Construction	Decline in plant health	High	Low	10/44 specimens affected by proposed trails	Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Glochidion zeylanicum var. zeylanicum	Construction	Decline in plant health	High	High	6/7 specimens affected indirectly by construction of main entrance	High	Less likely	Formation of some forest edges in a mix of forested and scrubland area ; plant specimens in forested area are already acclimatised to edge habitats.	Implement soil erosion control measures	Minor	> Design for and implement dense landscaping and infili planting at areas that are cleared, at existing gaps in forested areas, and along the sides of the proposed trails and boardwalks to buffer the surrounding forested areas from changes in microclimatic conditions  > conduct regular inspections to ensure contractor compliance with the EMMP  > Adjust design footprint to ensure Priority 1 plant species are not within the impact zones  > Adjust the construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	No change	No change	No change	Minor
Flora	Indirect	Goniophlebium percussum	Construction	Decline in plant health	High	Low	4/10 specimens indirectly affected by construction of proposed trails	1 Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Guioa pubescens	Construction	Decline in plant health	High	Low	1/3 specimens indirectly affected by construction of trails	Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Gynochthodes rigida	Construction	Decline in plant health	High	Low	9/39 specimens affected indirectly by construction of trail	1 Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Limacia scandens	Construction	Decline in plant health	High	Low	3/12 specimens indirectly affected by construction of primary entrance	1 Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Melicope lunu-ankenda	Construction	Decline in plant health	High	Low	6/13 specimens indirectly affected by construction of trails and possible stream enhancement works	n Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor

Flora	Indirect	Oxyceros longiflorus	Construction	Decline in plant health	High	Low	2/7 specimens indirectly affected by construction of the primary entrance and possible stream enhancement works	Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Tetracera fagifolia var. borneensis	Construction	Decline in plant health	High	Low	3/15 specimens indirectly affected by construction of trails	Low	Possible	Formation of some forest edges in a mix of forested and scrubland area; plant specimens previously in forested areas now exposed to some edge habitats.	Implement soil erosion control measures	Minor	NA	No change	No change	No change	Minor
Flora	Indirect	Angelesia splendens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Connarus semidecandrus	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Curculigo capitulata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Embelia canescens var. glabrescens	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Ficus vasculosa	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Hedyotis prostrata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Litsea umbellata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Macaranga hullettii	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Sticherus cf. truncatus	Construction	Decline in plant health	High	Negligible	No specimen affected directly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Symplocos fasciculata	Construction	Decline in plant health	High	Negligible	No specimen affected indirectly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Tetracera akara	Construction	Decline in plant health	High	Negligible	No specimen affected directly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
Flora	Indirect	Xanthophyllum ellipticum	Construction	Decline in plant health	High	Negligible	No specimen affected directly by development	Very Low	Unlikely	No specimen affected indirectly by development	NIL	Negligible	NA	No change	No change	No change	Negligible
										development			> Avoid areas of high conservation				
Flora	Direct	Bambusa vulgaris	Construction	Mortality	High	Negligible	1/15 (< 10%) specimens affected by the entrance and pond construction	Very Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Minor	value  > Arborists to determine suitable TPZs for any trees that will be retained within the worksites  > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space  > Transplant or salvage saplings of conservation significance  > Adjust design footprint to avoid Priority 1 plan species  > Adjust das and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist	Negligible	Very Low	Not expected to happen	Negligible
Flora	Direct	Ficus apiocarpa	Construction	Mortality	High	Negligible	2/46 (< 10%)specimens affected by the construction of trails and entrances	Very Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Minor	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust design footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Happen	Negligible
Flora	Direct	Melicope lunu-ankenda	Construction	Mortality	High	Negligible	1/14 (<10%) specimens affected by the construction of trail	Very Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Minor	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not Expected to Happen	Negligible

Flora	Direct	Glochidion zeylanicum var. zeylanicum	Construction	Mortality	High	Low	4/11 specimens affected by the construction of pond and south entrance	Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Moderate	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not expected to happen	Negligible
Flora	Direct	Guioa pubescens	Construction	Mortality	High	Low	1/4 specimens affected by the construction of trail	Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Moderate	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksites or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not expected to happen	Negligible
Flora	Direct	Litsea umbellata	Construction	Mortality	High	Low	1/4 specimens affected by the construction of trail	Low	Certain	Specimen located on the proposed footprint of worksite	NiL	Moderate	Navid areas of high conservation value     Adjust design footprint to avoid Priority 1 plan species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for any trees that will be retained within the worksites     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite     boundaries     Conduct regular iste inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not expected to happen	Negligible
Flora	Direct	Oxyceros longiflorus	Construction	Mortality	High	Low	1/8 specimens affected by the construction of trail	Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Moderate	> Avoid areas of high conservation value > Adjust design footprint to avoid Priority 1 plan species > Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist > Arborists to determine suitable TPZs for any trees that will be retained within the worksites > Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space > Transplant or salvage saplings of conservation significance > Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries > Conduct regular site inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not expected to happen	Negligible

Flora	Direct	Tetracera fagifolia var. borneensis	Construction	Mortality	High	Low	1/16 (<10%) specimens affected by the construction of trail	Very Low	Certain	Specimen located on the proposed footprint of worksite	NIL	Minor	Novid areas of high conservation value     Adjust design footprint to avoid Priority 1 plan species     Adjust construction footprint of boardwalks and trails to avoid Priority 1 plant species, in consultation with a Flora Specialist     Arborists to determine suitable TPZs for any trees that will be retained within the worksites     Ensure construction works, material and waste storage, access routes, etc., are kept within the boundaries of the worksite or agreed working space     Transplant or salvage saplings of conservation significance     Conduct regular inspections in the surrounding habitats to ensure no removal of vegetation has occurred beyond the agreed worksite boundaries     Conduct regular inspections to ensure contractor compliance with the EMMP	Negligible	Very Low	Not expected to happen	Negligible
Flora	Direct	Angelesia splendens	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Breynia discigera	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Bridelia stipularis	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Campnosperma auriculatum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Clerodendrum villosum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Connarus semidecandrus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to	No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Curculigo capitulata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to	mortality No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Cyrtococcum patens	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Embelia canescens var.	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low		mortality No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	glabrescens Ficus vasculosa	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality  No specimen will be affected by impact of	NIL			No change	No change	No change	Negligible
									happen Not expected to	mortality  No specimen will be affected by impact of	NIL	Negligible		-	-	-	
Flora	Direct	Goniophlebium percussum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality  No specimen will be affected by impact of		Negligible		No change	No change	No change	Negligible
Flora	Direct	Gynochthodes rigida	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Hedyotis prostrata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Limacia scandens	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality  No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Lomariopsis lineata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality  No specimen will be affected by impact of	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Macaranga hullettii	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen Not expected to	mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Sticherus cf. truncatus	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Symplocos fasciculata	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Tetracera akara	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Direct	Xanthophyllum ellipticum	Construction	Mortality	High	Negligible	No specimen affected directly by development	Very Low	Not expected to happen	No specimen will be affected by impact of mortality	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Angelesia splendens	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
							value)			·	Install TPZ around trees						
Flora	Indirect	Bambusa vulgaris	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public		Negligible		No change	No change	No change	Negligible
Flora	Indirect	Breynia discigera	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Fl	1	Daidelie etterdede	0	Deschion	I E-b	Nastala	No plant specimens of this species could get	V	Land Block	Specimens are clustered/spread out, and	NII	No elicible		No observe	No observe	No abassa	No olivitato
Flora	Indirect	Bridelia stipularis	Operational	Poaching	High	Negligible	stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Campnosperma auriculatum	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public		Negligible		No change	No change	No change	Negligible
Flora	Indirect	Clerodendrum villosum	Operational	Poaching	High	Negligible	Specimens are too large to be poached	Very Low	Possible	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Connarus semidecandrus	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Unlikely	Specimens are clustered/spread out, and are inaccessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Curculigo capitulata	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical	Very Low	Less likely	Specimens are clustered/spread out, and	NIL	Negligible		No change	No change	No change	Negligible
							value)  No plant specimens of this species could get			are accessible to members of public  Specimens are clustered/spread out, and							
Flora	Indirect	Cyrtococcum patens	Operational	Poaching	High	Negligible	stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Embelia canescens var. glabrescens	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)  No plant specimens of this species could get	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Ficus apiocarpa	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Ficus vasculosa	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	Glochidion zeylanicum var.	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical	Very Low	Less likely	Specimens are clustered/spread out, and	NIL	Negligible		No change	No change	No change	Negligible
Flora	Indirect	zeylanicum  Goniophlebium percussum	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical	Very Low	Less likely	are accessible to members of public  Specimens are clustered/spread out, and	NIL	Negligible		No change	No change	No change	Negligible
	300					-33-0-10	value)  No plant specimens of this species could get	y <del></del>		are accessible to members of public		-33			90		- Jg
Flora	Indirect	Guioa pubescens	Operational	Poaching	High	Negligible	stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are spread out, and accessible to members of public	NIL	Negligible		No change	No change	No change	Negligible

Flora	Indirect	Gynochthodes rigida	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Hedyotis prostrata	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Limacia scandens	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Litsea umbellata	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Lomariopsis lineata	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and inaccessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Macaranga hullettii	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Melicope lunu-ankenda	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Oxyceros longiflorus	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Sticherus cf. truncatus	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are not accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Symplocos fasciculata	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Tetracera akara	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Tetracera fagifolia var. borneensis	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical value)	Very Low	Less likely	Specimens are clustered/spread out, and are accessible to members of public	NIL	Negligible	No change	No change	No change	Negligible
Flora	Indirect	Xanthophyllum ellipticum	Operational	Poaching	High	Negligible	No plant specimens of this species could get stolen (i.e., not charismatic, no ethnobotanical	Very Low	Less likely	Specimens are clustered/spread out, and	NIL	Negligible	No change	No change	No change	Negligible

Appendix 2
Annexes to the Environmental Tender Specifications

### Annex A Tree Protection and Conservation Guidelines

#### **Annex A**

## GUIDELINES FOR TREE PROTECTION AND CONSERVATION

#### Ву

Derek Yap

**Lead Arborist** 

Camphora Pte Ltd

ISA certified

SG-0117A



#### CONTENT REQUIREMENTS

This document outlines specific measures to protect trees during construction or other site disturbance. The content and scope of the document will vary based on the site, type of construction, tree species, tree location and other factors.

#### TREE PROTECTION AND CONSERVATION GUIDELINES

This section outlines the general provisions for tree protection before, during and after construction. Additional measures may be added by the attending arborist on a case-by-case basis.

#### PRE-DEMOLITION/PILING/CONSTRUCTION

#### 1. Pre-Construction Meeting

The attending arborist shall attend a pre-construction meeting with the project contractor or construction supervisor to explain the tree protection and monitoring requirements as outlined in this document.

In addition, the project contractor or construction supervisor shall complete the 'VERIFICATION OF TREE PROTECTION CHECKLIST' as attached in Annex A before the onset of the construction.

#### 1.1 Tree Protection Zone

Prior to any site clearing (demolition works), piling works, grading, trenching or other soil disturbance, a tree protection zone (TPZ) must be installed as follows:

#### i. Type

The barriers should be temporary, made of a hard material, 1.8-m tall and firmly installed into the ground. If footings are required, there should be no on-site casting of footings

#### ii. Ground protection

Mulching material (can be compost or woodchips) at 100-mm thick to be laid within the TPZ. Woodchips with termicide treatment should not be used to avoid chemical leeching into the soil

Apply complete fertilizer (N:P:K 15:15:15) upon or together with the application of mulch.



#### iii. Signage

A readily-visible and waterproof sign shall be installed on all sides of the fencing around each individual protected tree. The size of each sign must be a minimum of 300mm wide and must contain the wording below:

# KEEP OUT! TREE PROTECTION ZONE

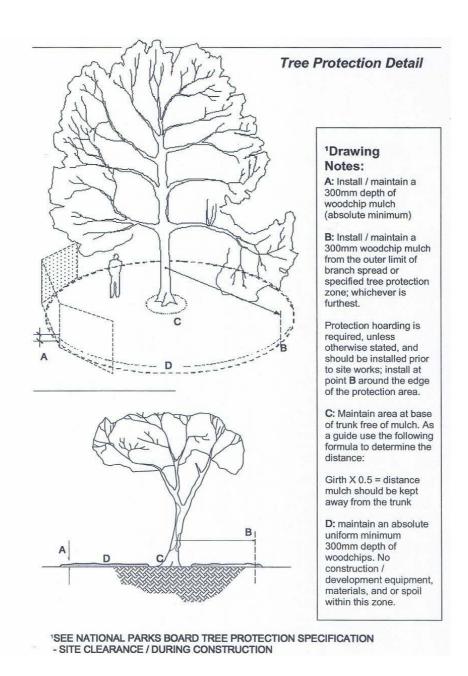
Entry prohibited. This fence shall remain in place throughout the entire construction period.

#### iv. Fencing installation

Installation must be approved by the attending arborists and/or the approved authority prior to construction.

A diagrammatic representation of a proper tree protection zone is presented below. The actual dimensions of the tree protection zone should be determined and documented by the attending Arborist.





#### 1.2 Tree pruning and removal

Various trees may need to be pruned away from structures or proposed construction activity. **Construction or contractor personnel shall not attempt pruning or removal.** Consultation and written approval with attending arborist must be obtained prior to pruning.



Removal of trees adjacent to trees that are to be retained requires planning and skilled arboriculture workers. Trees should not be removed by pushing with excavators/heavy machinery or with lumberjack (one cut) methods. Directional felling methods (notch and back-cut) should be deployed during removal of trees.

Removal of trees that extend into branches or roots of protected trees shall not be attempted by the demolition or construction crew, or by grading or other heavy equipment. Before removing tree stumps, the project manager shall seek the advice from the attending arborist determine if roots are entangled with trees that are to remain. If so, these stumps shall have their roots severed before extracting them.

#### 1.3 Site Clearance

To avoid lumber jack felling of trees that may severely damage the canopy of conserved trees, it is recommended that qualified (see Point 4.3 Tree Conservation Guidelines) Arboriculture contractors be engage to fell trees adjacent to protected trees to ensure that the trees (when cut) fall away from the protected trees and their associated TPZs.

Contractors carry out tree felling works near assigned TPZs of conserved trees should

- i. Employ directional felling through the use of notch and back cuts
- ii. Deploy cranes to tension trunks in the direction of the drop
- iii. Carry out pruning of canopy branches to remove entangling branches
- iv. If trees to be removed are taller than neighbouring trees to be retained, removal of branches should be carried out in a controlled manner using ropes and cranes to avoid damaging canopy of the lower trees.
- v. To avoid pruning of conserved trees at the proximity unless consultation and approval from attending arborist has been obtained.
- vi. No tree should be removed by pushing with an excavator or heavy machinery.



#### **DURING DEMOLITION/PILING/CONSTRUCTION**

- 2. Tree Protection Zone Restrictions
  - No ground disturbance, grading, trenching or other construction activities shall occur
    within the TPZ except as specified and/or approved by the attending arborist or
    authority.
  - No construction material, debris, machinery (e.g. generators) or other construction waste shall be stored within the TPZ. Weight and presence of these materials increases soil compaction and reduces the area exposed for water infiltration and gaseous exchange.



Figure 1: Construction material and heavy machinery are prohibited within the TPZ

• Excavation works within the TPZ are strictly prohibited. Unless otherwise specified by the attending arborist, all work done within the TPZ shall be completed with manual trenching with hand tools or other hand held power tools that will not cause any root/tree damage.

If roots need to be cut, it shall be done using proper equipment (e.g. pruning saw, chain saw) under the supervision of the attending arborist.





Figure 2: Trial trench by skilled workers using hand tools exposing root architecture

• Nailing, tying or pasting of materials on trees is prohibited. The tree shall not be used as an anchor for supporting structures during the construction.



Figure 3: Using tree as anchor may damage its bark.





Figure 4: No nails shall be driven into the tree as it promotes infiltration of pests/diseases

 Phytotoxic materials such as fuels, oils, cement, chemicals, and paint shall be kept away and stored/mixed at least 2.5m from the tree protection zone. Such chemicals can significantly change the cation exchange capacity and pH of the soil, rendering nutrient uptake inefficient and creating an environment too toxic for the roots to grow.

Construction slug especially from piling works should not be deposited within the TPZ. Such sludge is usually high in clay content and when layered over and within the TPZ could significantly alter the water infiltration and gaseous exchange rates of the root absorption area of the tree.

Canvass sheets/Eco-mat must be laid on the existing soil near the tree in view of soil protection during the demolition, drilling or other construction activities pertaining to concrete structures.





Figure 5: Construction cement deposited at tree base.



Figure 6: Tree showing signs of decline overtime.

- Lowering the grade around trees can have an immediate and long-term effect on trees.
  - Typically, most roots are within the top 1m of soil, and most of the fine roots active in water and nutrient absorption are in the top 300mm.
  - A) Grade changes within the TPZ are not permitted.
  - B) Grade changes outside the TPZ shall not significantly alter drainage.
  - C) Grade changes under specifically approved circumstances shall not allow more than 200mm of fill soil or allow more than 150mm of existing soil to be removed from



natural grade, unless mitigated.

- D) Grade fills over 200mm or impervious overlay shall incorporate an approved permanent aeration system, permeable material, or other approved mitigation.
- E) Grade cuts exceeding 150mm shall incorporate retaining walls or an appropriate transition equivalent.

#### No removal of the TPZ will be permitted under any circumstances.



Figure 7: Inappropriate installation/maintenance of TPZ during construction.

#### 2.2 Proximity of Heavy machinery/vehicles

Heavy vehicles and machinery (e.g. excavators, piling cranes, 10 wheelers) movement should be limited near TPZs. Temporary access/passageways should be planned to avoid conserved trees.



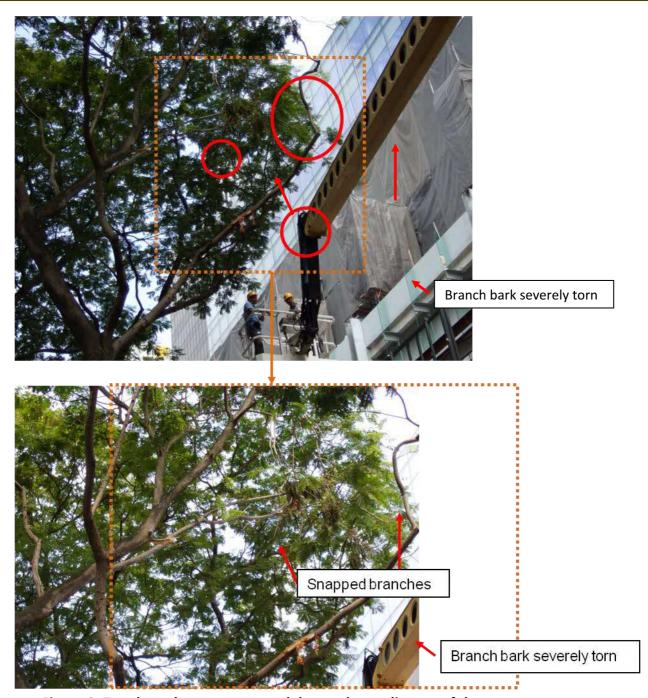


Figure 8: Tree branches were severed due to the negligence of the crane operator.



#### 2.3 Drainage Considerations

In the event that water ponding conditions develop in the course of construction due to change in grade/platform levels, construction events or any other unforeseeable factors, the contractor is required to improve drainage around or within the TPZ in consultation with the attending arborist.

#### 2.4 Trenching, Excavation and Equipment use

Trenching, excavation or boring within the TPZ shall be limited to activities approved by the architect and/or attending Arborist. Explore alternatives for trenching outside the root zone. Avoid exposing roots during hot, dry weather. Backfill trenches as soon as possible with soil and soak with water the same day. Small roots can die in 10 to 15 minutes and large roots may not survive an hour of exposure. If the trench must be left open all roots must be kept moist by wrapping them in peat moss and burlap.

#### i. Root Severance

Roots of any size requiring cutting should be assessed and documented by the attending Arborist according to the type of root, diameter, distance from trunk, and percentage of root base. Tunneling under roots is the approved alternative. Prior to excavation for foundation/footing/walls, or grading or trenching within the TPZ, roots shall be severed cleanly outside the TPZ to the depth of the planned excavation. When roots must be cut, they shall be cut cleanly with a sharp saw to sound wood and flush with the trench site.





Figure 9: Tunneling under roots.

#### ii. Excavation

Any approved excavation, demolition, or extraction of material shall be performed with equipment that is placed outside the TPZ. Hand digging, hydraulic, or pneumatic excavation (e.g. air spading) are permitted methods for excavation within the TPZ.



Figure 10: Root exploratory works using an air spade. Air spading avoids damage of structural and even feeder roots of the tree.



#### iii. Heavy Equipment

Use of backhoes, Ditch-Witches, steal tread tractors or other heavy vehicles within the TPZ is prohibited unless approved by the attending Arborist. If allowed, a protective root buffer is required.

#### 2.5 Tree Care

In the course of construction, the following measures may be necessary to reduce the effects of construction stress on protected trees. Quantum, duration and extent to be advised by attending arborist.

#### (A) Fertilization

Records of fertilization should be kept. The records should include details such as the type and date of fertilization. Application of chemicals (e.g., chemical fertilizers) should be avoided. If necessary, approval from the Board should be sought.

#### A1 Vertical trenches and Nutrient Sinks

Create vertical trenching and nutrient sinks. These nutrient sinks should go down to at least 300mm deep and should be filled with high grade compost and 12% Humic acid (dilution 1:100). These sinks will act to reduce construction stress by conditioning the soil, increasing soil microbiological activity and increasing organic matter At least 24 numbers of vertical trenches / nutrient sinks are required for trees greater than 2m in girth. Vertical trenches for trees under 2m in girth will be determined empirically by the attending arborist and will take into account site conditions, tree species and its pre construction vigor. Top up nutrient sinks every 3 months.

#### **A2 Soil Injection of Biostimulants**

**Mandatory** if TPZ has been infringed into, soil compaction has occurred, tree condition has observed to have declined (indicators: reduction in Live crown ratios, twig die back at canopy and change in leaf colour/size/density)

- Purpose: To de-compact soil using a hydraulic pressurized delivery of biostimulants that both hydrates and aerates at the same time. Aim to reduce compaction to less than 400psi in the first 500mm of the soil.
- Mixed bio stimulants serves 2 functions

#### **Decompaction**

 Humic acid – as soil conditioner and chelating agent (Nutrients are mobilized in forms that the plants can accept), facilitate release of nutrients and reduces leaching. Also improves water holding capacities of soil.



• Liquid gypsum / Dolomite – soil conditioner, improve soil structure and facilitate release of nutrients in clay soils typical of local conditions.

To feed and increase soil microbiology to increase tree vigor post damage. Soil microbiology helps nutrient uptake and encourages healthy root growth critical to prevent construction stress.

- Mollases High CE for immediate uptake,
- Fish Kelp Protein source. Organic fertilisers
- Slow release fertilizers (Osmocote)

#### (B) Watering

- Water supplement during periods of drought.
- Watering duration and extent depends on site conditions and species.
- Watering is carried out until first signs of inundation are observed (i.e. water infiltration observe to slow down significantly).

#### (C) Myconate treatment

• To trigger and stimulate growth of existing mycorrhizae.

#### (D) Pesticide treatment

- To control pest (e.g. termites, borers, caterpillars etc) when it occurs.
- Fungicide or bacteriocide as required or as determined by attending arborist to control microbe pathogens.

#### (E) Crown cleaning

To be carried out in consultation with the attending Arborist. Trees are living things and may require some form of pruning during the course of the development.

- Crown cleansing- Prune to remove dead branches that may have developed through time.
- Crown lifting- Prune to lift crown to avoid new amenities.
- Crown thinning- Prune to reduce canopy branches and loading.

Structural pruning (including crown reduction) to remove branches that may obstruct new amenities and/or movement of critically necessary equipment may require the planning and standing supervision of the attending arborist.



#### 2.6 Engaging Arboriculture Contractors

All arboriculture works should be carried out by skilled and trained arboriculture teams. As such, it is preferred that only Arboriculture contractors which have at least 8 years working experience and must show previous work experience in developments of similar size or complexity. Arboriculture contractors should meet NParks safety requirements for work at height, LTA's requirements for temporary works along roadsides (where necessary) and have a certified arborist to supervise the pruning/felling/planting works.

All arboriculture workers engaged in tree climbing and chainsaw work shall possess a valid basic tree climbing certification base upon demonstrated competence in the WSQ module conducted by CUGE or an equivalent WSQ approved training organization.

Each Arboriculture crew shall possess the following VALID competences:

Operation of chainsaw for ground work (LS-MT-103E-1)

Chainsaw safety and maintenance (LS-MT-102E-1)

Perform formative pruning of young trees (LS-MT-114E-1)

Provide Arboriculture support on site (LS-MT-116E-1)

Workplace safety and health – operators (ES-WSH-101G-1)

Respond to Emergency (LS-HM-208E-1)

Perform advance rigging and climbing techniques (LS-HM-308S-1)

Perform aerial tree access and aerial rescue skills (Ls-HM-204S-1)

Implement and apply appropriate risk and safety management to sector practices (LS-BP-301S-1)

Prepare risk assessment report (LS-HM-406S-1)

Operate and work from an elevated work platform (CUGE-ARB-3501)



#### **POST-CONSTRUCTION**

#### 3. Soft Landscaping

Ground works, site preparation and implementation of all landscaping near protected trees must be undertaken carefully.

TPZ barriers can only be removed at this juncture for the purpose. However, when working near trees, cultivation of soils in these areas must be cautiously handled using hand tools. Planting of shrubs shall be at a distance of at least 300mm away from existing root collar.

Avoid changes to ground levels or unnecessary compaction of soils within proximity to existing trees during the course.



Figure 10: New plantings at a minimum distance of 300mm (all round) from root collar



#### **ANNEX A**

#### **VERIFICATION OF TREE PROTECTION CHECKLIST**

Note: The project contractor or construction supervisor shall verify in writing that all **preconstruction** tree preservation conditions have been met as follows:

Submitted by:		 
Company/Project: _	 	
Date/Time:		

S/N	Action	Checked (②)	Remarks
1	Installation of tree fencing around identified trees within/near site (hard material at 1.8m tall)		
2	Tree protection zone (TPZ) dimensions meets specifications (from NParks and/or attending arborist)		
3	Warning signs prominently displayed on all sides of the fencing, including designated tree number		
4	Removal of construction material (ie machinery, debris, tools etc) within TPZ		
5	Mulching of high grade compost of 100mm thick around identified trees		
6	Completion of tree pruning (if necessary) under the supervision/written approval with the attending arborist		
7	Establishment of a tree maintenance schedule according to arborist recommendations (to be submitted to attending arborist)		
8	Documentation of trees removed and retained, including the species, height, and girth		

Verified by (attending arborist): _		
Date/Time:		

#### Annex B Tree Transplanting Requirements

#### 1. <u>Tree Transplanting Requirements</u>

#### 1.1 Overview

- a) The secondary forested area around the forested site at Bukit Batok will be the site of the new developments for nature parks. To preserve some of the more valuable mature trees on site, transplanting of suitable mature trees will be carried out. These trees are to be replanted within the site immediately.
- b) The Contract is effected on a firm price basis and the Lump Sum fee as accepted by the Employer shall remain firm for the duration of the Contract. Save as otherwise expressly provided in the Contract, there shall be no change in the amount payable by the Employer to the Contractor for the completion of the Works.
- c) The Contractor shall meet the following criteria to qualify for the Contract and provide information to supplement the following: Completed full crown transplanting projects of trees with more than 1 m girth in the past 3 years.

#### 1.2 Scope of Works

The scope of works to be performed by the Contractor shall cover the following aspects:

- a) Provide an Inception Study: The Contractor shall complete the Inception Report, verifying arborist's tree survey (specs, conservation status) and master plan, identifying all trees to be transplanted and appropriate means of access/egress for the transplanting;
- Transplant existing trees for relocation using proper tree protection methods with sensitive care to the surrounding area. This includes providing necessary guying supports. Location of transplanted trees will be provided by the Client;
- c) Prepare the receiving site beforehand, ensuring trees will be transplanted effectively;
- d) Provide Resident Arborist to supervise the works and ensure proper handling of the trees;
- e) Carry out maintenance works after transplanting to ensure healthy growth of trees:
- f) Daily maintenance of transplanted trees, including regular watering of the trees;
- g) Monthly submission commencing from the date of transplanting, describing work progress and tree health, and work schedule for the following month; and
- h) At the end of establishment period (3 months), three complete sets of photographs of all plant material, reporting on the health status of the harvested/ transplanted trees. All photographs shall be labelled and representative of the plant materials specified.

#### 1.3 Submission Material

- a) The Contractor shall submit samples of each of the following type of materials to be approved except where specified otherwise:
  - i. Materials for planting mixtures;
  - ii. Materials for staking, guying, and wrapping; and
  - iii. Fertilizers/supplements

#### 1.4 Provision of Employer's Witness

The Contractor shall make provisions for Employer, SO's witnessing in relation to the harvesting of saplings and trees, setting up of the nursery, the planting process, during the duration of nursery care and the collection of plant materials by the Main Contractor from the project nursery. All costs and expenses incurred for such provisions as specified herein in this Contract are deemed to have been included in the Lump Sum price.

#### 1.5 Site Conditions and Constraints

- a) The Contractor shall carry out the planting works systematically to minimize interference and inconvenience to the public and other contractors/parties working in the Site. He shall plan the schedule andsequence of work well in advance and obtain approval from the SO on the proposed schedule and sequence of work before commencement of plantingworks. The Contractor is deemed to have made due allowance for the constraints in his proposal and any claim arising from this will not beentertained.
- b) The Contractor shall be deemed to have visited the site and satisfied himself on and make provision in his "Lump Sum" for:
  - All aspects of local conditions, physical or otherwise that pertains to or affects in any way his provision of specialist consultancy services in this Contract at the site;
  - ii. The compliance to the Board's requirements for personnel working in the Central Catchment Nature Reserve;
  - iii. Compliance to the Environmental Specification.
- c) No claim by the Contractor for additional payment will be allowed on the ground of any misunderstanding or misinterpretation in respect of any such matter nor shall the Contractor be released from any risks or obligations imposed on or undertaken by him under the Contract on any such ground or on the grounds that he did not or could not foresee any matter which might affect or have affected the execution of the work.

#### 1.6 Time for Completion

a) The time for completion of all necessary tree transplanting works is pegged to the timeline for completion of the Main Contract. The Contractor shall ensure timely completion of transplanting works. b) The Contractor is to note the Bird Breeding Season (March – July each year), during which no transplanting works are to be carried out.

#### 2. DETAILED METHODOLOGY

#### 2.1 <u>Detailed Methodology – Inception Study</u>

#### 2.1.1 Harvesting Plant Material/ Tree Felling

The Contractor shall refine the work plan and secure the necessary permissions to undertake any surveys / collections that may be required, including but not necessarily limited to:

- a) Preparation of detailed field survey / collection plan, including securing survey permissions from the Board – this includes detailed list of trees to be transplanted and felled, with scientific name, girth size, tree height and crown spread;
- b) Safety assessment for all components of work and in particular field surveys / collections in compliance with the requirements of the Singapore Workplace Safety & Health (WSH) Act;
- c) Refinement of the survey / collection plan;
- d) Refinement of the work plan.

#### 2.1.2 Receiving Site

The Contractor shall outline proposed works and schedule at the receiving site so that the trenches are prepared for immediate reception of the transplanted trees.

#### 2.1.3 <u>Pre-growing Nursery</u>

The Contractor shall set up pre-grow nursery in consultation with the Client, the Landscape Architects, Client's Flora Specialist, and Client's Arborist. Pre-grow nursery set up shall include electrical, water supply, sheltered and be able to achieve at least 85% humidity and be of sufficient size to hold the amount of saplings and trees harvested.

#### 2.1.4 Data Provided to Contractor

The following data will be provided to the Contractor:

- a) Existing Tree Survey in CAD format (includes trees to be harvested)
- b) Topography Survey Plan in CAD format
- c) Proposed locations where trees are to be transplanted in CAD format.

The Contractor shall review the data and assure themselves of the suitability, quality, and coverage of the information with respect to the reliable execution of the present study. Based on the information, data and results obtained from this Inception Study and surveys / collections carried out, the Contractor shall establish the following:

- a) The suitability of the species specified in the Contract.
- b) Planting Requirements: The Contractor will put forward proposed planting requirements that would facilitate the survivability and healthy growth trees. This would include but not limited to spacing requirements, spacing made to accommodate growth, etc.

#### 2.1.5 Submission

The Contractor shall submit the Inception Study within 4 weeks of the Commencement of the Contract.

#### 2.2 <u>Detailed Methodology – Preparation for Transplanting</u>

The Contractor shall observe the following guidelines:

- a) Method statement and transplanting/harvesting schedule to be submitted at least 2 weeks prior to commencement of any transplanting work. Transplanting/harvesting to proceed only upon approval of method statement by SO.
- b) Document (with photographs) condition of tree before and after transplanting/harvesting.
- c) Operations shall be planned and coordinated so that the amount of time that the tree spends in any position other than standing upright with its roots in the ground shall be kept to a minimum.
- d) Contractor shall ensure that appropriate equipment, machinery, and manpower resources are deployed for the adequate execution of the transplanting works.

#### 2.2.1 Pre-Grow Nursery

The Contractor shall set up nursery to pre-grow saplings and transplants:

- a) Nursery should be of sufficient size to hold all harvested saplings and where necessary transplants.
- b) Infrastructure of nursery should include, electricity, water supply (sprinkler system if necessary) and needs to be FULLY enclosed to maintain humidity. Netting should be specified to reduce Photosynthetic Active Radiation (PAR) levels to the required levels to reduce exposure.
- c) Environmental conditions within nursery including temperature (28-29 degree C), humidity (>85%) and Photosynthetic Active Radiation (PAR) should be monitoring daily to ensure they are at agreed levels.
- d) Contractor will propose maintenance regime to include methods and materials to be used and upon approval, carry out the maintenance as agreed.

#### 2.2.2 Receiving Site

The Contractor shall observe the following guidelines:

- a) Prior to receiving the trees, identified sites shall be prepared by the Contractor. Contractor shall check receiving site for waterlogging conditions. If necessary, subsoil drainage should be formulated in consultation with the attending arborist and Landscape Architect.
- b) Contractor to measure temperature, humidity, and Photosynthetic Active Radiation (PAR) levels of receiving site and compare it to the extraction site to ensure that trees will be transplanted to an area of similar conditions to reduce transplant shock.
- c) Planting should be carried out to species suitability e.g., shade tolerant species will be planted in shaded areas and vice versa.
- d) Site preparation includes digging of trench to receive rootball. Planting holes shall be excavated to dimensions required by the transplant and in consultation with the attending arborist. On completion of excavation, the

Contractor shall remove from site all excavated materials, debris, etc. No extra payment will be made for any other types of materials encountered during excavation.

- e) Glazed vertical surfaces on the sides of the tree pits shall be forked to loosen the soil prior to backfilling.
- f) Should a hole be left unfilled with the planting media overnight, the Contractor shall duly barricade the open planting hole and position clearly visible signage to ensure public safety.
- g) Soil excavated from receiving site shall be kept as backfill material. The Contractor shall observe the following guidelines:
  - i. Contractor shall identify storage location on-site for harvested soil.
  - ii. Protection shall be provided, achieved via an effective cover of nonnoxious material. Topsoil should be kept moist.
- h) Contractor shall propose irrigation set-up and methodology, to be approved by SO before commencement of planting.

#### 2.2.3 Transplanting Trees

- a) Transplanted tree specimens shall be in a moist, vigorous condition, free from dead wood, bruises, or other root or branch injuries. They will also be free from insect and/or disease infestation;
- b) Pruning: Tree specimens to be transplanted are to be first pruned toreduce undue stress to the tree. Pruning must be approved by attendingArborist. All injured, weak, interfering and poorly located branches are to be removed. Use clean, sharp tools. Make cuts smoothly with no tearingor ripping of the bark. Where possible, leave branches that are as long as possible to promote better form. Small twigs along the leader, main branches or trunk are to be retained to aid in preventing sunscald on smooth or thin barked trees;
- c) All tree trimming shall be approved by the SO prior to trimming if requested;
- d) Prepare ball of soil at roots to be removed with each tree. Unless otherwise directed by S.O., the representative size of root balls shall be as follows:

Tree Height (m)	Minimum Transplanted Root Ball Size (m)
<2.0	In consultation with attending arborist
2.0 – 4.0	0.8 dia or in consultation with attending arborist
4.0 – 6.0	1.2 dia
>6.0	1.5 dia

e) For trees >4m in height: Trenching / Digging: Determine if pre-plant trenching is required for each specimen. Preparation of in-ground trees shall be by root pruning to the stated rootball dimensions. Trenching

around the outer edge of the rootball using a sharp spade shall be done in 2 separate stages and halves, with one half of the tree roots being cut and backfilled each week, the next half the following week, with all of the ball being cut in 2 weeks. If roots over 25mm are encountered these are to be cleanly cut with large secateurs or pruning saw. Biostimulant application should be carried out during this period to enhance feeder root growth and cut sections of roots should be applied with mycorrhizae.

The trench, which shall be at least 500 mm wide shall be dug to the full specified depth of the root ball and undercut at the end of the root-pruning exercise to sever base roots. The tree is then to be allowed to settle for one week (or less in consultation with attending arborist) before final wrapping with protection and lifting. The root ball is to be well watered during this period;

- f) For saplings or trees under 4 m, root ball sizes are determined in consultation with attending arborist. Once extracted, root balls should be enclosed by polythene wraps to prevent excessive desiccation and reduce transplant shock. Where required, leaves should be wrapped also;
- Trenching should not be attempted unless the soil is moist. If the soil is dry, it should be thoroughly watered at least a day before trenching and digging operations commence;
- h) There shall be sufficient support installed prior to trenching of the root ball and immediately after planting to ensure that the tree does not move;
- i) Backfill ASM to follow requirements stated in the Soil Specification;
- j) Root zone to be mulched with chipped leaf litter at least 100 cm thick and watered down:
- k) Biostimulant mix application should be carried out twice every week (during the generation of the root ball) prior to the actual transplant. Biostimulant mix should include humic acid, high EC molasses, fish kelp and mycorrhizae application. Contractor to submit biostimulant application proposed to be applied, including dilution factor and volume for the various size of trees expected to be transplanted;
- When directed, the Contractor shall submit a report from the AVA certifying the soil to be pest free and of acceptable nutrient contents;
- m) Plants to be transported or moved are to be thoroughly wrapped and protected prior to transporting. Rootballs to be wrapped and tied with Polythene bags (preferred), Gunny sack or Hessian sacking. Exposed trunks are to be wrapped in rice straw including the lower parts of the branch system and the upper branch system, especially if well furnished with leaves and twigs during transport. Damaged plant material will automatically be rejected on arrival at site;
- n) Tree shall be planted such that top of root ball is about 5 cm above ground level;

- o) Transplanted trees to be watered daily, and biostimulant mix and mycorrhizae applied and monitored for signs of transplant shock. Watering frequency to increase in case of dry weather (generally, 2 days without rain). Thinning of trees to reduce transpiration to give a 50% cover is permissible providing due notification is given than thinning is required to ensure that the trees can be inspected before thinning work is done. Bare crowned trees will not be permitted.
- p) Any deviation from the above specifications, method statement or transplanting schedule is to be approved by a representative of the Employer.
- q) The contractor is responsible for obtaining any permits or auxiliary services that may be required for the work to be carried out.
- r) The Contractor shall note that planting shall not take place in very hot and/ or dry weather conditions (i.e., during drought conditions (1 week without rain) or when temperatures exceed 34 degrees Celsius), which may result in drying out of root systems and scorching of leaves. Planting should take place in moist of over-cast conditions where possible (early morning).
- s) Contractor shall furnish method statement to show how weight of transplant is calculated and therefore deploy adequate machinery to carry out the lift for the transplant.

Below is a table of extraction methods according to tree girth. The Contractor shall consider this AND his calculated weight of transplant in his proposal.

Girth Size	Extraction
<0.3m	Manual labour
0.3 – 1.5m	Heavy machinery or mobile crane up to 200
	tonnes
>1.5m	Large/Mobile crane (up to 500 tonnes)



Transplants: Determining root ball size, shaping root balls, protection withpolythene wrap to prevent excessive desiccation and anchoring trees prior transplant.





Transplants: Securing root ball and lifting of intact root balls for transport of transplant.









#### 2.3 <u>Detailed Methodology – Tree Protection Plans</u>

#### 2.3.1 Individual Trees Near Work Areas

- a) For existing trees to be retained, the Contractor shall ensure that his site access and machinery does not encroach into the tree protection zone (TPZ).
- b) Tree protection zone (TPZ) to extend to dripline of tree or 5x diameter of trunk measured at 1.4 m height, whichever is greater. The actual TPZ dimensions should be determined and documented by the attending Arborist.
- c) No equipment or materials of any kind shall be placed within the TPZ.
- d) Spillage of any materials into the TPZ shall be reported to the SO cleaned up immediately.
- e) General guidance for tree protection zones is detailed in the table below. Tree protection zones (TPZ) for fig trees and trees with a critically endangered status will be prescribed individually on a case-to-case basis. Where trees have defects, have low physiological vigor or if species is exotic and invasive, no TPZ will be recommended. Tree Girth (m) Recommended Tree Protection Zones. Fig trees and trees with critically endangered status will be prescribed individually on a case-by-case basis.

Tree Girth (m)	Recommended Tree Protection
	Zones
<0.5m	1m Radius
>0.5m but less than 1m	2m Radius
>1m but less than 1.5m	3m Radius
>1.5m but less than 2m	4m Radius
>2m	5m Radius
Fig trees and Trees with critically	Prescribed individually on a case by
endangered status	case basis

f) Where clusters of trees are shown to be protected, brushwood etc. shall be cleared by hand completely from within the cluster to a line of 3m from the trunks of the outer trees in the cluster, to be removed to clearance areas.

During these operations no cutting of (or damage to) barks, roots, or branches of trees to be protected shall occur and no soil is to be cut away from around the roots within the cleared area. After clearance, a protective fence shall be erected around each tree, or cluster of trees. The position of the fence shall be:

- \* individual trees, in a line of 5,000mm from the trunk all around the tree
- \* cluster of trees, in a line of 5,000mm from the trunks of the outer trees.
- g) Rectification and Repair of Damaged Woodland: The Contractor shall notify the SO if trees meant to be retained are damaged immediately. Damage to areas of protected woodland is to be made good to the satisfaction of the SO and all costs of such work are to be fully borne by

the Contractor, including all work necessary for new trees, earthworks, supervision, and administration costs.

- h) If any aspects of the Works or the working areas become severely hampered by the fenced areas and the Contractor considers that the fence lines must be altered, the Contractor shall not move any fence, or dig soil out around the base of the fence without written approval of the SO, who shall be given 48 hours' notice of the request to move the fence, in order that time is allowed for inspection and the issuance of any necessary instructions.
- The Contractor shall also refer to Annex A: Tree Protection and Conservation Guidelines.

#### 2.4 Detailed Methodology – Protection and Maintenance of Plants After Transplanting

- a) The Contractor shall provide documentation of trees, including photographs, shall be made before and after transplanting. Photographs should show intact root balls at the different stages, during generation of root ball, when tree is lifted and when tree is installed into the receiving site.
- b) The Contractor shall propose the type of protection and support required for the healthy growth of the trees for the Employer's consideration.
- c) The establishment period of three months shall commence upon final transplant of the last tree. However, once each tree has been transplanted, daily maintenance activities should begin.
- d) The Contractor shall submit before start of required maintenance period, the maintenance methodology describing the procedures for the maintenance of plants for the duration of the care. Inclusion of biostimulant and mycorrhizae application is considered compulsory.
- e) The Contractor shall provide daily maintenance by skilled employees. Maintenance shall begin immediately after the planting and continue for the duration of the care.
- f) The following reports shall be submitted:
  - i. During the establishment period, monthly submission commencing from the date of transplanting, describing work progress and tree health, and work schedule for the following month.
  - ii. At the end of establishment period (3 months), three complete sets of photographs of all plant material, reporting on the health status of the harvested/ transplanted trees. All photographs shall be labelled and representative of the plant materials specified.
- g) Handover: A joint inspection with the SO shall be carried out at the end of the establishment period, trees will be deemed to be in satisfactory condition before they are handed over.
- h) The SO reserves the rights to inspect further for size and condition of root balls, root development, pests, disease, injuries, and defects, etc. and to reject unsatisfactory or defective material at any time during the duration of the Contract. The Contractor

shall remove and replace rejected plant materials immediately from the approved sources. All costs for the replacement of tree shall be borne by the Contractor.

#### 2.5 Detailed Methodology - Tree Removal

- a) Tree felling may only take place when and where directed by the SO and be carried out in accordance with landscape arboriculture practice and safety standards. Only directional felling methods with a hinge and back cut shall be deployed. Trees SHALL NOT be felled by pushing over with heavy machinery.
- b) Method statement and Risk Assessment shall be submitted to the attending arborist for review prior to work start.
- c) Where stump removal is required, the tree shall be cut above ground level in order to allow adequate purchase for pulling. Where stump removal is not required, the tree is to be cut flush with the ground.
- d) Trees to be felled shall be cut to fall away from protected trees and fences. Felled trees shall be cut up at the location of felling and removed from site carefully, avoiding damage to undergrowth, saplings, or new landscape areas. No burning on site of timber, leaves or brushwood will be allowed on site.
- e) The holes resulting from the grubbing up of the roots shall be backfilled with approved materials and consolidated in 300 mm layers.

#### 3. DATA, MATERIAL AND FACILITIES PROVIDED

- a) The Employer will, upon request, provide the Contractor with available documents and data deemed relevant to the satisfactory completion of the works.
- b) All relevant data provided by the Employer for the Contract shall be checked, analysed, and verified by the Contractor for quality and its suitability, including converting them to the necessary format for use in this Contract.

#### 4. <u>WARRANTY</u>

- a) While transplant entail a certain level of mortality, the Contractor must be able to demonstrate that the transplants were carried out on the best effort basis. This includes and is not limited to:
  - i. Extraction of a suitable size root ball for the size of the tree
  - ii. Ensuring the root ball is intact during the transplant and during installation into receiving site. Documentation is therefore critical.
  - iii. Providing adequate protection on the branches and main trunks where tie-ins are made.
  - iv. Deploying adequate and suitable machinery and equipment of work
  - v. Providing sufficient manpower for the works
  - vi. Ensuring adequate and timely post-transplant maintenance
  - vii. Ensuring sufficient communication.

b) Where transplant fail due to neglect or inadequacies on the part of the contractor, the contractor shall provide replacement plants at his expense or the cost of the transplants shall be recovered from the Contractor.

#### 5. TENDER PROPOSAL

- a) The fullest possible detailed technical proposal shall be submitted by the Contractor together with his tender so that a comprehensive evaluation can be made:
  - i. Proposed Project Organization including details of the manpower and resource allocation, strength, qualification, and experience. Curriculum Vitae shall be submitted for key staff in the proposed Project Organization;
  - ii. The proposed method statement for full crown transplant, including:
    - i. Methodology for pre-transplant checks and considerations,
    - ii. Methodology for estimating total weight of transplants and the machinery that will be deployed (Equipment List),
    - iii. Methodology for calculating root plate for transplant,
    - iv. Brief description of undercut methods,
    - v. Proposed subsoil anchorage system for transplants more than 1.5m in girth, and
    - vi. Proposed post-transplant maintenance program.
  - iii. Provide a detailed proposal based on the scope of works including the method of calculating weight of root ball, considerations for deploying of adequate size cranes for lifting of transplant, method of transporting and delivering of trees to project site and make suggestions and recommendations for the project. This includes a proposed schedule of works:
  - iv. Details of any other matters which the Contractor knows or has reason to believe will materially affect the execution of the works should also be given.

Appendix 3
Forms and Protocols

#### **BUKIT BATOK NATURE CORRIDOR WILDLIFE INCIDENT FORM**

Date (YYYY/MM/DD):	Time:
Description of Location:	GPS Coordinates:
Wildlife Observed:	Animal Condition:
	☐ Alive ☐ Killed ☐ Dead ☐ Injured
	Animal Activity:
	☐ Moving ☐ Resting ☐ Trapped
Photographs Taken:	NParks Notified:
☐ Yes ☐ No	☐ Yes ☐ No
	Name of NParks Staff Notified:
Describe Incident (e.g., activities being carried out; what animal was doing; personnel involved):	
Actions Taken:	
Reported by:	Reported to:
Contact #:	Contact #:
Remarks:	