

# 13 CONCLUSION

## 13.1 INTRODUCTION

- 13.1.1 An assessment of potential environmental impacts associated with the construction and operation phase of the Project has been conducted in accordance with the requirements of the EIA Stud Brief and EIAO-TM.
- 13.1.2 This section summarises the findings of the EIA study and the recommended mitigation measures (where necessary) associated with the Project.

# 13.2 CONCLUSION OF ENVIRONMENTAL IMPACTS

- 13.2.1 The summaries of environmental impacts are structured as follows for each of the technical assessments completed under this EIA study:
  - Sensitive receivers/ assessment points;
  - Assessment Methodology and Criteria;
  - Key Construction Impacts;
  - Key Operation Impacts;
  - Key Mitigation Measures;
  - Residual Impacts; and
  - Compliance with the guidelines and criteria of the EIAO-TM.

### Air Quality

13.2.2 **Table 13.1** presents a summary of the key findings of the assessment of potential impacts to air quality as a result of the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 3** of this EIA Report.

Table 13.1 Summary of Environmental Assessment and Outcomes – Air Quality

Item	Description
Air Sensitive Receivers (ASRs)	The Assessment Area is defined as an area within 500m from the boundaries of the Project site and the work areas of the Project as stated in Section 3.4.4.2 of the EIA Study Brief.  A total of 31 ASRs have been identified in accordance with the criteria in EIAO-TM Annex 12 and are illustrated in <b>Figure 3.3</b> .
Assessment Methodology and Criteria	<ul> <li>The principal legislation for the management of air quality in Hong Kong is the <i>Air Pollution Control Ordinance (APCO) (Cap 311)</i>. As the new set of AQOs was implemented on 1 January 2022, the new AQOs have been used as the assessment criteria for this assessment.</li> <li>A maximum hourly TSP level of 500 µg m<sup>-3</sup> at ASRs is also stipulated in Annex 4 of the <i>EIAO-TM</i> to assess potential construction dust impacts. The measures stipulated in the <i>Air Pollution Control (Construction Dust)</i></li> </ul>



Item	Description
	<ul> <li>Regulation should also be followed to ensure that any dust impacts are minimised.</li> <li>Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulation will be followed to control potential emissions from non-road mobile machinery.</li> <li>As per Clause 3(ii) of Appendix B of the EIA Study Brief, qualitative assessment of the construction dust impact has been carried out given that fugitive dust impact associated with the construction of the Project are considered minor and not expected to cause exceedance of relevant assessment criteria as stipulated in the EIAO-TM and AQOs at nearby ASRs with dust control measures in place.</li> <li>As per Clause 4(i) of the EIA Study Brief, a quantitative assessment has been carried out to evaluate the operational air quality impact at the identified ASRs. Cumulative NO<sub>2</sub>, RSP and FSP impacts, identified as the key air pollutants of concern during operation phase, have been quantitatively assessed at the identified ASRs making reference to EPD's Guidelines on Assessing the 'Total' Air Quality Impacts, taking into account Tier 1, Tier 2</li> </ul>
Key Construction Impacts	and Tier 3 emission source contributions.  Minor excavation works due to minor slope and piling works during the construction phase of the Project are identified to be the potential dust generating activities. Considering the minor excavation works with limited extent of the excavation areas at any one time, no adverse dust impact arising from the construction activities of the Project is anticipated with proper implementation of dust control measures and good site practices.
Key Operation Impacts	Air quality impact would arise from the vehicular emissions generated from the proposed roads of the Project during operation phase. The cumulative NO <sub>2</sub> , RSP and FSP impacts at the identified ASRs comply with the relevant AQOs during the operation phase of the Project. Adverse air quality impact arising from the operation of the Project is not anticipated.
Key Mitigation Measures	Construction Phase:  Dust control measures stipulated in the Air Pollution Control (Construction Dust) Regulation will be implemented during the construction activities for the Project to reduce the potential fugitive dust emissions. Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulation will also be followed to control emissions from construction plant.  Operation Phase:  No specific mitigation measures are required during the operation phase.
Residual Impacts	Construction Phase: With the implementation of the recommended dust control measures, no adverse residual impact is anticipated.  Operation Phase: No adverse residual impact is anticipated during the operation phase.



Item	Description
Compliance with EIAO-TM	The assessment and the potential impacts are acceptable and in compliance with the EIAO-TM Annexes 4 and 12 and applicable assessment standards/ criteria.

### **Noise**

13.2.3 **Table 13.2** presents a summary of the key findings of the assessment of potential impacts to noise as a result of the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 4** of this EIA Report.

Table 13.2 Summary of Environmental Assessment and Outcomes – Noise

Item	Description
Noise Sensitive Receivers (NSRs)	The Assessment Area is defined as an area within 300m from the boundaries of the Project site and the work areas of the Project as stated in Appendix C of the EIA Study Brief.
	A total of 39 NSRs have been identified in accordance with the criteria in EIAO-TM Annex 13 and are illustrated in <b>Figure 4.1</b> .
Assessment Methodology	Construction Phase:
and Criteria	The methodology for the noise impact assessment is in accordance with the procedures outlined in the GW-TM issued under the NCO, and the EIAO-TM.
	Operation Phase:
	Road traffic noise prediction is carried out based on the traffic flows, following strictly the procedures stipulated in the "Calculation of Road Traffic Noise (CRTN)" (1988) published by Department of Transport, UK.
Key Construction Impacts	Potential sources of noise impacts during the construction phase of the Project will mainly arise from powered mechanical equipment (PME) operating at the construction work sites.
	With the implementation of the recommended noise mitigation measures and proper scheduling of works, the predicted construction noise levels arising from the Project at all the identified NSRs comply with the EIAO-TM construction noise criteria, except during examination period of one identified school. The Contractor shall liaise with the school's management for the schedule of construction works, to avoid carrying out noisy construction activities during examination period. Thus, adverse construction noise impact arising from the Project is not anticipated.
Key Operation Impacts	Road traffic noise would be generated due to vehicular movement on the proposed Project roads during operation phase.
	With the implementation of the recommended noise mitigation measures, the predicted noise levels at the identified representative NSRs would either comply with the traffic noise criteria or that the noise contribution due to Project roads is less than 1dB(A). Thus, adverse road traffic noise impact arising from operation of the Project is not anticipated.



Item	Description
Key Mitigation Measures	Construction Phase:
ga	Quieter Construction Methods, QPME, provision of temporary movable noise barriers / enclosures and noise insulating fabric, and proper scheduling of works are recommended to minimise the noise impact at the affected NSRs during non-restricted working hours.
	Movable noise barriers have been proposed for some of the PME. The movable temporary noise barriers should be located close to noisy plant and be moved iteratively with the plant along a worksite as far as practicable. The movable noise barriers should be a wooden framed barrier with a small cantilevered upper portion of superficial density no less than 14kg/m² on a skid footing with 25mm thick internal sound absorptive lining.
	The Contractor shall liaise with the school's management for the schedule of construction works, to avoid carrying out noisy construction activities during examination period. Thus, adverse construction noise impact arising from the Project is not anticipated.
	Operation Phase:
	Direct noise mitigation measures to be implemented during the operation of the Project are as follows:
	<ul> <li>Low Noise Road Surfacing (LNRS) along the proposed So Kwun Po Link:         <ul> <li>Approximately 330m in length along the new southbound slip road connecting to Pak Wo Road;</li> <li>Approximately 350m in length along the new northbound and southbound slip roads connecting to the new flyover; and</li> <li>Approxiamtely 110m in length along the realigned So Kwun Po Road between the So Kwun Po Interchange and Pak Wo Road;</li> </ul> </li> </ul>
	<ul> <li>Cantilever barrier (5m high with 2.5m at ∠45° cantilever) of about 80m in length along the eastern roadside of the new southbound slip road connecting to Pak Wo Road;</li> </ul>
	<ul> <li>Cantilever barrier (5m high with 2.5m at ∠45° cantilever) of about 170m in length along the eastern roadside of the new northbound and southbound slip road connecting to the new flyover;</li> </ul>
	<ul> <li>3m and 5m high vertical barrier of about 100m and 90m respectively in length along the western roadside of the new northbound slip road connecting to the new flyover;</li> </ul>
	3m and 5m high vertical barriers of about 100m and 50m respectively in length along the western roadside of the realigned So Kwun Po Road between the So Kwun Po Interchange and Pak Wo Road; and
	3m high vertical barrier of about 80m in length along the northern roadside of the new So Kwun Po Link connecting to San Wan Road.
Residual Impacts	Construction Phase:
	With the implementation of the proposed mitigation measures and proper scheduling of works, the predicted noise levels at the representative NSRs during construction phase would comply with the construction noise criteria. No adverse residual noise impact is expected during construction phase.



Item	Description
	Operation Phase:  With the implementation of all the proposed direct noise mitigation measures, the noise contribution from Project roads to the overall noise levels at all NSRs would be less than 1.0 dB(A) and the predicted noise levels due to Project roads at all NSRs would comply with the relevant noise criteria. No adverse residual noise impact during operation phase is anticipated.
Compliance with EIAO-TM	The assessment and the potential impacts are acceptable and in compliance with the EIAO-TM Annexes 5 and 13 and applicable assessment standards/ criteria.

# **Water Quality**

13.2.4 **Table 13.3** presents a summary of the key findings of the assessment of potential impacts to water quality as a result of the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 5** of this EIA Report.

Table 13.3 Summary of Environmental Assessment and Outcomes – Water Quality

Item	Description
Water Sensitive Receivers (WSRs)	In accordance with Section 3.4.6.2 of the EIA Study Brief, the Assessment Area for the water quality impact assessment includes areas within 500m from the boundary of the Project site and covers the Deep Bay WCZ under the WPCO. The identified existing WSRs are shown in <b>Figure 5.1</b> .
Assessment Methodology and Criteria	The potential impacts due to the construction of the Project were assessed following the EIAO-TM Annex 6 guidelines and the impacts evaluated based on the criteria in EIAO-TM Annex 14. Potential water quality impacts on WSRs were evaluated according to the corresponding WQO criteria.
Key Construction Impacts	Wastewater may be generated from the construction site runoff and construction activities. Sewage effluent from construction workforce and runoff from work sites may be generated during the construction phase. Diversion / Modification of box culvert to be conducted carries risk of drainage water encroaching into the work area, resulting in contamination of drainage water. Chemical wastes would also be produced from the use of chemicals during construction. With the implementation of the recommended management and mitigation measures, no unacceptable water quality impact is expected from the site runoff and construction activities, sewage effluent from construction workforce, or accidental spillage of chemicals/ chemical wastes.
Key Operation Impacts	Slight increase in road runoff may be resulted from the proposed road works during operation. Such runoff typically contains elevated levels of suspended solids, grits as well as trace amount of oil and grease from vehicles, which could affect the water quality of the receiving waters. With the implementation of proposed mitigation measures and management practices (e.g. proper road drainage system fitted with appropriate pollutant removal devices such as grit traps), no unacceptable water quality impact associated with road runoff is expected.
Key Mitigation Measures	Construction Phase:
	Standard site practices outlined in <i>ProPECC PN 1/94</i> "Construction Site Drainage" will be followed as far as practicable in order to reduce surface runoff. Sufficient



Item	Description
	number of chemical toilets should also be provided and be regularly cleaned, maintained and emptied by a licenced contractor.
	Operation Phase:
	Drainage system should be fitted with appropriate design measures to control pollution of drainage water following the relevant guidelines and practices as given in the <i>ProPECC PN5/93</i> .
Residual Impacts	With the implementation of the recommended mitigation measures, no adverse residual impact is anticipated during the construction and operation phases.
Compliance with EIAO-TM	The assessment and the potential impacts are acceptable and in compliance with the EIAO-TM Annexes 6 and 14 and applicable assessment standards/ criteria.

## **Waste Management**

13.2.5 **Table 13.4** presents a summary of the key findings of the assessment of the waste management implications associated with the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 6** of this EIA Report.

Table 13.4 Summary of Environmental Assessment and Outcomes – Waste

Item	Description
Assessment Methodology and Criteria	The potential environmental impacts associated with the handling and disposal of waste arising from the decommissioning/ demolition, construction and operation of this Project have been assessed in accordance with the criteria presented in Annexes 7 and 15 of the EIAO-TM:
	Estimation of the types and quantities of the wastes to be generated; and
	Assessment of the secondary environmental impacts due to the management of waste with respect to potential hazards, air and odour emissions, noise, wastewater discharges and traffic.
Key Construction Impacts	The type of wastes to be generated during the construction phase include (1) C&D materials from site clearance, minor slope and excavation works, as well as piling and superstructure works, (2) chemical waste (e.g. used paint, spent oils/ fluids from mechanical machinery) from construction works, and (3) general refuse from construction workforce. All the wastes produced during the construction phase are of small quantities and will be disposed of accordingly to their nature and relevant regulations, avoiding any potential adverse impact.
Key Operation Impacts	No waste is expected to be generated during the operation of the Project. No waste management issues are expected during the operation phase.
Key Mitigation Measures	Construction Phase:  A Waste Management Plan (WMP) will be devised which incorporates recommended mitigation measures that have been proposed to avoid or reduce potential adverse environmental impacts associated with handling, collection, transport and disposal of waste arising from the construction of this Project. A trip-ticket system will also be established in accordance with DevB TC(W) No. 6/2010 to monitor the disposal of construction waste at landfill and to control flytipping. All dump trucks should be equipped with GPS or equivalent systems for monitoring their transportation routes and parking locations to prohibit illegal dumping and landfilling of C&D materials. The Contractor should maintain a



Item	Description
	recording system to record the amount of C&D materials generated, recycled and disposed of at the disposal sites as well as the transportation routing and parking locations of the dump trucks.
	Operation Phase:
	No specific mitigation measure is required during operation phase.
Residual Impacts	With the implementation of the recommended mitigation measures, no adverse residual impact related to waste management is anticipated during the construction and operation phases of the Project.
Compliance with EIAO-TM	The assessment and the potential impacts are acceptable and in compliance with the EIAO-TM Annexes 7 and 15 and applicable assessment standards/ criteria.

### **Land Contamination**

13.2.6 **Table 13.5** presents a summary of the key findings of the assessment of the land contamination associated with the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 7** of this EIA Report.

Table 13.5 Summary of Environmental Assessment and Outcomes – Land Contamination

Item	Description
Assessment Methodology and Criteria	Land contamination assessment was undertaken in accordance with the criteria set out in Annex 19 of the EIAO-TM, as well as the following guiding documents:
	Guidance Note for Contaminated Land Assessment and Remediation (the RBRGs Guidance Note);
	<ul> <li>Guidance Manual for Use of Risk-based Remediation Goals for Contaminated Land Management (the RBRGs Guidance Manual); and</li> <li>Practice Guide for Investigation and Remediation of Contaminated Land (the Practice Guide).</li> </ul>
Key Construction Impacts	Neither storage/ handling of hazardous chemical and chemical waste nor equipment repair/ maintenance activities were observed within the Project site. No potential land contamination facilities, such as underground fuel oil storage tanks, underground oil pipelines, chemical and chemical waste storage areas, dangerous goods stores, wastewater treatment facilities and transformer rooms were observed at the Project site. No evidence of oil stains or chemical leakages/ spillages was observed. Also, no signs of obvious/ suspected contamination such as abnormal odour and/or distressed vegetation were identified at the Project site. As advised by EPD and FSD, there are no records of chemical spillage incidents or chemical leakage incidents within the Project site.  Land contamination issue associated with the construction of the Project is not anticipated. Further site investigation and mitigation measures are considered not necessary.
Key Operation Impacts	Land contamination impact associated with the operation of the Project is not anticipated.
Key Mitigation Measures	No specific mitigation measure related to land contamination is required during the construction and operation phases.



Item	Description
Residual Impacts	No adverse residual impact in respect of land contamination within the Project site is expected.
Compliance with EIAO-TM	The assessment and the potential impacts are acceptable and in compliance with the EIAO-TM Annexes 19 and applicable assessment standards/ criteria.

# **Ecology**

13.2.7 **Table 13.6** presents a summary of the key findings of the assessment of potential impacts to ecology as a result of the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 8** of this EIA Report.

Table 13.6 Summary of Environmental Assessment and Outcomes – Ecology

Item	Description
Assessment Methodology and Criteria	Ecological impact assessment was undertaken in accordance with the criteria set out in Annexes 8 and 16 of the EIAO-TM, as well as the following legislation/ standards/ guidelines/ literature:
	Forests and Countryside Ordinance (Cap. 96) and its subsidiary legislation, the Forestry Regulations;
	Wild Animals Protection Ordinance (Cap. 170);
	Environmental Impact Assessment Ordinance (EIAO) (Cap. 499);
	Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586) and its subsidiary legislation.
	Hong Kong Planning Standards and Guidelines (HKPSG) Chapter 10, "Conservation";
	PELB Technical Circular 1/97 / Works Branch Technical Circular 4/97, "Guidelines for Implementing the Policy on Off-site Ecological Mitigation Measures";
	EIAO Guidance Note No. 3/2010 - Flexibility and Enforceability of Mitigation Measures Proposed in an Environmental Impact Assessment Report;
	EIAO Guidance Note No. 6/2010 - Some Observations on Ecological Assessment from the Environmental Impact Assessment Ordinance Perspective;
	EIAO Guidance Note No. 7/2010 – Ecological Baseline Survey for Ecological Assessment; and,
	EIAO Guidance Note No. 10/2010 – Methodologies for Terrestrial and Freshwater Ecological Baseline Surveys
	List of Wild Animals under State Protection, promulgated by the State Council
	List of Wild Plants under State Protection, promulgated by the State Council
	The International Union for Conservation of Nature and Natural Resources (IUCN) Red List of Threatened Species
	China Plant Red Data Book;
	China Species Red List;
	China Red Data Book of Endangered Animals;



Item	Description
	Category I or II protected species in mainland China;
	Threatened Species List of China's Higher Plants (Qin et al. 2017);
	Red List of China's Vertebrates;
	Rare and Precious Plants of Hong Kong (2003);
	The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
	PRC Wild Animal Protection Law;
	Wild animals to watch: Terrestrial and freshwater fauna of conservation concern in Hong Kong; and
	Hong Kong vascular plants: distribution and status.
Key Construction Impacts	Disturbance to roosting and breeding activities to ardeids of the North District Park Egretry and Day Roost (NDPEDR).
Key Operation Impacts	Potential bird collision due to the newly added noise barrier.
Key Mitigation Measures	Mitigations related to minimising the construction disturbance, including:
	Strict use of non-percussive piling method within the 100m area of NDPEDR for all year round, other noisy construction works within 100m area of the NDPEDR should also be avoided in breeding season as far as practicable;
	<ul> <li>A pre-construction ecological survey that covering the whole breeding season (March to August) to find out the peak month(s) of the breeding season and to verify and update the location of NDPEDR. Accordingly, works programme shall be scheduled to minimize construction impacts to NDPEDR during peak month(s) of breeding season. If possible, the works to be done within 100m area of the NDPEDR will also be arranged as far from NDPEDR as practicable;</li> </ul>
	A Construction Noise Management Plan shall be prepared before implementation of any construction works within 100m area of the NDPEDR during breeding season; and
	Mitigation measures for reducing construction noise, such as use of Quality Powered Mechanical Equipment (QPME), movable noise barrier and non- percussive piling method, and implementation of good site practice
	Regular monitoring of the ardeid day roosting and breeding activities within 100m of the NDPEDR during the course of construction phase and operational phase.
	Bird friendly design for the noise barrier should be adopted to mitigate the potential ecological caused by potential bird collision.
Residual Impacts	With the implementation of the recommended mitigation measures discussed in mitigation section, it is anticipated that all potential ecological impacts will be reduced to an acceptable level. As a result, no adverse residual impact is anticipated during both construction and operational phases.
Compliance with EIAO-TM	The assessment and the potential impacts are acceptable and in compliance with the EIAO-TM Annexes 8 and 16 and applicable assessment standards/ criteria.



## Landscape and Visual

13.2.8 **Table 13.7** presents a summary of the key findings of the assessment of potential impacts to landscape and visual as a result of the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 9** of this EIA Report.

Table 13.7 Summary of Environmental Assessment and Outcomes – Landscape and Visual

Item	Description
Sensitive Receivers	Existing Landscape Resources (LRs) (21) and Landscape Character Areas (LCAs) 5 and Visually Sensitive Receivers (VSRs) (30) within the assessment area.
Assessment Methodology and Criteria	<ul> <li>Annexes 8 and 18 of the EIAO-TM</li> <li>Environmental Impact Assessment Ordinance Guidance Note 8/2010</li> </ul>
Key Construction Impacts	Key Affected LRs:
	Moderate adverse:
	<ul><li>LR2.1 Roadside Plantation</li><li>LR3.1 North District</li></ul>
	Slight adverse:
	LR3.2 Parks and Playgrounds
	Key Affected LCAs:
	Moderate adverse:
	LCA2 Park Urban Landscape
	Slight adverse:
	<ul> <li>LCA1 Transportation Corridor Landscape</li> <li>LCA3 Mixed Modern Comprehensive Urban Development Landsccape</li> </ul>
	Key Affected VSRs:
	Substantial adverse:
	Residential VSRs (VSR5, VSR15, VSR24)
	Moderate adverse:
	<ul> <li>Residential VSRs (VSR1, VSR2, VSR3, VSR6, VSR8, VSR9, VSR14, VSR16, VSR19, VSR21, VSR23)</li> <li>Recreational VSRs (VSR7, VSR12, VSR28)</li> <li>Occupational VSRs (VSR4, VSR11, VSR13, VSR18, VSR20, VSR25, VSR26)</li> <li>Travelling VSRs (VSR10, VSR17, VSR27 &amp; VSR30)</li> </ul>
	Slight adverse:
	Recreational VSRS (VSR29)
Key Operation Impacts	Key Affected LRs:
	Moderate adverse:
	<ul> <li>LR2.1Roadside Plantation</li> <li>LR3.1 North District</li> </ul>



Item	Description
	Key Affected LCAs:
	Moderate adverse:
	LCA2 Park Urban Landscape
	Key Affected VSRs:
	Substantial adverse:
	Residential VSRs (VSR5, VSR15, VSR24)
	Moderate adverse:
	<ul> <li>Residential VSRs (VSR1, VSR2, VSR3, VSR6, VSR8, VSR9, VSR14, VSR16, VSR19, VSR21, VSR23)</li> </ul>
	Recreational VSRs (VSR7, VSR12, VSR28)
	Occupational VSRs (VSR4, VSR11, VSR13, VSR18, VSR20, VSR25, VSR26)
	Travelling VSRs (VSR10, VSR17, VSR27 & VSR30)
	Slight adverse:
	Recreational VSRS (VSR29)
Key Mitigation Measures	Construction Phase:
	<ul> <li>Re-provisioned Cycle Track and Footpath (CM1)</li> <li>Preservation of Existing Vegetation (CM2)</li> <li>Transplanting of Affected Trees (CM3)</li> <li>Control of Night-time Lighting Glare (CM4)</li> <li>Good Site Practice (CM5)</li> <li>Erection of Decorative Screen Hoarding (CM6)</li> <li>Reinstatement of Temporarily Disturbed Landscape Areas (CM7)</li> </ul>
	Operation Phase:
	<ul> <li>Compensatory Tree Planting (OM1)</li> <li>Roadside Planting (OM2)</li> <li>Aesthetically pleasing design for carriageways and other highways structures (OM3)</li> <li>Provision of Aesthetic Pleasing Treatment on Noise Barriers (OM4)</li> </ul>
Residual Impacts	Key Affected LRs:
	Slight residual impact during Construction and during day 1 of Operation and Negligible residual impact during year 10 of operation on affected Landscape Resources (LR2.1).
	Moderate residual impact during Construction and Slight residual impact during day 1 of operation and year 10 of operation on affected Landscape Resources (LR3.1).
	Slight residual impact during Construction and Negligible residual impact during day 1 of operation and year 10 of operation on affected Landscape Resources (LR3.2).
	Key Affected LCAs:
	Slight residual impact during Construction and Negligible residual impact during day 1 of operation and year 10 of operation on affected Landscape Caharacter Areas (LCA1 & LCA3).



Item	Description
	Slight residual impact during Construction, during day 1 of operation and year 10 of operation on affected Landscape Caharacter Areas (LCA2).
	Key Affected VSRs:
	<u>Slight</u> residual impact during day 1 and Year 10 of operation on the affected visually sensitive receivers
	<ul> <li>Residential VSRs (VSR1, VSR2, VSR6, VSR8, VSR9, VSR21, VSR23, VSR24)</li> </ul>
	Moderate residual impact during day 1 of operation and Slight residual impact during year 10 of operation on the affected visually sensitive receivers
	<ul> <li>Residential and Occupantional VSRs (VSR4, VSR5, VSR15, VSR25, VSR26)</li> </ul>
	Slight residual impact during day 1 of operation and Negligible residual impact during year 10 of operation on the affected visually sensitive receivers
	<ul> <li>Residential and Occupantional VSRs (VSR11)</li> <li>Recreational VSRs (VSR12, VSR13, VSR28)</li> </ul>
	Negligible residual impact during day 1 and Year 10 of operation on the affected visually sensitive receivers
	<ul> <li>Residential and Occupantional VSRs (VSR3, VSR16, VSR18, VSR19, VSR20, VSR22,)</li> </ul>
	Recreational VSRs (VSR29)  Travelling VSRS (VSR24) VSR44 VSR47 VSR97 VSR99)
Compliance with EIAO-TM	Travelling VSRS (VSR10, VSR14, VSR17, VSR27, VSR30)  The assessment and the impacts are in compliance with the EIAO-TM Annexes 10 and 18 and applicable assessment standards/ criteria.

# **Cultural Heritage**

13.2.9 **Table 13.8** presents a summary of the key findings of the assessment of potential impacts to cultural heritage as a result of the construction and operation of the Project. Full details of the assessment and mitigation measures are presented in **Section 10** of this EIA Report.

Table 13.8 Summary of Environmental Assessment and Outcomes – Cultural Heritage

Item	Description
Sensitive Receivers	A part of the Po Leng SAI, at a distance of about 450m, is found within the 500m Assessment Area. Eight graded historic buildings and four built heritage items with no grading were identified within the 500m Assessment Area.
Assessment Methodology and Criteria	The study methodology follows the criteria and guidelines as stated in Annexes 10 and 19 of the EIAO-TM as stated in the EIA Study Brief.
Key Construction Impacts	The proposed works areas of the Project are located in area with no archaeological potential. No archaeological survey is required. Potential impact on archaeological resources is not anticipated.
	Due to sufficient separation distance from the Project works areas, potential direct impact on the identified built heritage items and graded historic buildings is not anticipated.



Item	Description
Key Operation Impacts	The Project involves no excavation works during operation phase, no adverse archaeological impact is anticipated.
	No direct or indirect built heritage impacts are anticipated during operation phase.
Key Mitigation Measures	Construction Phase:
	The project proponent and his/her contractor are required to inform AMO immediately when any antiquities or supposed antiquities under the Antiquities and Monuments Ordinance (Cap. 53) are discovered during the course of works.
	It is recommended to monitor any vibration and building movement induced by the proposed works on the graded historic buildings (No.5 Ng Uk Tsuen, GB-03), which is closest to the boundary of the Works Area, as well as on the Grade 1 historic building (Pang Ancestral Hall, GB-01). This will ensure that there are no negative impacts from vibration on the graded historic buildings.
	Operation Phase:
	No specific mitigation measure is required during operation phase.
Residual Impacts	No adverse residual impact related to cultural heritage is anticipated.
Compliance with EIAO-TM	The assessment and the impacts are in compliance with the EIAO-TM Annexes 10 and 19 and applicable assessment standards/ criteria.

#### Conclusion

- 13.2.10 The assessment of the potential environmental impacts associated with the construction and operation phases of the Project demonstrated that the implementation of the Project will not cause adverse or unacceptable environmental impacts in accordance with the requirements of the EIA Study Brief and criteria stipulated in the EIAO-TM.
- 13.2.11 An environmental audit programme will be implemented to audit the environmental performance of the Contractor(s) during the implementation of the construction activities and verify the findings of the EIA study.