Prepared for

Infinity View Limited & Planet Universal Limited

Prepared by

Ramboll Hong Kong Limited

PROPOSED COMPREHENSIVE RESIDENTIAL DEVELOPMENT WITH WETLAND RESTORATION AREA AT VARIOUS LOTS IN DD104 AND ADJOINING GOVERNMENT LAND, WING KEI TSUEN, NAM SANG WAI, YUEN LONG

PROJECT PROFILE



Date 18 September 2025

Prepared by Crystal Lui et al.

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Signed

Approved by Henry Ng

Principal Consultant

Signed _____

for

Project Reference

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BASIC INFORMATION

- 1.1 Project Title
- 1.1.1 Proposed comprehensive residential development with wetland restoration area at various lots in D.D.104 and adjoining government land, Wing Kei Tsuen, Nam Sang Wai, Yuen Long (hereinafter referred to as "the Project").
- 1.2 Purpose and Nature of the Project
- 1.2.1 The Project is a comprehensive residential development with wetland restoration area. The majority of the Project Site comprises of unpaved land with vegetation, abandoned pond, etc. The Project Site is partially paved for uses such as open storage area, car parking, and temporary structures mainly at the northwestern, west, and southwestern of the Project Site. With due considerations given to the local environmental conditions in its design, the Project will serve to upgrade the existing poorly managed rural environment through environmentally sustainable development and result in a more compatible land use, thereby bringing overall benefits to the local community and environment.
- 1.2.2 The location of the Project is shown in Figure 1.1.
- 1.2.3 An Environmental Impact Assessment (EIA) study brief (EIA Study Brief No. ESB-240/2011) was previously issued on 26 Jan 2012 for the Project (hereinafter referred to as "the previous study brief"). However, the EIA study of the Project did not commence after the issuance of the previous study brief. There are also updates on the Project boundary when comparing with that in the previous study brief. In view of the amendments to the Environmental Impact Assessment Ordinance (Cap. 499) and the revised Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM) which took effect on 30 June 2023, the Project Proponent applies for a fresh EIA study brief with a view to ensuring the upcoming EIA study of the Project will be conducted in accordance with the latest requirements under the amended EIAO and revised EIAO-TM based on the latest Project boundary.
- 1.2.4 The purpose of this document is to facilitate the application for a fresh EIA Study Brief under the amended EIAO (Cap.499). Details of relevant assessments and recommendations will be carried out in the later EIA study stage.
- 1.3 Name of Project Proponent
- 1.3.1 Infinity View Limited & Planet Universal Limited.
- 1.4 Location and Scale of the Project and History of Project Site
- 1.4.1 The Project is bounded by Pok Wai West Road to its north, San Tin Highway and Castle Peak Road Tam Mi to its east, the existing Pok Wai Tsuen and Wing Kei Tsuen to its northeast and south respectively, and with some ponds to its west. Figure 1.1 shows the location and the environs of the Project Site.
- 1.4.2 The Project is located at various lots in D.D.104, Wing Kei Tsuen, Nam Sang Wai, Yuen Long. It comprises a planned Developable Area of about 6.8 ha as well as proposed sewers and manholes between the Developable Area and the existing Nam Sang Wai Sewage Pumping Station (Figure 1.2 refers). Based on preliminary information, the anticipated works area for the potential construction of sewers and manholes between the Developable Area and the Nam Sang Wai Sewage Pumping Station is about 0.9 ha or so. The Developable Area mainly includes medium-rise residential development, clubhouses, GIC, retail development, internal access road, and a proposed Wetland Restoration Area (WRA), etc. There is also an on-site sewage pumping station (SPS)



to be built at the basement. There will be proposed rising mains and terminal manhole from the SPS within the Developable Area as well as proposed gravity sewers along existing Pok Wai West Road and then along Pok Wai South Road to convey sewage generated by the Project Site to the existing Nam Sang Wai SPS and finally to Yuen Long Sewage Treatment Works for treatment as shown in Figure 1.1 and Figure 1.2. The above-mentioned sewerage disposal arrangement and a reserved capacity of 1,565m³/day at Nam Sang Wai SPS have previously been submitted and agreed under a Sewerage Impact Assessment (SIA) of an approved planning application no. Y/YL-NSW/7. The concerned proposed SPS, rising mains, and terminal manhole will be constructed and maintained by the Project, while the gravity sewers and its manholes will be constructed by the Project and handed over to the government for maintenance. The exact alignment will be subject to further agreement with government. According to the SIA of the said planning application, with these sewerage facilities in place, there will be no insurmountable sewerage impact due to the Project.

- 1.4.3 The Project would include road works, which involve modification and widening at an existing section of Pok Wai Road near the entrance of Project Site for connection to existing Castle Peak Road Tam Mi. The exact road works, its alignment and construction method will be subject to later EIA study stage.
- 1.4.4 The Project and its surrounding areas are characterized by rural uses. The Project Site was occupied by agricultural uses in the 1980s. Parts of the land have been converted to logistics and open storage uses since the 1990s. It is currently partly occupied by various car parking, heavy vehicle parking, warehouse structures and open storage operations. There are also other uses such as abandoned pond, small areas of vegetation, and nullah within the Project Site. These uses are proposed to be phased out by the Project.
- 1.5 Number and Types of Designated Projects Covered by the Project Profile
- 1.5.1 The proposed residential development is a designated project (DP) by virtue of Item P.1 (i.e., A residential or recreational development, other than New Territories exempted houses within Deep Bay Buffer Zone 1 or 2) in Part I, Schedule 2 of the EIAO, and an Environmental Permit is required for the construction and operation of the Project.
- 1.5.2 The proposed sewers and manholes underneath existing Pok Wai West Road and Pok Wai South Road for connection to Nam Sang Wai SPS would fall within an area zoned as "conservation area" under the Nam Sang Wai Outline Zoning Plan No. S/YL-NSW/10 (OZP). The exact construction method of such sewers and manholes will be subject to EIA study. Unless the associated trench works of sewers and manholes are with a width of not more than 1.5m, it would then constitute a designated project by virtue of Item Q.1 (i.e. All projects involving earthworks, dredging works and other building works partly or wholly in an existing or gazetted proposed country park or special area, a conservation area, an existing or gazetted proposed marine park or marine reserve, a site of cultural heritage, and a site of special scientific interest.) in Part I, Schedule 2 of the EIAO.
- 1.6 Name and Telephone Number of Contact Person(s)
- 1.6.1 All queries regarding the Project can be addressed to:Mr. Henry Ng, Ramboll Hong Kong Limited, Tel.: 3465 2888.



2. OUTLINE OF PLANNING AND IMPLEMENTATION PROGRAMME

- 2.1 Project Planning and Implementation
- 2.1.1 The Project will be planned, implemented and constructed by Infinity View Limited & Planet Universal Limited, together with its consultants and contractors.
- 2.2 Project Timetable
- 2.2.1 The proposed construction of the Project is tentatively scheduled to commence in later 2026 the earliest, and for completion and operation in 2030 or so.
- 2.3 Interactions with Other Projects
- 2.3.1 The Project may potentially interface with the following known approved or planned major projects:
 - Site Formation and Infrastructure Works for Public Housing Development at Sha Po, Yuen Long (B875CL)
 - Northern Link (NOL) project
 - Proposed Ngau Tam Mei Water Treatment Works Extension (proposed water mains portion)
 - Proposed development to the south of Pok Wai and Wing Kei Tsuen (A/YL-NSW/241-1, Y/YL-NSW/8, and Y/YL-NSW/9)
 - Proposed Comprehensive Development with Wetland Enhancement (CDWE) at Nam Sang Wai and Lut Chau
 - Proposed Northern Metropolis Highway San Tin Section (ESB-373/2025)
 - The proposed Nam Sang Wai Wetland Conservation Park under the Development of Wetland Conservation Parks System
 - Proposed Residential Development with Wetland Habitat and Filling of Ponds/Land and Excavation of Land (A/YL-NSW/314)
- 2.3.2 The list of concurrent projects is preliminary which will be reviewed and confirmed again during the course of EIA Study, such that the relevant projects available are considered in the EIA Study. Any cumulative impact from the construction and operational phases of the identified concurrent project(s) will be addressed in the EIA Report, subject to the availability of such information for assessment and appropriateness during EIA stage.
- 2.3.3 Some of these projects have already been approved, while others are EIA projects and/or subject to planning permission or public works projects procedures. It is anticipated that relevant identified concurrent projects would undergo proper assessment and evaluate the environmental impacts arising from the construction and operation phases. Appropriate mitigation measures will be recommended and implemented to ensure the relevant impacts are under control.



MAJOR ELEMENTS OF THE SURROUNDING ENVIRONMENT

3.1 Air Quality

- 3.1.1 The Project Site is bounded by existing Pok Wai Tsuen and Wing Kei Tsuen to its northeast and south respectively, and with some ponds to its west and southwest. Possible emission sources within 500m of the Project Site Boundary include exhaust from vehicular road network, such as Castle Peak Road Tam Mi, San Tin Highway, and Pok Wai West Road, which will be subject to further review in the EIA study stage. No chimneys are identified within the 500m assessment area during a site survey in October 2024, and the findings will be further reviewed and confirmed in the EIA study. Regarding potential odour source, there is a proposed on-site sewage pumping station (SPS). There are also nearby water ponds and Ngau Tam Mei Channel. Presence of any livestock farms in the area will be further reviewed and confirmed during EIA study stage. Identification of all potential emission sources and assessment on its potential impact will be further carried out during the course of EIA study. Any cumulative air quality impact shall be considered and evaluated in the EIA study.
- 3.1.2 The first layer of Air Sensitive Receivers (ASRs) nearest to the Project Site boundary including those within the Project Site are representative ASRs, which are shown in Table 3.1 for reference. This is preliminary only, and the exact complete list of all existing, committed and planned ASRs will be further reviewed and assessed during the EIA stage to cope with any changes on-site.

Table 3.1 Representative ASRs

Description	Land use	Existing/ Planned
347B Pok Wai	Residential	Existing
352 Pok Wai	Residential	Existing
406 Pok Wai	Residential	Existing
409 Pok Wai	Residential	Existing
3 Wing Kei Tsuen	Residential	Existing
Village house at Wing Kei Tsuen	Residential	Existing
No. B6A Wing Kei Tsuen	Residential	Existing
Construction Sector Imported Labour Quarters	Residential	Existing
Residential flats of the Project	Residential	Planned

3.2 Noise

3.2.1 The first layer of Noise Sensitive Receivers (NSRs) nearest to the Project Site boundary including those within the Project Site have been identified as representative NSRs, which are shown in Table 3.2. The exact complete list of all existing, committed and planned NSRs will be further reviewed and assessed during the EIA stage to cope with any changes on-site. Relevant noise impact assessment will also be carried out accordingly.

Table 3.2 Representative NSRs

Description	Land use	Existing/ Planned
347B Pok Wai	Residential	Existing
352 Pok Wai	Residential	Existing
406 Pok Wai	Residential	Existing
409 Pok Wai	Residential	Existing
3 Wing Kei Tsuen	Residential	Existing
Village house at Wing Kei Tsuen	Residential	Existing
No. B6A Wing Kei Tsuen	Residential	Existing
Construction Sector Imported Labour Quarters	Residential	Existing



Description	Land use	Existing/ Planned
Residential flats of the Project	Residential	Planned

3.3 Water Quality

- 3.3.1 There are existing nullahs/drainage channels, ponds and rivers adjacent to the Project Site and within the 500m assessment area, which are potential water sensitive receivers (WSRs) for the construction and operation phases of the Project. Based on the Outline Zoning Plan Nos. S/YL-NSW/10 Nam Sang Wai and S/YL-KTN/11 Kam Tin North, there are two areas zoned as Conservation Area (CA) within the assessment area to the east and west of the Project Site, respectively which are potential WSRs as well. Please refer to Figure 1.2 for the locations of CA zones. The complete list of WSRs including other ponds, nullahs, watercourses that may be affected by the Project will be further reviewed and identified during the course of the EIA study. Relevant water quality impact will also be evaluated and with necessary mitigation measures proposed accordingly.
- 3.3.2 During construction of the proposed WRA and its establishment period, the WRA itself will be part of a construction site, which is not a WSR yet. Once the WRA is fully functional during operation phase, the proposed WRA will be considered as WSR. For existing ponds on-site which will be filled by the Project, these will also form part of the construction site.

3.4 Ecology

- 3.4.1 The Project Site falls within the Deep Bay Buffer Zone 2. The Project falls outside other ecological sensitive areas such as the areas zoned as Conservation Areas (CA), with the exception of the proposed sewers and manholes which partially fall within the CA. The Project is entirely outside the Deep Bay Buffer Zone 1. Under the New Nature Conservation Policy (NNCP), twelve Priority Sites for Enhanced Conservation (PSEC) were identified by the Government with a view to enhancing the conservation of these identified sites. Amongst which, the Deep Bay Wetland Outside Ramsar Site and the Ramsar Site in the area, are part of the PSEC. The Mai Po Inner Deep Bay Ramsar Site is located to the further northwest of the Project Site, while part of the abovementioned CA including a portion of the proposed sewers and manholes (underneath public roads), would fall within the Deep Bay Wetland Outside Ramsar Site.
- 3.4.2 Outside the Project Site, the habitats mainly involve existing ponds, nullahs/drainage channels, abandoned ponds, access road, wasteland, plantation, woodland and grassland/shrubland, etc. Kam Tin River and Ngau Tam Mei Channel are located to the southwest and northwest of the Project Site respectively. Exact locations and nature of habitats in surrounding areas and those that may be affected by the Project will be further identified and assessed during the course of EIA study.
- 3.4.3 Within Project Site, it is largely disturbed by human activities and is partially occupied by paved developed areas such as various car parking, and warehouses/storage activities. These uses on-site will then be phased out by the Project. Other ecological features within the Project Site include abandoned ponds, small areas of plantation and nullahs. Part of the proposed sewers and manholes is underneath existing paved public road such as those along Pok Wai West Road and Pok Wai South Road.
- 3.5 The proposed Nam Sang Wai Wetland Conservation Park
- 3.5.1 The Government proposes to establish a Wetland Conservation Parks System in phases, comprising existing conservation areas and parks proposed to be established, to achieve multiple functions including ecological conservation, sustainable development of aquaculture, provision of eco-education and eco-recreation



opportunities, while at the same time creating environment capacity for the development of the Northern Metropolis, and achieving conservation and development in parallel. In particular, the boundary of one of the proposed parks, Nam Sang Wai Wetland Conservation Park, as recommended in the Study Report of the Strategic Feasibility Study on the Development of the Wetland Conservation Parks System, potentially interfaces with the Project Site, as well as the 500m Assessment Area.

3.6 Fisheries

- 3.6.1 Based on current information, there are abandoned ponds within the Project Site but there is no known existing active fishpond or existing fisheries resources identified within the Project Site boundary, which will be subject to further review and confirmation in later EIA study stage and site survey. Outside the Project Site, as discussed in Section 3.4, there are other existing and abandoned ponds. Existing Ponds outside Project Site would be potential fisheries resources and water sensitive receivers.
- 3.6.2 Presence and status of exact fisheries resources within and outside the Project Site will be identified and confirmed through baseline site surveys during the course of EIA study and its impacts will be evaluated and assessed to address the possible fisheries impacts due to the implementation of the Project.
- 3.7 Landscape and Visual
- 3.7.1 The local landscape context and resources of the site and its surroundings in the approaching areas to Castle Peak Road Tam Mi and San Tin Highway, is highly disturbed by human activities in contrast with the adjacent lowland plain in Nam Sang Wai and Deep Bay.
- 3.7.2 Within the Developable Area, a large portion in the northeast is an abandoned field. It abuts the plantation along the water channel at Pok Wai Road. The edge of this area is covered with a combination of plantation and trees extending from the plantation alongside of the water channel. The western portion of the Developable Area is a hard paved disturbed area with storage use and with no particular vegetation, the centre to southern portion of the site is an abandoned pond surrounded by wild grasses, weeds, etc. In the southeastern corner of the site, there is a strip of wooded area that extends from the Project Site towards the junction of Pok Wai Road and Castle Peak Road Tam Mi. There are also plantation and tree alongside Pok Wai Road and Castle Peak Road Tam Mi.
- 3.7.3 The Project will then encourage the phasing out of the visually unpleasant uses in the landscape and visual context which would benefit the local landscape and visual quality.
- 3.7.4 The Project would involve landscape with distinctive character/resources as listed out in Annex 18 of the EIAO-TM. Within the Project Site, a wetland restoration area tentatively consisting of water ponds with the periphery planting area as buffer is proposed to replace the existing abandoned pond. A portion of proposed sewers and manholes also fall within an existing conservation area under the OZP but these are underneath existing public roads. Both of these are potential landscape with distinctive characters/resources. Outside the Project Site, there are other existing conservation areas in the surrounding environment. These are also potential distinctive landscape resources/ characters. Locations and types of landscape with distinctive characters/resources, if any, will be further reviewed and confirmed during the course of EIA study.
- 3.7.5 Relevant surveys to identify exact landscape resources, landscape characters and trees will also be carried out during the course of EIA study. Subject to EIA study, part of



- the Project Site would be converted from existing disturbed land areas into a wetland restoration area, while the remaining site area would be developed. The exact layout arrangement, design considerations, and recommendations will be subject to the EIA study.
- 3.7.6 Based on preliminary review, key public viewing points of the Project include the followings, which are briefly described below: A) View southeast from Pok Wai South Road along Ngau Tam Mei Channel; B) View west from Kai Kung Leng; C) View north from Pok Wai South Road; D) View northeast from Kam Tin Riverside at Nam Sang Wai; E) View northwest from footbridge connecting Wing Kei Tsuen and Mo Feng Heung across San Tin Highway. These key public viewing points would represent views at street level as well as views from general public. The above is preliminary only. Subject to details of the Project and baseline survey to be conducted in EIA study, the exact key public viewing points for visual impact assessment will be identified and agreed with relevant department, and their impacts will also be assessed during the EIA stage according to the prevailing EIAO-TM.
- 3.7.7 The Project is situated immediately to the south of Pok Wai West Road and to the west of San Tin Highway. Nam Sang Wai and Wing Kei Tsuen, where the Project situates, is a lowland plain extending from the Deep Bay coastal area in the far west. Nam Sang Wai composes of wetland and fishpond areas extending alongside of Kam Tin River and Ngau Tam Mei Channel. The Developable Area of the Project itself is currently disturbed area. There is no important visual resource with the Project Site, with exception of the a few wooded areas presence in the southeast and planation along roadside of Pok Wai West Road and Pok Wai South Road. Roadside plantation along Pok Wai West Road and Pok Wai South Road is also a visual resource in the context. On the other hand, Kai Kung Leng, Kam Tin River and Nam Sang Wai wetland/fishpond areas are key valued visual resources and attraction to the viewers.

3.8 Land Contamination

3.8.1 The Project Site is currently zoned as "Other Specified Uses (Comprehensive Development to Include Wetland Restoration Area 1)" under the Nam Sang Wai Outline Zoning Plan No. S/YL-NSW/10. The Project Site is bounded by existing Pok Wai West Road, Pok Wai Tsuen and Wing Kei Tsuen to its northeast, east, and south respectively, and with some ponds to its west and southwest. The existing land uses within the site include car parking, container truck parking, logistic/ freight operations, and open storage sites, which would have the potential of land contamination. Potential land contamination issues will be further evaluated in EIA study.



4. POSSIBLE IMPACTS ON THE ENVIRONMENT

4.1 Construction Phase

4.1.1 Relevant assessments will be carried out in later EIA study stage, and the required mitigation measures will also be recommended. The following sections briefly discuss potential environmental impacts arising from construction of the Project.

Air Quality

- 4.1.2 Construction works would normally be conducted from 7am to 7pm every day except on Sundays and public holidays. Possible air quality impacts during construction phase of the Project include:
 - fugitive dust emission arising from site formation, excavation and backfilling, vehicular movement on open site, construction and demolition works, as well as wind erosion of open sites and stockpiling areas;
 - air pollutants emissions from construction vehicles and powered mechanical equipment;
 - Cumulative air quality impacts from any identified concurrent projects; and
 - Potential odour impact due to possible malodourous excavated materials, if any.
- 4.1.3 The nearest existing ASRs will be village houses near Wing Kei Tsuen and Pok Wai Tsuen. Given that the works involved are transient and localised, it is expected potential construction air quality impact to these ASRs could be minimized with adoption of appropriate control measures and best practices as stipulated in the Air Pollution Control (Construction Dust) Regulation as well as implementation of best practices by workers via contractual requirements. Potential odour impact due to malodourous excavated materials, if any, will be further reviewed and addressed in EIA study stage. Please also refer to Section 5.1.2 for examples of possible mitigation measures.

Noise

4.1.4 The major source of construction noise impact will be the operation of powered mechanical equipment (PMEs) for carrying out construction/demolition activities. The activities will normally be conducted from 7am to 7pm every day except on Sundays and public holidays. In view of the location and scale of the Project, the associated construction and demolition works would be controllable and localised. If necessary, appropriate mitigation measures recommended in Sections 5.1.5 to 5.1.6 would be adopted to mitigate any adverse noise impact during the construction phase.

Water Quality

4.1.5 Potential impacts on water quality during construction phase of the Project will be associated with site surface runoff, erosion of exposed soil, potential water quality impact to nearby nullahs/drainage channels/ streams/ ponds, wastewater and sewage generated from construction workforce, filling of existing abandoned pond, and creation of proposed WRA, etc. With implementation of the site practices outlined in EPD's Professional Persons Environmental Consultative Committee Practice Note (ProPECC PN) 2/24 – "Construction Site Drainage" and mitigation measures recommended in Section 5.1.7, the potential surface runoff and the associated water quality impacts would be minimized during construction phase. Effluent produced from construction stage, should be pre-treated to comply with Water Pollution Control



Ordinance (WPCO) requirement, and the discharge point should be sited away from natural section of water courses and other water sensitive receivers.

Waste Management Implication

- 4.1.6 Generally speaking, waste generated by general construction works are likely to be inert construction and demolition (C&D) materials such as excavated soil and rock and unusable concrete, and non-inert C&D materials such as wood, vegetation, packaging waste as a results of site formation activities, foundation, and building construction activities, etc. There are also other waste such as general refuse, chemical waste, and sediment/ pond mud due to workforce, equipment maintenance, and excavation etc, respectively.
- 4.1.7 Provided that good site practices, mitigation measures, and sorting and recycling as stated in Section 5.1.8 will be strictly followed during handling and transportation of construction wastes generated, adverse environmental impact would be minimized during the construction of the Project.

Ecology

- 4.1.8 During construction stage of the Project, potential ecological impacts associated with direct habitat loss may arise such as permanent and temporary loss in habitat (e.g. ponds and plantation) due to site formation and construction works, and potential direct impact on flora and fauna species as a result of physical disturbance of the habitats. A wetland restoration area is proposed as part of the development, which involves excavation and re-profiling works. During construction, in the absence of any mitigation measures, there may be potential disturbance to surrounding habitats and fauna, impact to water quality at nearby nullahs/ ponds, disturbance to identified habitats and areas to be protected (if any), disturbance to the proposed Nam Sang Wai Wetland Conservation Park, interim impact during construction of proposed wetland restoration area, fragmentation of habitats, impact to wildlife and ardeids due to construction activities, noise, dust, and light impact, etc.
- 4.1.9 The ecological value of the habitats involved and the impacts from the Project works on ecology will be assessed in detail during the EIA study based on planned baseline ecological surveys and proposed construction method. Appropriate measures to address potential ecological impacts will also be proposed.

Fisheries

- 4.1.10 There are abandoned ponds within the Project Site but there is no known existing active fishpond within the Project Site boundary. The abandoned ponds within the Project Site will be filled and the potential impacts on fisheries including fisheries activities and production would be reviewed and evaluated in the EIA study. There are also existing and abandoned fishponds in surrounding areas outside the Project Site. Construction works of the Project may cause deterioration of water quality or degradation of environmental condition of fishponds surrounding the Project Site in the absence of control measures. Potentially affected stakeholders, including pond fish farmers, would be consulted during the EIA study to gather their views and comments.
- 4.1.11 Presence and status of exact fisheries resources within and outside the Project Site will be identified and confirmed during the course of EIA study. A detailed fisheries impacts assessment and baseline site surveys will be carried out in the EIA study to identify and address the possible fisheries impacts due to the implementation of the Project.



Landscape

- 4.1.12 Temporary landscape impacts during the construction phase would arise as a result of disturbance to the existing landscape resources and characters of the Project Site by the presence of construction plant and temporary works.
- 4.1.13 During construction phase, there would be potential landscape impact such as loss of landscape elements (e.g. ponds, shrubland, trees, etc.). Existing landscape resources within Project Site such as woodland, shrubland/ grassland, amenity planting, and pond, etc., would potentially be affected by the construction works. Removal of trees and weedy species is also anticipated. There are also roadside plantation alongside Pok Wai Road, Pok Wai West Road, Pok Wai South Road, and Castle Peak Road - Tam Mi. These landscape resources and the roadside landscape characters would potentially be affected. As discussed in Section 3.7.4, the Project would potentially involve landscape with distinctive characters/resources. In the absence of any appropriate control measures and proper construction method, there could be direct impact on landscape characters/resources, which will be further reviewed during later EIA study stage. Site survey and trees survey including identification and confirmation of presence of any valuable landscape resources/ trees and landscape characters will be required during the course of EIA study. Accordingly, relevant measures will be recommended so as to avoid and mitigate such impacts as far as practicable.

Land Contamination

- 4.1.14 The existing land uses within the Project Site include container trucks parking, logistic/ freight operations and open storage. Potential land contamination issues will be further evaluated in EIA study.
- 4.1.15 According to the information provided in the Geochemical Atlas of Hong Kong published by CEDD in 1999, elevated levels of naturally occurring arsenic was observed within the Project Site. The contaminated land impacts could pose health risks to site workers and may affect the health of future users within the Project Site. The natural occurrence arsenic and its potential impact within the Project Site will be further evaluated and reviewed in the EIA study.

Cultural Heritage

4.1.16 No declared or proposed monuments and/ or graded historic buildings and/ or sites of archaeological interest/ Government historic site are located within or immediately adjacent to the Project Site. Thus, no cultural heritage impact is anticipated during the construction phase of the Project. EIA study will review and evaluate the potential impact on nearby cultural heritage arising from various Project construction activities.

Hazard to Life

4.1.17 An underground high pressure gas pipeline is located to the east of the Project Site running along San Tin Highway (Figure 1.2 refers). As the Project is anticipated to setback from the concerned high pressure gas pipeline, danger to the worker within the construction site is less likely to occur. Nevertheless, necessity in conducting a quantitative risk assessment in the presence of adequate buffer distance will be further reviewed in the EIA stage.

4.2 Operation Phase

4.2.1 Relevant assessments will be carried out in later EIA study stage, and the required mitigation measures will also be recommended. The following sections briefly discuss potential environmental impacts arising from the operation of the Project.



Air Quality

- 4.2.2 Air quality impact may arise from the traffic emissions in the vicinity of the Project site, including all the road links within 500m assessment area, the existing and planned public transport interchange (PTI)/ bus terminus (if any), heavy goods vehicles (HGVs) and coach parking site, if any. These pollution sources will be further reviewed and assessed in the EIA study to address the air quality impacts during operation phase. As mentioned in Section 4.2.1, a detailed air quality impact assessment will be carried out during the course of EIA study, to assess potential air quality impacts. Any cumulative air quality impact shall also be considered and addressed in the EIA study.
- 4.2.3 Other potential air pollution sources such as chimney emissions associated with nearby industrial premises, odour from existing livestock farms, if any, and the potential odour from proposed SPS will be reviewed and assessed during the EIA stage. Where necessary, relevant mitigation measures will be recommended.

Noise

- 4.2.4 During operation, the Project may be subject to traffic noise impact. With appropriate measures in design such as adjusting orientation of residential towers, and adoption of baffle type acoustic windows/ balconies according to the ProPECC PN 5/23 "Application of Innovative Noise Mitigation Designs in Planning Private Residential Developments against Road Traffic Noise Impact", it is anticipated that the noise impact can be mitigated to acceptable levels and no adverse noise impact is expected.
- 4.2.5 As mentioned in Section 4.2.1, a noise impact assessment will be carried out in later EIA Study stage. Appropriate mitigation measures such as silencers, acoustic louvres etc. will be adopted in design as necessary to minimize the potential fixed noise impact from the operation of the Project to the nearby sensitive receivers.

Water Quality

- 4.2.6 An estimated sewage flow of 1,565m³/day is expected to be generated from the residential use of the Project. As mentioned in Section 1.4.2, sewage will be properly collected and discharged into planned public sewerage facility.
- 4.2.7 An on-site SPS, rising mains and terminal manhole are proposed to collect generated sewage and convey it to government's existing Nam Sang Wai SPS via proposed sewers. There will be no insurmountable sewerage impact due to the Project. The water quality impact of proposed SPS will be assessed in the EIA stage and relevant mitigation measures will be recommended. Proper stormwater drainage system with screening facilities will also be provided and stormwater will be pre-treated before discharge, and the discharge point should be sited away from natural section of water courses and other water sensitive receivers as far as possible.

Waste Management Implication

4.2.8 The key issues with respect to waste are anticipated to be related to the management of municipal solid waste generated from residential, GIC and retailing activities. Regular maintenance of SPS may generate chemical waste, screening and grits. As mentioned in Section 4.2.1, an assessment will be carried out in later EIA Study stage. The amount of waste to be generated and its disposal method will be further studied and proposed during the EIA stage.

Ecology

4.2.9 As mentioned in Section 4.2.1, an ecological impact assessment will be carried out in later EIA Study stage to assess the exact impact due to the Project. The ecological



issue during operation phase will be the loss of existing habitats as a result of the Project. With the incorporation of appropriate measures during the planning and design of the Project, including the provision of wetland restoration area and other mitigation measures, ecological impacts during the operational phase of the Project can be properly controlled and addressed.

4.2.10 Potential ecological impacts arising from the operation phase would also include indirect impacts to the interfacing proposed Nam Sang Wai Wetland Conservation Park, other surrounding habitat and associated wildlife due to increased human activities/ disturbance. Indirect impact due to the Project such as increased human activities and artificial light may also cause disturbance to wintering wetland-dependent birds. The portion of proposed sewers and manholes within the CA would be underground facilities only, appropriate mitigation measures should be recommended in EIA study. Flight line of ardeids and large-sized birds will be identified through surveys and potential bird collision impact should be considered in building design. A wetland restoration area is proposed within the Project, which can also act as a buffer between the Project and adjacent sensitive areas. Relevant detailed assessment would be conducted in the EIA study.

Fisheries

4.2.11 As mentioned in Section 3.6, no existing fisheries resources are identified within Project Site, but there are existing ponds in surrounding areas outside Project Site. In the absence of control measures the key fisheries issues of the Project could be the indirect impact due to potential deterioration of water quality due to sewage and surface runoff during operation of the Project Site, which potentially affects the environmental conditions of nearby active fishponds. In addition, a wetland restoration area is proposed within the Project Site, the design and function of which would be reviewed and confirmed in the EIA study. The exact key fisheries issues of the Project will be subject to site survey and further review during the course of EIA study. As mentioned in Section 4.2.1, a detailed fisheries impacts assessment will be further carried out in later EIA Study stage to identify and assess potential impacts due to the Project and propose necessary mitigation measures if any. With mitigation measures in place and the proposed wetland restoration area, disturbance to existing fishponds would be minimized.

Landscape and Visual

4.2.12 There would be potential landscape impact due to the Project such as loss of landscape elements (e.g. ponds, shrubland, trees, etc.), potential visual intrusion, and change in roadside landscape character alongside the proposed sewer, should there be an absence of appropriate control measures and lack of a proper design. Nonetheless, the Project Site will transform from mostly disturbed land and warehouses to properly managed residential development. With the relatively poor visual amenity and somewhat degraded landscape character of the Project Site at present, the Project is likely to represent a source of positive landscape and visual impact in the longer term through the introduction of proper planning and environmental upgrading. There would be existing trees within Project Site affected, which will be properly mitigated for. Details of the landscape proposal will be developed during the EIA study. During operational phase, the potential visual impact of the Project would be potential visual intrusion and obstruction created by the Project, as well as visual quality of the new development, etc. Subject to details of the Project and site surveys to be conducted in later EIA study stage, a detailed visual impact assessment will be carried out according to the prevailing EIAO-TM.



- 4.2.13 As discussed in Section 3.7.4, there would be potential landscape with distinctive characters/ resources within the Project Site and in surrounding environment. The Project would potentially pose a direct impact on the identified landscape characters/resources in the absence of appropriate control measures and the lack of a proper design.
- 4.2.14 A detailed landscape and visual impact assessment will then be carried out during the EIA study to identify and evaluate the exact landscape and visual resources, key public viewing points, characters and presence of any valuable landscape resources/ trees (if any), landscape characters/resources, places of high visual value to be affected due to the Project. Accordingly, relevant measures will be recommended so as to avoid and mitigate such impacts as far as practicable.

Land Contamination

4.2.15 As the primary use of the Project Site is for residential purpose, land contamination impact due to the Project is unlikely to occur during the operation phase.

Cultural Heritage

4.2.16 No declared or proposed monuments and/ or graded historic buildings and/or sites of archaeological interest/ Government historic site are located within or immediately adjacent to the Project Site. Thus, no adverse impact to cultural heritage is anticipated during the operation phase of the Project.

Impact from Electric and Magnetic Field

4.2.17 There are existing high voltage overhead transmission lines running across the southwestern corner of the Project Site. The requirements stipulated in HKPSG as well as the guideline issued by the International Commission on Non-Ionizing Radiation Protection (ICNIRP) would be observed and followed in subsequent design stage and to address potential hazard to life impact due to exposure of electric and magnetic field arising from the overhead transmission lines during EIA Study if necessary.

Hazard to Life

- 4.2.18 An underground high pressure gas pipeline is located to the east of the Project Site running along San Tin Highway (Figure 1.2 refers). The exact alignment and potential hazard to life implications would be subject to further review and findings under the EIA Study.
- 4.2.19 While the Project is anticipated to setback from the concerned high pressure gas pipeline, necessity in conducting a quantitative risk assessment will be further reviewed in the EIA stage. Subject to the findings of hazard to life assessment, appropriate control measures and safeguards would be recommended to further reduce the risk during operational phase.



5. ENVIRONMENTAL MITIGATION MEASURES TO BE INCORPORATED

5.1 Construction Phase

Air Quality

- 5.1.1 Construction dust would be minimized with the implementation of proper air quality control measures as stipulated in the Air Pollution Control (Construction Dust) Regulation. Relevant EIAO Guidance Notes and EPD's Practice Note for Professional Persons (ProPECC PNs) shall be referred and followed, and detailed list of relevant requirements and guidance notes will be further reviewed and provided in the EIA study stage. The following examples of mitigation measures should be carried out, where applicable, to minimize construction air quality impact:
 - any excavated dusty materials or stockpiles of dusty materials should be covered by impervious sheeting or sprayed with water so as to maintain the entire surface wet;
 - all dusty materials to be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet;
 - the load of dusty materials carried by vehicle leaving a construction site should be covered by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle;
 - the excavation area should be sprayed with water immediately before, during and immediately after (as necessary) the works to maintain the entire surface wet; and
 - Wheel washing facilities at the exit points of the site.
- 5.1.2 During construction stage, in case malodourous excavated materials are encountered, precautionary measures should be recommended in the EIA study stage. For example, exposed surface of malodourous excavated materials shall be filled by fill materials as soon as possible; malodorous material should be placed as far as possible from nearby ASR; and malodorous materials should be covered by plastic tarpaulin sheets.
- 5.1.3 Requirements stipulated in the Air Pollution Control (Non-road Mobile Machinery) (Emission) Regulation and Air Pollution Control (Fuel Restriction) Regulation should also be followed to control potential emissions from non-road mobile machinery (NRMM) and construction equipment respectively during construction phase where appropriate. Availability of electricity supply for the construction plant and equipment during construction phase, deploying electrified NRMM, and restricting the use of exempted NRMM, should also be considered as proposed mitigation measures as far as practicable in later stage of development, which is subject to further review and confirmation.
- 5.1.4 Reference should be made to the Air Pollution Control Ordinance (APCO) (Cap. 311) and the prevailing Hong Kong Air Quality Objectives (AQOs) for the acceptable levels of pollutants at the sensitive receivers. Mitigation measures will be subject to the findings of the EIA study, and implementation of the recommended measures will be documented in the EIA study.



Noise

- 5.1.5 Relevant EIAO Guidance Notes¹ (e.g. GN 9/2023, GN 12/2023 & GN 16/2023, etc.) and ProPECC PNs (e.g. ProPECC PN 4/23, ProPECC PN 1/24, etc.), shall be referred and followed. Application of quieter construction methods/equipment² and Quality Powered Mechanical Equipment (QPME), etc. should be prioritized as far as practicable for mitigating the construction noise impact. Detailed list of relevant requirements and guidance notes will be further reviewed and provided in the EIA study stage.
- 5.1.6 To minimize the construction noise impact to the nearby sensitive receivers, the following examples of good site practices and noise management should be adopted, where applicable, during construction phase:
 - only well-maintained plant should be operated on-site and the plant should be serviced regularly during the construction programme;
 - machines and plant that may be intermittent in use should be shut down between work periods or should be throttled back to a minimum;
 - plant known to emit noise strongly in one direction, should, where possible, be oriented so that the noise is directed away from nearby NSRs;
 - silencers or mufflers on construction equipment should be utilised and should be properly maintained during the construction period;
 - mobile plant should be sited as far away from NSRs as possible;
 - material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities;
 - Use of quiet PMEs and minimize the use of PMEs as far as practicable;
 - Movable and temporary barriers to screen particular items of plant or noisy operations; and
 - the Contractor shall at all times comply with all current statutory environmental legislation.

Water Quality

- 5.1.7 During construction phase of the Project, the practices outlined in EPD's ProPECC PN 2/24, as well as other good site management practices to avoid site runoff and minimize the potential water pollution will be implemented. Detailed list of relevant requirements will be further reviewed and provided in the EIA study stage. Recommended examples of mitigation measures for minimizing potential water quality impact listed below should be followed throughout the construction phase:
 - the site should be confined to avoid silt runoff from the site;
 - no discharge of silty water into the drainage channel within and in the vicinity of the site;
 - Surface run-off from construction sites should be discharged into storm drains
 via adequately designed sand/silt removal facilities such as sand traps, silt traps
 and sedimentation basins:

² https://www.epd.gov.hk/epd/misc/construction_noise/contents/index.php/en/index.html



¹ https://www.epd.gov.hk/eia/tc_chi/guid/index.html

- Silt removal facilities, channels and manholes should be maintained, and the
 deposited silt and grit should be removed regularly, at the onset of and after
 each rainstorm;
- any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials;
- excavated soil which needs to be temporarily stockpiled should be stored in a specially designated area that should not obstruct existing overland flow.
 Tarpaulin sheet should also be provided to cover and avoid runoff into the drainage channels;
- Open stockpiles to be covered by tarpaulin sheet to avoid spreading of materials during rainstorms;
- storage areas shall be selected at safe locations on site and adequate space shall be allocated to the storage area;
- any construction plant which causes pollution to the water system due to leakage of oil or fuel shall be removed off-site immediately;
- regular clearance of domestic waste generated in the temporary sanitary facilities to avoid waste water spillage;
- temporary sanitary facilities to be provided for on-site workers during construction;
- Road works should avoid impacting on nullahs/drainage channels/ streams,
 where practicable, and properly control and direct surface runoff away;
- Water in existing ponds shall be sampled and pre-treated if required before discharge; and
- Proper management of the drained water and sediment, if any, shall be implemented to prevent release to existing watercourses.

Waste Management Implication

5.1.8 To minimize generation of waste and C&D materials, standard waste management measures and good site practices in waste handling, disposal and transportation as stated below will be implemented. Relevant requirements will be further reviewed and provided in the EIA study stage. Waste sorting, recycling, as well as on-site reuse of inert C&D materials should also be considered such as reuse as fill materials during site formation stage and transportation of surplus materials to public fill reception facilities.

Excavated Material/Construction & Demolition Materials

- stockpiling of excavation material during the wet season should be avoided as far as possible;
- careful design, planning and good site management can minimize over-ordering
 and generation of waste materials such as concrete, mortars and cement
 grouts. The design of formwork should maximise the use of standard wooden
 panels so that high reuse levels can be achieved. Alternatives such as steel
 formwork or plastic facing should be considered to increase the potential for
 reuse;



- Contractor should prioritize the reuse of the C&D material on-site. Surplus C&D materials should be delivered to public fill reception facilities or collected by recycling contractor. Inert C&D materials will be delivered to public fill reception facilities, and non-inert C&D materials will be recycled and disposed of at landfill as a last resort. Proper segregation of wastes on site will increase the feasibility of recovery of certain components of the waste stream by recycling contractors; and
- ticket-trip system should be adopted with proper record system

General Refuse

- general refuse should be stored and disposed of separately from general construction waste and chemical waste;
- Separated storage bins for different types of waste should be provided with lids
 to facilitate waste sorting and recycling, which should be kept closed to avoid
 nuisance and windblown litter. For example, recyclable materials should be
 collected and recycled by a licenced contractor;
- general refuse would be removed regularly and disposed of at designated landfills;
- the Contractor should employ a reputable waste collector to remove general refuse from the Project Area, separate from C&D materials and chemical wastes, on a regular basis to minimize odour, pest and litter impacts; and
- Handle by registered and licensed waste hauliers under Waste Disposal Ordinance (Cap. 354).

Chemical Waste

- Handle by registered and licensed waste hauliers under Waste Disposal (Chemical Waste) (General) Regulation (Cap. 354C); and
- Chemical wastes should be separated from other wastes. It should be properly stored, and collected by licenced chemical waste collector on regular basis and treated at licensed facilities.

Sediment/ Pond Mud

- Avoidance of disturbance subject to the engineering design. Where disturbance cannot be avoided, other possible construction method should be explored to minimise the extent of dredging/ excavation activity where practicable;
- Handling of excavated sediment/ pond mud by Contractor should comply with relevant legislative requirements such as WDO, and Dumping at Sea Ordinance;
- In case of sediment/ pond mud encountered, contractor should consider the feasibility of reuse of excavated sediment/ pond mud on-site where practicable, e.g. at the proposed wetland restoration area; and
- The exact arrangement should be subject to findings and recommendations to be provided in the EIA study.



Ecology

- 5.1.9 It is anticipated that there would be habitat loss (permanent and temporary) and disturbance impact due to construction of the Project as described in Sections 4.1.8 to 4.1.9. A wetland restoration area is proposed as part of the Project. The details are to be developed during the EIA study, and should be constructed first in the construction phase.
- 5.1.10 Due considerations will be given during the EIA study to the habitat loss and other ecological impact that may arise from the Project. Relevant guidelines and EIAO Guidance Notes shall be referred and followed, and detailed requirements will be further reviewed and provided in the EIA study stage. Disturbance impact that may cause deterioration of habitat quality to birds and other wildlife would be evaluated. The significance of ecological impacts would be assessed and the required mitigation measures will be recommended in the later EIA study to be carried out. Any proposal for mitigation, if found to be required during the EIA study, will be agreed with relevant authorities before the implementation of the Project.
- 5.1.11 The extent and degree of ecological disturbance from construction activities will be evaluated and minimized as far as possible through measures such as visual screening, control of site runoff and careful scheduling of construction works, consideration of quieter construction methods, site hoarding, good site practices, control of night-time light, etc. Best practices on control surface runoff within construction site should be followed.
- 5.1.12 The effectiveness of the proposed mitigation measures will also be monitored during the construction phase as part of the Environmental Monitoring and Audit (EM&A) programme to be developed in the EIA study.

Fisheries

- 5.1.13 Fisheries impacts assessment shall be carried out in the EIA study. Relevant guidelines and EIAO Guidance Notes shall be referred and followed, and detailed requirements will be further reviewed and provided in the EIA Study stage. The impacts on the affected fishponds will be assessed, and appropriate mitigation measures will be identified to address any impacts on the affected fishponds in the later EIA study to be carried out. Good site practices for the control of construction site runoff should be fully implemented to minimize impacts on the ponds in the vicinity.
- 5.1.14 Careful planning of works sequence and construction method will be considered with the aim to avoid potential impact as far as practicable, and adoption of good site practice will be recommended to minimize potential fisheries impacts.

Landscape

5.1.15 The following examples of measures will be considered for minimizing the potential landscape impacts associated with the Project during the construction phase, which are subject to the EIA study. Relevant guidelines and EIAO Guidance Notes shall be referred and followed, and detailed requirements will be further reviewed and provided in the EIA study stage. Reference should also be made to relevant technical circulars including "DEVB TC(W) No. 4/2020 - Tree Preservation", "LAO PN No. 6/2023 - Processing of Tree Preservation and Removal Proposals for Building Development in Private Projects - Compliance with Tree Preservation Clause under Lease", and "DEVB TC(W) No. 5/2020 - Registration and Preservation of Old and Valuable Trees", for requirements of tree protection and tree transplanting. Details of which will be listed out in the EIA study:



- Retention and avoidance of Old and Valuable Trees and Landscape Resources
 Elements with high landscape value on Site: in case of old and valuable trees
 and landscape elements with high landscape value found on site it should be
 retained or avoided where possible for incorporation in the Project;
- Good Construction Practice Landscape impacts during construction would be minimized by regulation of working hours, minimization of the duration of the works, and control of lighting on site;
- Tree Protection Trees to be retained within or adjacent to the works area should be carefully protected to avoid damage by machinery as well as to prevent dumping of materials or compaction of soil around tree roots; and
- Tree Transplanting Any trees identified as affected by the Project should be considered for transplanting to other areas within the Project Site or nearby suitable sites. The feasibility of transplantation will depend on a number of factors such as the size, health and tree species, as well as the condition of the local terrain. Adequate time will be allowed to prepare trees for transplantation.
- 5.1.16 The relevant mitigation measures will be included in the contract clauses for the works and the implementation of these measures will also be audited as part of the EM&A programme during the construction phase.

Land Contamination

- 5.1.17 In the event that there is any potential exposure to contaminated materials, workers should wear protective clothing. Onsite remediation will be undertaken and carried out with appropriate safety measures in place. Further assessment will be conducted in the EIA study to review and confirm any trace of land contamination issues due to historical and existing land uses, and formulate appropriate contamination assessment plans and remediation action plans if required. Relevant guidelines and EIAO Guidance Notes shall be referred and followed. Detailed requirements will be further reviewed and provided in the EIA study stage.
- 5.1.18 For contamination due to natural occurrence such as arsenic, the Project Proponent would consider pathway or receptor control instead of source control to minimize secondary contamination or generation of significant amount of waste due to cleaning up of the naturally occurring materials.

Cultural Heritage

5.1.19 EIA study will review and evaluate the potential impact on nearby cultural heritage arising from various Project construction activities. If required, relevant mitigation measures will be recommended in accordance with relevant guidelines and EIAO Guidance Notes.

Hazard to Life

5.1.20 The Project is setback from the concerned high pressure gas pipeline. Necessity in conducting a quantitative risk assessment will be further reviewed in the EIA stage. Subject to the findings of hazard to life assessment, appropriate controls measures and safeguards during construction would be recommended to further reduce the risk issue during operational phase.



5.2 Operation Phase

Air Quality

- 5.2.1 Air quality impact during operation phase of the Project due to identified emission sources will be further assessed in the EIA stage. Relevant air quality mitigation measures and consideration of better design in layout will be recommended in order to alleviate any potential air quality impact. Relevant guidelines and EIAO Guidance Notes shall be referred and followed, and detailed requirements will be further reviewed and provided in later EIA study stage.
- 5.2.2 To minimize potential odour impact during operation phase of the Project, the proposed SPS should be designed underground or inside enclosed structure. There should be sufficient buffer distance between air sensitive uses and emission sources where appropriate. Inlet chamber and wet well should be underground where possible and enclosed by airtight covers. It is recommended that the proposed emission exhausts from the proposed SPS would be treated by deodorizers and/or other air pollution treatment systems before discharging into the atmosphere. Details and extent of air quality mitigation measures will be subject to the EIA results.

Noise

- 5.2.3 In order to mitigate potential road traffic noise impact, provision of setback distance from nearby public roads should be considered in design. Also incorporation of special building design and mitigation measures such as acoustic window, acoustic balcony, etc. of noise sensitive premises will be considered as appropriate.
- 5.2.4 To minimize potential operational noise impacts from the fixed plant noise sources, these noise sources will be located in such a way to avoid direct line of sight to nearby NSRs and with adequate buffer distance as far as practicable. The exhaust fans of the ventilation system are also proposed to be located away from the NSRs as far as practicable.
- 5.2.5 The noise mitigation treatment, if required, could be provided in the form of silencers, acoustic louvers and acoustic enclosure, fitted to the discharge sides of fans to ensure that the noise levels at NSRs comply with the stipulated noise criteria. Relevant guidelines and EIAO Guidance Notes shall be referred and followed, and detailed requirements will be further reviewed and provided in the EIA study stage. The details and extent of noise mitigation measures will be subject to the EIA results.

Water Quality

- 5.2.6 Sewage is expected to generate from the residential use of the Project. As mentioned in Section 1.4.2, sewage will be properly collected and discharged into planned public sewerage facility.
- 5.2.7 During operation phase, mitigation measures for water quality impacts would be implemented in accordance with the Practice Note for Professional Persons on Drainage Plans (ProPECC PN) 1/23. Proper drainage and sewerage systems should be provided for serving the Project. Surface run-off from the open paved areas should be discharged into storm drains via adequately designed sand/silt removal facilities. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm. Proposed road works should be designed such that to avoid impacting on nearby nullahs/drainage channels/ streams, where practicable.
- 5.2.8 Sewage from the Project will be properly collected, and delivered to the proposed SPS and then conveyed to the existing Nam Sang Wai SPS. No overflow of either raw



- sewage or treated effluent should be allowed and direct discharge of untreated sewage should be avoided. Detailed mitigation measures, discharge standards, discharge location and emergency response plan for emergency situation of on-site SPS will be further developed and proposed during the EIA study.
- 5.2.9 With the implementation of preventive measures, the water quality impact can be minimized.

Waste Management Implications

5.2.10 During operation phase, municipal solid waste should be regularly collected and removed in appropriate covered containers to prevent odour and windblown litter. Adequate recycling facilities such as recycling bins shall be established in the Site to promote recycling activities and minimize the disposal of waste to landfills. As discussed in Section 4.2.8, generation of relevant waste such as any chemical waste, screening and grits, as well as their handling and disposal method will be further assessed and proposed in EIA study stage in accordance with relevant requirements.

Ecology

- 5.2.11 Ecological impact assessment will be carried out in the EIA study to review and address the possible direct and indirect ecological impacts on the environment due to the implementation of the Project. Due consideration should be given to the identified dedicated flight-line of waterbirds and indirect impacts due to human disturbance. Possible mitigation measures should be proposed such as landscape buffer, control of night-time light, etc. Measures should also be proposed in design stage to address potential bird collision impacts. Operation of the Project should avoid or minimize any direct impact/disturbance to any habitats and associated wildlife identified of ecological importance such as wetland.
- 5.2.12 Due consideration of potential fragmentation to wetland habitats should be given in the design and during EIA study. As mentioned above, a wetland restoration area is proposed to compensate for the loss in wetland due to the Project. Details of design considerations and assessments will be provided in the EIA study stage.
- 5.2.13 The effectiveness of any proposed ecological mitigation measures that extends into the operation phase will be monitored through the EM&A programme to be developed in the EIA study.

Fisheries

- 5.2.14 Good site practices for the control of surface run-off shall be fully implemented to minimize impacts on water sources and fishponds in the vicinity of the Project Site. Impacts on the affected fishponds should be controlled with appropriate mitigation measures. Significance of fisheries impacts from the operation of the Project should be evaluated and relevant mitigation measures should be implemented as appropriate.
- 5.2.15 The effectiveness of any proposed ecological mitigation measures that extends into the operation phase will be monitored through the EM&A programme to be developed in the EIA study.

Landscape and Visual

- 5.2.16 Examples of landscape and visual mitigation measures to be incorporated for the Project include the following, subject to EIA study:
 - Compensatory Amenity the creation of amenity planting will be one of the means for compensating loss of existing vegetation on site;



- Screen Planting Planting of trees along the periphery of the Project Site will assist in screening visual impacts on VSRs;
- Aesthetic Treatment of Buildings Consideration of sensitive treatment in terms of architectural form and colour of the buildings will assist in reducing their visual impacts;
- Optimal Site Layout alternative layouts will be considered to ensure that the landscape and visual impacts associated with the Project are minimized. The landscape and visual character may also be incorporated in the design of the buildings;
- Responsive Site Planning building design, building disposition, building separations and setbacks will be arranged strategically to minimize the visual impact, and;
- Preserving Natural Elements tree preservation and establishment of the WRA will enhance the visual quality on site.
- 5.2.17 Relevant guidelines and EIAO Guidance Notes shall be referred and followed. The design scheme of the Project would allow space for a proposed wetland restoration area, which could minimize the potential visual impact in the area. The details of landscape and visual impact mitigation measures will be formulated in the EIA study and EM&A program with respect to the findings of the assessment therein and these measures will be incorporated and implemented during operation.

Land Contamination

5.2.18 As the Project is for residential use, potential contaminated land impacts from residential activities are unlikely to occur in operation phase. Mitigation measures are not considered necessary.

Cultural Heritage

5.2.19 No declared or proposed monuments and/ or graded historic buildings and/or sites of archaeological interest/ Government historic site are located within or immediately adjacent to the Project Site. Thus, no adverse impact to cultural heritage is anticipated during the operation phase of the Project. If required, relevant mitigation measures will be recommended to minimize the adverse impact to cultural heritage from the Project during operation phase.

Impact from Electric and Magnetic Field

5.2.20 Given that relevant guidelines (i.e. HKPSG and guideline issued by ICNIRP) would be observed and followed in subsequent design stage and addressing potential health hazard, the impact from electric and magnetic field can be minimized.

Hazard to Life

- 5.2.21 While the Project is anticipated to setback from the concerned high pressure gas pipeline, necessity in conducting a quantitative risk assessment in the presence of adequate buffer distance will be further reviewed in the EIA stage. Subject to the findings of hazard to life assessment, appropriate controls measures and safeguards would be recommended to further reduce the risk issue during operation phase.
- 5.3 Severity, Distribution and Duration of Environmental Effects and Further Implications
- 5.3.1 Subject to the findings of assessments, effective control and mitigation measures would be identified to ensure the impacts are at acceptable levels. The possible



severity, distribution and duration of environmental effects such as beneficial and adverse effects; short and long term effects; secondary and induced effects; cumulative effects and trans-boundary effects, and further implications would be considered and addressed in the EIA, where applicable.



6. USE OF PREVIOUSLY APPROVED EIA REPORTS

6.1.1 There is no EIA report previously approved under the EIAO for this Project Site. However, references have been made to the following previously approved EIA reports with similar nature:

Table 6.1 Previously Approved EIA Reports With Similar Nature

Register No.	Project Title	Date of Approval
AEIAR-189/2015	Comprehensive Development and Wetland Protection near Yau Mei San Tsuen	6 Jul 2015
AEIAR-120/2008	Proposed Comprehensive Development at Wo Shang Wai, Yuen Long	31 Jul 2008

Figures





