

ISSUE NO. : FINAL
ISSUE DATE : JULY 2015
PROJECT NO. : 1158

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

EXECUTIVE SUMMARY

FOR

**CHAI WAN GOVERNMENT
COMPLEX AND VEHICLE DEPOT**

COMMERCIAL-IN-CONFIDENCE

Prepared By:

**Allied Environmental Consultants
Ltd.**

Allied Environmental Consultants Limited
Acousticians & Environmental Engineers

19/F., Kwan Chart Tower, 6 Tonnochy Road, Wan Chai, Hong Kong
Tel: (852) 2815 7028 Fax: (852) 2815 5399 Email: info@aechk.com



ISSUE NO. : FINAL
ISSUE DATE : JULY 2015
PROJECT NO. : 1158

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

EXECUTIVE SUMMARY

FOR

CHAI WAN GOVERNMENT COMPLEX AND VEHICLE DEPOT

COMMERCIAL-IN-CONFIDENCE

Prepared By:

**Allied Environmental Consultants
Ltd.**

Author: Various

Checked and
Approved:



Grace M.H. Kwok
BEng(Hons) MHKIEIA MHKIOA
MIAIA MRAPA MISWA LEEDAP CAP
BEAM Pro

This report has been prepared by Allied Environmental Consultants Limited with all reasonable skill, care and diligence within the terms of the Agreement with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.
This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

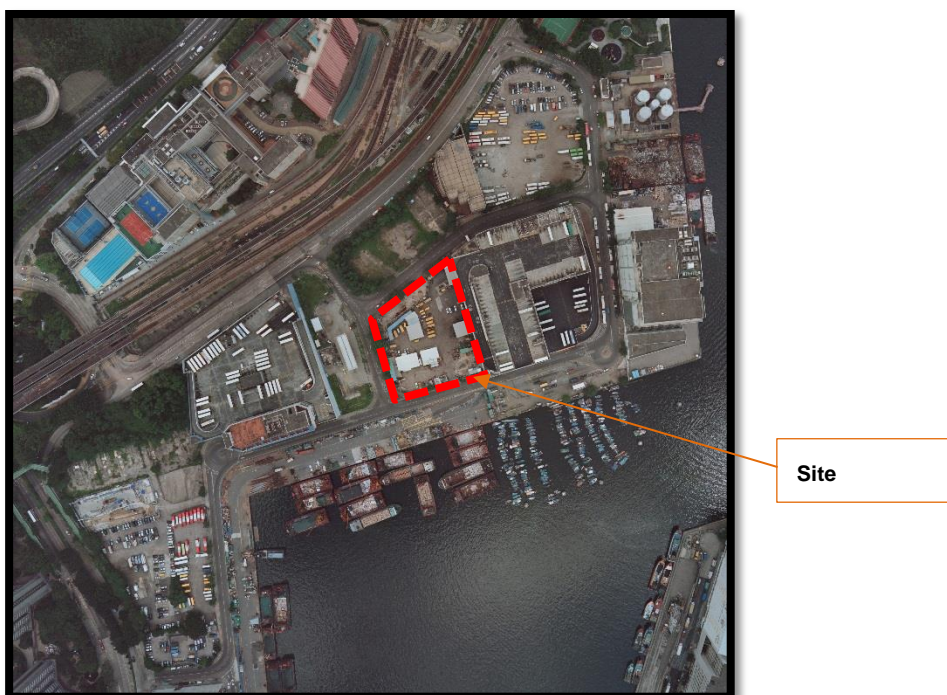
TABLE OF CONTENTS

| | |
|--|-----------|
| 1. INTRODUCTION | 2 |
| 1.1. Background..... | 2 |
| 2. PROJECT DESCRIPTION | 3 |
| 2.1. Need of the Project | 3 |
| 2.2. “Without Project” Alternative..... | 3 |
| 2.3. Site Location Alternative | 4 |
| 2.4. Design Alternatives..... | 4 |
| 2.5. Description of the Site Area..... | 6 |
| 2.6. Design of the Proposed Project | 6 |
| 2.7. Operation of the Proposed Project..... | 7 |
| 2.8. Project Implementation Programme | 7 |
| 2.9. Identification of Key Environmental Issues | 7 |
| 3. AIR QUALITY IMPACT ASSESSMENT | 9 |
| 4. NOISE IMPACT ASSESSMENT | 11 |
| 5. WATER QUALITY AND SEWERAGE IMPACT ASSESSMENT | 13 |
| 6. LANDSCAPE AND VISUAL IMPACT ASSESSMENT | 14 |
| 7. WASTE MANAGEMENT IMPLICATION ASSESSMENT | 16 |
| 8. LAND CONTAMINATION ASSESSMENT | 17 |
| 9. HAZARD TO LIFE ASSESSMENT | 18 |
| 10. ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS | 19 |
| 11. CONCLUSIONS | 20 |

1. INTRODUCTION

1.1. BACKGROUND

- 1.1.1. This Project is to construct and operate a vehicle depot-cum-office building (hereinafter referred to as the “proposed Project”) in Chai Wan at the junction of Sheung Tat Street, Sheung On Street and Sheung Mau Street (hereinafter referred to as the “Project site” and is shown in *Figure 1.1*) for the Hong Kong Police Force (HKPF), the Food and Environmental Hygiene Department (FEHD), the Electrical and Mechanical Services Department (EMSD) and the Government Laboratory (GL), who are also responsible for the operation of the proposed Project upon completion of construction works. The Project Proponent for the proposed Project is the HKPF. Allied Environmental Consultants Limited (AEC) was appointed as the environmental consultant to undertake the Environmental Impact Assessment (EIA) study for the proposed Project.
- 1.1.2. In accordance with Item A.6, Part I, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO), the proposed Project is a designated project under a category of “A transport depot located less than 200 m from the nearest boundary of an existing or planned (a) residential area and (b) educational institution”. An EIA is required and an Environmental Permit (EP) is to be obtained prior to construction commencement. An application for the EIA Study Brief under Section 5(1) of the EIAO was submitted by AEC on 23 January 2014 with a Project Profile (No. PP-499/2014). An EIA Study Brief (No. ESB-267/2014) was issued by the Environmental Protection Department (EPD) on 5 March 2014 to proceed with an EIA study for the proposed Project.
- 1.1.3. The potential environmental impacts arising from the construction and operation of the proposed Project have been assessed in accordance with the requirements stipulated in the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM).



(Aerial Photographs taken on 1st June 2013)

2. PROJECT DESCRIPTION

2.1. NEED OF THE PROJECT

- 2.1.1. Currently, the facilities of the proposed Project, namely the HKPF Hong Kong Island Police Vehicle Pound and Examination Centre (PVP & EC), the HKPF Centralised Case Property Store, the FEHD Depot, the EMSD Depot and the GL Specialist Laboratory, are occupying temporary sites that require periodic extensions of their tenancy duration. These temporary sites are sited at different locations, resulting in the need of additional resources, such as increased travelling time and distance, for the operations of the abovementioned facilities. The current arrangement is viewed as environmentally and economically inefficient. There is a long-term need for permanent government vehicle depot and offices.
- 2.1.2. Moreover, the existing HKPF PVP & EC and FEHD Depot are currently occupying temporary sites at Quarry Bay, both of which have been earmarked for the development of the extension of Quarry Bay Park Phase II by the Leisure and Cultural Services Department (LCSD). The relocation of the facilities would pave the way for future development of the Quarry Bay Park Phase II. Thus, there is an urgent need for available spaces to accommodate the aforementioned facilities.
- 2.1.3. The proposed Project will also resolve the shortage of laboratory accommodation faced by the GL and long-term need for permanent depot facility of the EMSD and centralised store for the HKPF's case property.

2.2. “WITHOUT PROJECT” ALTERNATIVE

- 2.2.1. A fundamental alternative of the proposed Project is the option not to construct the new vehicle depot-cum-office building in Chai Wan, which is referred to as the “do-nothing” option in environmental terms.
- 2.2.2. In the absence of the proposed Project, the services for the said region would have to depend upon other depot(s) in the other regions, which in turn demands longer travelling distance and time. It would lead to other environmental impacts including increase in traffic volume, and hence noise and vehicular emissions.
- 2.2.3. The absence of the proposed Project will also affect the future extension of Quarry Bay Park Phase II, as mentioned in *Section 2.1.2* and sustain the shortage problem of GL laboratory, EMSD permanent depot facility and HKPF's case property centralised store.
- 2.2.4. Taking the above reasons into account, the “do-nothing” option is not preferred and not considered to be an environmentally-preferred solution to cope with the current demand for vehicle repair / testing and operational services of the HKPF, FEHD, EMSD and GL in the region.

2.3. SITE LOCATION ALTERNATIVE

2.3.1. As discussed above, there is an urgent need for a vehicle depot-cum-office building on the Hong Kong Island, especially in the Eastern District. In the early planning stage of the proposed Project, two potential sites in the Chai Wan area were identified and shortlisted for evaluation. The locations of the two sites are indicated in **Figure 2.1**, which include:

- Site A: the Project site, which is a land piece located at the junction of Sheung Tat Street, Sheung On Street and Sheung Mau Street
- Site B: a nearby land piece which is located at the junction of Sheung Tat Street and Chong Fu Road

2.3.2. Site A was eventually selected. The selected site is located further away from nearby residential developments and shortens the travelling distance and time to access the major carriageway, Island Eastern Corridor (IEC). Such arrangement is anticipated to introduce less vehicular emission and noise nuisance to nearby sensitive receivers.

2.4. DESIGN ALTERNATIVES

2.4.1. The design options, including form, building design, facilities layout, ventilation and local exhaust design, were considered and reviewed in order to optimise the operational and environmental benefits of the facilities.

Form

2.4.2. The Project aims to re-provide the existing government facilities, including offices, stores, workshop etc. as mentioned in *Section 2.1.1*. The vehicle depot-cum-office building option enables various Government departments in one single building relieving the pressure on land resources, reducing the quantity of building construction materials, giving rise to a more efficient transport planning and minimising the overall impacts on landscape resources and visual amenity by the avoidance of establishing multiple buildings or at multiple locations, etc.

Building Design

2.4.3. Floor-to-floor heights, and consequently the overall building height, of the building are minimised to reduce potential visual impact and at the same time provide sufficient space for vehicle maintenance work and parking of various types of vehicles in the building.

2.4.4. The use of underground basement floor was not considered due to its longer construction period and the extensive amount of excavated materials and potential marine sediment generated.

Facilities Layout

2.4.5. Vehicle repair / testing activities are proposed to be covered and surrounded by spaces with uses that are relatively non-sensitive to noise impact, e.g. storerooms and staircases, which could serve as noise screening/ buffering purpose as far as possible. Moreover,

substantial greenery features were considered, including soft landscaping areas on Level 1 and roof, together with the use of non-reflective materials for building envelope.

Ventilation and Local Exhaust Design

- 2.4.6. The proposed Project will be covered with a vast amount of openings at the building façades to optimise the use of natural ventilation, supplemented with the mechanical ventilation system at the car parking areas. Due to the reduced number of mechanical ventilation system required, potential noise nuisance from the fixed plant systems could be minimised.
- 2.4.7. Ventilation exhaust at laboratories of GL is to be treated prior to discharge to the atmosphere. Location and orientation of the local exhaust were carefully examined to ensure sufficient dispersion and to avoid direct impact to the nearby sensitive receivers. Various gas treatments were evaluated and the most appropriate technologies with proven removal efficiency (e.g. activated carbon filter, chemical scrubber, etc.) will be applied when considered necessary, and subject to detailed design development.

Construction Alternatives

- 2.4.8. For the construction of the proposed Project, the major construction activities comprise the following:
- Site formation, excavation and filling;
 - Foundation; and
 - Main building construction.

Foundation works

- 2.4.9. Although less noise and vibration would be generated from bored piling during construction, it usually requires longer construction period and more extensive excavation. In view of the above, conventional steel H-piling is considered to be more suitable for the proposed Project.

Site formation, excavation and filling

- 2.4.10. The construction methods to be adopted for site formation are all conventional methods which include site clearance, excavation and backfilling, construction of haul road and utilities laying, and finally the landscape works. For these works, the methods are well established and there are limited alternatives.

Main building construction

- 2.4.11. In general, the suitable main building construction options will not present significant differences in terms of the environmental impacts to the nearby sensitive receivers. Specific construction method will be determined upon the development of the structural form of the buildings during later design phase.

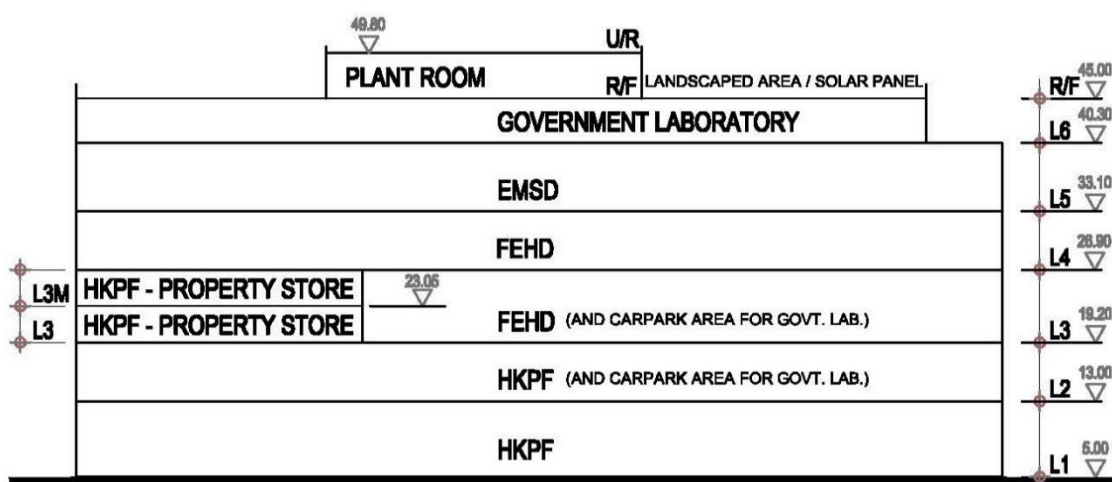
2.5. DESCRIPTION OF THE SITE AREA

2.5.1. The Project site is currently allocated as a works and staging area by the Drainage Services Department (DSD). As shown in **Figure 1.1**, the Project site is located on a reclaimed land near the promenade of Chai Wan Public Cargo Working Area, which previously was a reclaimed land. It is surrounded by Sheung Tat Street to the northwest, Sheung Mau Street to the southwest and Sheung On Street to the southeast. According to the approved Chai Wan Outline Zoning Plan (OZP) No. S/H20/21, the Project site is zoned “Government, Institution or Community (2)” (“GIC(2)”). The proposed Project is subject to a building height restriction of 70mPD (including roof-top structures).

2.6. DESIGN OF THE PROPOSED PROJECT

2.6.1. The proposed vehicle depot-cum-office building will be constructed in the form of a six-storey building (with a mezzanine floor above Level 3), with a proposed height of +49.8 mPD. The area of the Project site is approximately 7,000 m². The proposed Project involves the following facilities:

- (a) Construction of the HKPF PVP&EC of 5,200 m² on Level 1 and 2;
- (b) Construction of a vehicle depot under the FEHD of 4,600 m² or as appropriate on Level 3 and 4;
- (c) Construction of the HKPF Centralised Case Property Store of about 1,942 m² for the storage of case property for Crime Formations on Level 3 and 3M;
- (d) Construction of a permanent depot under the EMSD of 2,200 m² on Level 5; and
- (e) Construction of a specialist laboratory under the GL of about 2,160 m² on Level 6.



(Schematic Elevation Plan of the Proposed Project)

2.7. OPERATION OF THE PROPOSED PROJECT

Operation Hours in Proposed Project

- 2.7.1. Major vehicle repair / testing activities at the EMSD depot will be taken from 0800 to 1800 hours on weekdays, whilst the HKPF examination works will be taken on irregular basis due to operation needs. The PVP & EC will be in operation 24 hours on 7-day per week basis. FEHD depot will operate daily from 0600 to 2330 hours. General offices of EMSD, GL, etc. will operate mainly during normal office hours (0800 to 1800 hours).

Estimated Population in Proposed Project

- 2.7.2. The number of staff working in the proposed Project is estimated to be about 180 and 55 during daytime (0800 to 1800 hours) and evening time (1800 to 2330 hours) respectively.

Proposed Activities in Proposed Project

- 2.7.3. The major activities to be carried out in the proposed Project include vehicle repair / testing activities, vehicle parking, vehicle washing, chemical testing, etc.

2.8. PROJECT IMPLEMENTATION PROGRAMME

- 2.8.1. The construction of the proposed Project is tentatively to commence in period from Mid 2016 to Mid 2017 depending on the design process and will last for about 29 months.

2.9. IDENTIFICATION OF KEY ENVIRONMENTAL ISSUES

- 2.9.1. The identified key environmental issues during the construction and operation phases include the following:

During Construction Phase

- Potential dust impacts arising from the construction works activities of the proposed Project;
- Potential noise impacts arising from the construction works activities of the proposed Project;
- Potential water quality and sewerage impacts arising from the construction works activities and workforce;
- Potential waste management implication and land contamination issues arising from the construction works activities;
- Potential landscape and visual impacts arising from the construction works activities;
- Potential hazard to life arising from the neighbouring dangerous goods (DGs) processing and storage facilities; and

- Potential cumulative environmental impacts through interaction or in combination with other existing, committed and planned concurrent projects.

During Operation Phase

- Potential vehicular emission and pollutant emission impacts arising from the vehicle repair / testing activities in the proposed Project and road carriageways in the vicinity of the proposed Project;
- Potential fixed noise impacts arising from operation plant and vehicle repair / testing activities in the proposed Project and road carriageways in the vicinity of the proposed Project;
- Potential sewerage impacts arising from the workforce in the proposed Project;
- Potential landscape and visual impacts arising from the operation of the proposed Project;
- Potential waste management implications arising from the vehicle repair / testing activities of the proposed Project;
- Potential hazard to life arising from the neighbouring dangerous goods (DGs) processing and storage facilities as well as the proposed Project; and
- Potential cumulative environmental impacts of the proposed Project, through interaction or in combination with other existing, committed and planned projects in the vicinity of the proposed Project, and that those impacts may have a bearing on the environmental acceptability of the proposed Project.

2.9.2. The associated environmental nuisances have been adequately assessed in the following sections.

3. AIR QUALITY IMPACT ASSESSMENT

- 3.1. Air quality impact assessment was conducted for the construction and operation phase of the proposed Project within the 500 m study area in accordance with the requirements of the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM).
- 3.2. Air quality impact arising from the Project was assessed by air quality models commonly used by the EPD.

Construction Phase

- 3.3. The potential dust emission sources are mainly from the construction work activities of the excavation and wind erosion at the work site. As there would be no major earthworks to be carried out such that the amount of excavated materials generated would be small, no adverse dust impact would be anticipated at the representative air sensitive receivers (ASRs) with the implementation of sufficient dust suppression measures as stipulated under the Air Pollution Control (Construction Dust) Regulation and good site practices.



Watering of dusty construction areas



Imposing speed controls for vehicles



Covering temporary stockpiles

Operation Phase

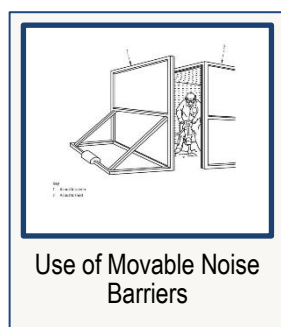
- 3.4. During operation of the proposed Project, no adverse air quality impacts is anticipated as there would be limited vehicular emissions from the repair / testing and parking activities of the proposed Project, considered with cumulative effect of emissions from open roads networks within the 500m study area.
- 3.5. Quantitative air quality impact assessment on air pollutants such as NO₂, PM₁₀ and PM_{2.5} indicated that the pollutant concentrations under the worst case scenario are in compliance with the prevailing Air Quality Objectives (AQOs). No mitigation measure is required.
- 3.6. Analysis of odour emissions from RCVs was conducted. Given the initiatives and management practices as listed below, potential odour and water dripping nuisance associated with the operation of the proposed Project is anticipated to be negligible:
- All RCVs will be fully off-loaded in designated refuse disposal sites and washed thoroughly in the Island East Transfer Station or disposal site before returning to the FEHD Depot;
 - No maintenance work of RCVs will be taken place in the proposed Project;
 - Extensive cleansing and clearance of refuse residual inside the compactor of the RCVs would not be carried out within the proposed Project;
 - Only washing of the body shell of RCVs would be taken place either at the manual washing bay or passing through the automatic vehicle washing machine;
 - All RCVs will be wiped dry before leaving proposed Project;
 - All RCVs will also be equipped with metal tailgate cover and deodourising system with an odour removal efficiency of 85% or above; and
 - Sufficient parking spaces to avoid the chance of RCV queuing at the building entrance.
- 3.7. Lastly, the estimated emission rates of the organic and inorganic chemicals emanated due to the operation of the GL Specialist Laboratory are to be of minimal amount and fulfil the threshold limit value / permissible exposure limit of relevant occupational safety and health requirements. Potential impacts associated with volatile chemicals emissions of the proposed Project are negligible.



4. NOISE IMPACT ASSESSMENT

Construction Phase

- 4.1. Assessment of construction noise, including cumulative impact from the proposed Project and concurrent project, has been conducted. The assessments were carried out based on the guidelines in the Technical Memorandum on Noise from Construction Work other than Percussive Piling issued under the Noise Control Ordinance (NCO). Based on the verified tentative construction programme and construction plant inventory, the potential construction noise impacts on representative noise sensitive receivers (NSRs) were assessed.
- 4.2. With the implementation of the recommended mitigation measures such as the use of quality powered mechanical equipment (QPME), limiting the number of construction plants operating concurrently, using movable noise barriers and adopting good site practices, adverse construction noise impact is not anticipated except at the Hong Kong Institute of Vocational Education (Chai Wan) (NSR 2). As it is close to the site, NSR 2 is predicted to expose to construction noise exceeding the relevant noise standard during examination period when site formation, excavation and filling works take place in mid-2016. The duration of the exceedance is expected to be around 7 days. It is recommended that more detailed construction planning, which includes the arrangement on work sequence and plant locations, etc. before actual construction work is undertaken by the Contractor, and practicable noise mitigation measures should be implemented according to the actual site condition and constraints, in order to reduce the construction noise impact. In this connection, the Contractor should keep close liaison with the nearby educational institutions to obtain the examination schedule and should control noise from their construction work such as avoiding concurrent operation of noisy PME, and /or reduction in percentage on-time of PME during school examination periods. A Construction Noise Management Plan shall be provided by the Contractor before commencement of the construction to avoid noise exceedance.
- 4.3. Environmental monitoring and auditing procedures (EM&A) are recommended in EM&A manual to ensure the implementation of construction noise mitigation measures and a noise complaint handling mechanism.



Operation Phase

- 4.4. Noise from fixed plant including vehicle repair / testing activities and mechanical ventilation and air conditioning system (MVAC) equipment and other fixed noise sources have been assessed according to the *Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites* issued under the NCO. With the implementation of the mitigation measures for vehicle repair / testing activities (including carrying out vehicle repair / testing activities at covered area during daytime and evening as far as possible), and the selection of MVAC equipment and other fixed noise sources with mitigation measures where necessary to meet the maximum allowable sound power levels, adverse fixed noise impact on the NSRs will not be anticipated during operation phase.
- 4.5. The road traffic noise contribution generated by the proposed Project has been assessed for Year 2033 which would be the worst year within 15 years after commencement of the operation. The assessment results demonstrated that with the low level of traffic generation from the proposed Project, operation of the proposed Project will have no significant contribution to road traffic noise impact on the NSRs. No mitigation measure is necessary.

5. WATER QUALITY AND SEWERAGE IMPACT ASSESSMENT

- 5.1. Potential water pollution sources have been identified as construction site run-off, sewage from workforce, and potential risk of chemical spillage. Mitigation measures including the implementation of the construction site practices in accordance with the EPD's ProPECC PN 1/94 Construction Site Drainage, provision and management of portable chemical toilets on-site as well as preventive measures for avoiding accidental chemical spillages are recommended to mitigate any adverse water quality impacts. With the implementation of these measures, adverse residual impacts would not be anticipated.
- 5.2. Furthermore, there would be insignificant sewerage and sewage treatment implications during the operation of this Project, and adverse water quality impact would not be anticipated with the implementation of the recommended mitigation measures based on the findings of this EIA study.



6. LANDSCAPE AND VISUAL IMPACT ASSESSMENT

- 6.1. A landscape and visual impact assessment covering a 500 m study area for assessment of landscape impacts and the visual envelop for assessment of visual impacts has been conducted.

Landscape Impact

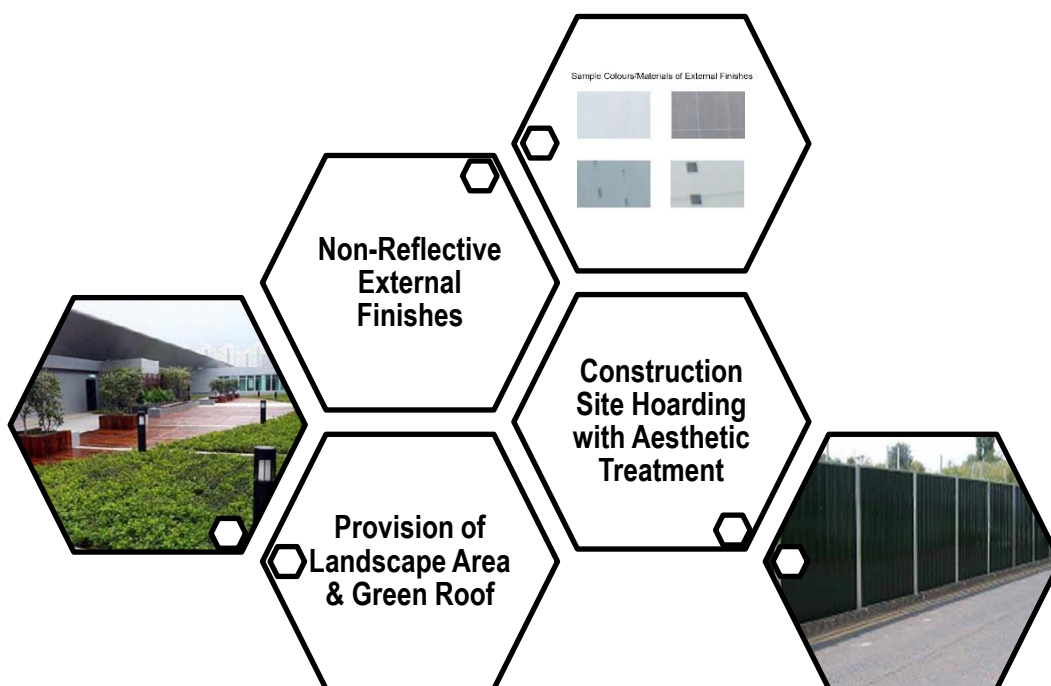
- 6.2. The potential sources of landscape impact of the proposed Project during construction and operation phase mainly arisen from site clearance (i.e. removal of existing vegetation) and the presence of the permanent structure and its operation respectively.
- 6.3. The proposed Project would have no impact on any landscape resources and landscape character area within the study area except for the 12 trees that are of direct conflict with the proposed Project and therefore proposed to be felled. The impacts are slightly adverse due to the minor loss of greenery. With proper implementation of the proposed mitigation measures, such as the provision of landscape area and compensatory planting, the magnitude of change would be minimised and therefore the residual landscape impact would be insubstantial.

Proposed Master Landscape Plan



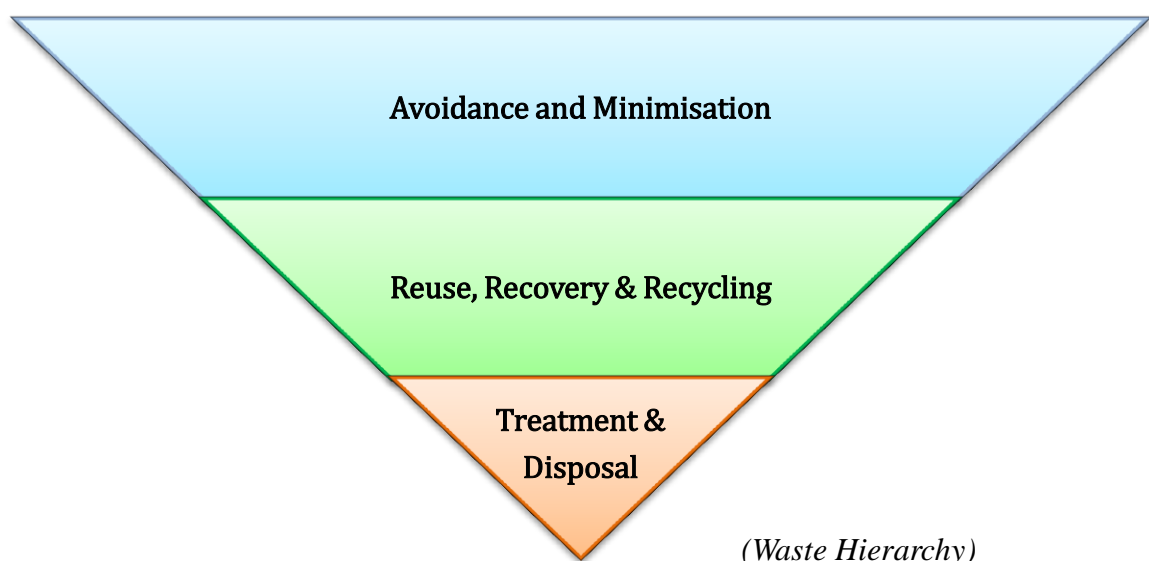
Visual Impact

- 6.4. The potential sources of visual impacts from the proposed Project during construction and operation phase mainly arisen from the operation of site works (i.e. site clearance work, stockpiling of construction equipment, etc.) and the presence of permanent structure of the proposed Project respectively.
- 6.5. The anticipated visual impacts from the proposed Project are generally slightly to moderately adverse during construction phase mainly due to slightly to partially obstructed views of construction activities. Following the completion of construction activities, the landscape planting and green roof of the proposed Project act as visual screen to visual sensitive receivers as well as enhance the visual quality and amenity value by the provision of a more greenery view to the neighbourhood as compared to the existing condition of the Project site, which consists of temporary works area with exposed soil and trees in poor health condition. The residual visual impact in operation phase is slightly adverse to insubstantial in general.
- 6.6. Comparing the original setting of the Project site prior to the proposed Project, where trees in poor health and form with low amenity value are located, the overall landscape character and visual quality of the Project site would be improved with the provision of landscape design, including the incorporation of hard landscape design and the provision of landscape planting on Level 1 and green roof. Therefore, the landscape character and visual quality of the Project site have been complemented and the landscape and visual impact from the proposed Project is considered as acceptable with mitigation measures.



7. WASTE MANAGEMENT IMPLICATION ASSESSMENT

- 7.1. The types of waste that would be generated during the construction and operation phases of the proposed Project have been identified. The potential environmental impacts that may result from these waste materials have been assessed in accordance with scope outlined in clause 3.4.8 and Appendix E1 of the EIA Study Brief as well as the criteria and guidelines stated in Annex 7 and Annex 15 of the EIAO-TM.
- 7.2. The major waste types generated from construction activities will include construction and demolition (C&D) materials and C&D wastes from the removal of paved ground, site formation, foundation and main building construction; chemical waste from construction plant maintenance activities; and general refuse from the construction workforce. No excavation / dredging of sediment is anticipated. Provided that all these identified wastes are handled, transported and disposed of in strict accordance with the relevant legislative and recommended requirements and that the recommended good site practices are properly implemented, no adverse environmental impact is expected during the construction phase.
- 7.3. During the operation phase, the key waste types generated will include general refuse and chemical waste arising from office and vehicle repair / testing activities of the proposed Project. Provided that all these wastes are handled, transported and disposed of in strict accordance with the relevant legislative requirements and the recommended good site practices are properly implemented, no adverse environmental impact is expected during the operation phase.
- 7.4. Provided that the recommendations are properly implemented, adverse residual impact is therefore not anticipated during both the construction and operation phases of the proposed Project.



8. LAND CONTAMINATION ASSESSMENT

- 8.1. Historical and current land uses were reviewed and site walkover of the Project site were undertaken. Other relevant information collected from the related government departments were also reviewed. With reference to the findings, land contamination impacts associated with the construction and operation of the proposed Project is not anticipated.
- 8.2. The operation of the proposed Project is not anticipated to lead to quantifiable adverse land contamination impacts with proper site practice for handling, storage, transportation, collection and disposal of DGs, chemical and chemical waste.



9. HAZARD TO LIFE ASSESSMENT

- 9.1. A hazard to life assessment has been conducted for the construction phase and operation phase of the Chai Wan Government Complex and Vehicle Depot (the proposed Project) associated with the DG stores and all neighbouring hazardous installations.
- 9.2. Based on the results of the hazard to life assessment for the operations of the existing Sinopec HK Oil Terminal Chai Wan at Chong Fu Road, Sinopec Petrol-cum-LPG Filling Station at Chong Fu Road, ExxonMobil Petrol-cum-LPG Filling Station at Sheung Mau Road, the New World First Bus Chong Fu Road Permanent Depot, the Citybus Chai Wan Bus Depot at Shueng On Road and the LPG wagon parking site at the junction of Sheung On Street and Sheung Ping Street, the risk levels in the construction year to the construction worker and in the operation year to the future occupants of the proposed Project have been considered to be in compliance with the risk guidelines of Section 2 of Annex 4 of the EIAO TM. The operation of the proposed Project has been concluded to pose no off-site risk.
- 9.3. With regards to the cumulative risk in the assessment year of 2018 that has taken into account the operation of the proposed Project and all hazardous installations, the risk level has been also considered to be in compliance with Section 2 of Annex 4 of the EIAO TM.

10. ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

- 10.1. Environmental monitoring and audit (EM&A) programme will be implemented during the construction of the Project to ensure the effectiveness of the recommended mitigation measures and compliance with relevant statutory requirements. Details of the EM&A works have been specified in the EM&A Manual. The EM&A Manual contains full details of proposed baseline and compliance monitoring programme, implementation schedule of the environmental protection / mitigation measures, EM&A reporting procedures, and complaint handling procedures.

11. CONCLUSIONS

- 11.1. This EIA Report has assessed the potential environmental impacts associated with the construction and operation of a new vehicle depot-cum-office building, which is located on an urbanised area at the junction of Sheung Tat Street, Sheung On Street and Sheung Mau Street. The EIA has been conducted in accordance with the EIA Study Brief No: ESB-267/2014 issued under the EIAO for this project. The findings of this EIA Study have identified the nature and extent of environmental impacts arising from construction and operation of the project. During the EIA process, environmental control measures were proposed and incorporated into the planning and design of the project to achieve the compliance with relevant environmental legislation and standards during the construction and operation phases.