

Our Ref: TCS01267/22/300/L0138

**AECOM**  
**12/F, Grand Central Plaza, Tower 2**  
**138 Shatin Rural Committee Road**  
**Shatin, Hong Kong**

Attn: Mr. Alex Chan

**20 February 2024**  
By email

Dear Sir,

**Re: Contract No. YL/2021/04**  
**Site Formation and Infrastructure Works for**  
**Yuen Long South First Phase Development – Contract 2**  
**Environmental Permit No. EP-549/2018 Condition 2.8**  
**Environmental Permit No. EP-553/2018/A Condition 2.6**  
**Supplementary Contamination Assessment Plan (Part 2) (Version 3.1)**

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With the respect to the Supplementary Contamination Assessment Plan (Part 2) (Version 3.1) submitted by the Main Contractor of Contract 2 (CREC Joint Venture), we would like inform you that we have no adverse comment and hereby certify the captioned submission.

Should you have any queries or require further information, please feel free to contact us or the undersigned at Tel: 2959-6059 or Fax: 2959-6079.

Yours sincerely,  
For and on Behalf of  
**Ford Business International Limited**



Tam Tak Wing  
Environmental Team Leader

Encl.

cc Telexmax (IEC)

Mr. Nelson TAM

By email



Our Ref. : TEEM/816/24/L/035/JYT  
Job No. : TM0816-22  
Date : 21 February 2024

**By Email**

**AECOM Asia Co., Ltd.**  
12/F, Grand Central Plaza, Tower 2  
138 Shatin Rural Committee Road  
Shatin, Hong Kong

Attn.: Mr. Alex Chan

Dear Alex,

**Contract No. YL/2021/04**  
**Site Formation and Infrastructure Works for**  
**Yuen Long South First Phase Development – Contract 2**  
**Independent Environmental Checker’s Verification Letter for**  
**Environmental Permit No. EP-549/2018 Condition 2.8 & EP-553/2018/A Condition 2.6**  
**Supplementary Contamination Assessment Plan (Part 2) (Version 3.1)**

With reference to the Supplementary Contamination Assessment Plan (Part 2) (Version 3.1) submitted by the Main Contractor (CREC Joint Venture) under the Contract 2, we are pleased to inform that we have no adverse comment on the captioned submission and hereby verify this submission.

Should you have any queries, please do not hesitate to contact the undersigned at (852) 3610 8701 or our Mr. Michael Fong at (852) 3610 8706 or our Mr. Vince Lo at (852) 3610 8787 or our Mr. Jacky Tsang at (852) 3610 8735.

Yours faithfully,

For and on behalf of  
**Telemax Environmental and Energy Management Limited**



Ir Nelson Tam  
Independent Environmental Checker (IEC)

c.c. Ford Business International Ltd. (ET) - Attn: Mr. Tam Tak Wing / Ms. Nicola Hon

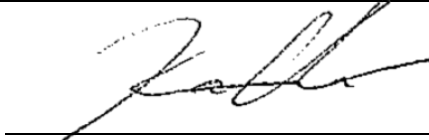
EM / NT / MF / VL / JYT



Comments from EPD	Consultant's Response to Comments
<p>a.) S3.6.1, S8.1.3                      Per our tele-conversation (Jeremy/Eric) on 15.2.2024, it is noted that land resumption of E135 will not be completed in First Phase of YLS Development, which might be completed in the subsequent phases. Please note that a separate SCAP for E135 shall be submitted by the Client/contractor of subsequent phases for EPD's approval prior any construction works at E135.</p> <p>By copy to Kenneth/CEDD, please confirm whether the abovesaid is correct. If affirmative, please consider to revise S.8.1.3 to read as "Due to land handover issues at E135, this a separate SCAP would be revised submitted by the Client or other Contractors of Contract 2 involved in subsequent phases (if necessary)."</p>	<p>S3.6.1                      "Any construction works at E135 are strictly prohibited until land contamination assessment is completed" has been revised to "A separate SCAP for E135 shall be submitted by the Client/contractor of subsequent phases for EPD's approval before commencing any construction works at E135."</p> <p>S8.1.3                      The sentence has been revised accordingly.</p>
<p>b.) S.7.1.1 Line 5-6                      Please review whether "the southern part of Assessment Area" should be "the northern part of Assessment Area". If affirmative, please revise the relevant parts of the report as appropriate.</p>	<p>S7.1.1                      The last sentence has been revised as "The remaining area of the Assessment Area, i.e. E135, shall be addressed in a separate SCAP submission."</p>
<p>c.) Please consider to remove S7.1.4 to avoid confusion.</p>	<p>S7.1.4 has been deleted.</p>

# Civil Engineering and Development Department

**YL/2021/04 - Site Formation and  
Infrastructure Works for Yuen Long South  
First Phase Development - Contract 2  
Final Supplementary Contamination  
Assessment Plan (Part 2)  
(Version 3.1)  
February 2024**

Certified By   
(Land Contamination Specialist: Karina Chan)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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## 1 INTRODUCTION

### 1.1 Background

- 1.1.1 The Chief Executive announced in the 2011-12 Policy Address that the Government would explore the possibility of converting into housing land some 150 hectares of agricultural land in North District and Yuen Long currently used mainly for industrial purposes or temporary storage, or which is deserted. Furthermore, the Policy Addresses in Year 2016 and Year 2017 also mentioned the development of Yuen Long South (YLS), generally bounded by Yuen Long Highway, Kung Um Road and Tai Lam Country Park, as a medium and long-term land supply measure. Subsequently in November 2012, CEDD and PlanD jointly commissioned the YLS Planning and Engineering Study (YLS P&E Study) under Agreement No. CE 35/2012 (CE) to carry out planning, engineering and environmental studies with a view to formulating a development proposal for the YLS Development. The YLS Development Area is illustrated in **Appendix A**.
- 1.1.2 The YLS P&E Study (“the Project”) is a Designated Project (DP) under Item 1 Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO). The YLS Development also covers the ten individual Schedule 2 DPs. An Environmental Impact Assessment (EIA) Report for the DP was approved with conditions under EIAO in November 2017 (No.: AEIAR-215/2017) in accordance with the EIA Study Brief (No. ESB-246/2012) and the Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM).
- 1.1.3 The YLS development, divided into First Phase (Stages 1 and 2A), Second Phase (Stage 2B) and Third Phase (Stages 3 and 4) is to be implemented in phases. The draft RODP for the Project was promulgated to the public on 8 August 2017 after public consultation, with 1,730,00m<sup>2</sup> for domestic (including about 28,500 of planned new flats) and 577,00m<sup>2</sup> for non-domestic developments. Later on, CEDD and PlanD had proposed to increase the development intensity of the area so as to meet the increasing demand for the public housing, community facilities, and sites for brownfield operations. Accordingly, a Planning and Engineering Review on the RODP had been undertaken in which a series of planning and technical assessments were conducted. The RODP had been revised (“the Revised RODP”) for a total population of about 101,200, of which about 98,700 would be housed in about 32,850 new flats (constituting about 15% increase as compared with the RODP). The revised RODP was promulgated in May 2020. The YLS phasing plan and the revised RODP that illustrate the planned development areas for different stages and future land uses in YLS are attached in **Appendix A**.
- 1.1.4 During the EIA stage and the assignments for the design and construction stages for the Project, land contamination assessments were conducted, entailing site appraisals and identification of land contamination issues within the assessment areas of the YLS. Three past Contamination Assessment Plans (“the Past CAPs) were prepared under different agreements for the stages, namely “the CAP\_EIA”, *Agreement No. CE 35/2012 (CE) Planning and Engineering Study for Housing, Sites in Yuen Long South – Investigation*; “the CAP\_A9-03”, *Agreement No. CE 32/2017 (CE) Yuen Long South development – stage 1*; & “the CAP\_A13-05”, *Agreement No. CE 58/2019 (CE) Yuen Long South development – stage 2 works, phase 1– Design and Construction*.
- 1.1.5 In 2017, a total of 697 potentially contaminated sites (“the Sites“) were identified, as recorded in the CAP\_EIA, within the assessment area of the EIA study for the entire YLS development. In 2022, site-reappraisal was conducted, and the findings were documented in

CAP\_A9-03 and CAP\_A13-05 which were submitted and agreed by EPD. The findings of the Past CAPs are summarise as follows:

- In the EIA report under the P&E study, 697 potentially contaminated sites were identified within the assessment area. The potentially contaminated sites were inaccessible for detailed site walkover or still in operation at the time of the EIA study. It was recommended that further site visit to the Sites be conducted once future development of these Sites is confirmed and that site access is available in order to identify the need for SI or any additional hotspots as a result of the on-going land contaminating activities.
- According to CAP\_A9-03, 64 of the 697 Sites would be would be affected by the Project, in which only 9 were accessible during site walkover and site re-appraisal. Subject to the land resumption programme in Q1/2023 in construction stage, the remaining inaccessible potentially contaminated sites within private land lots shall become accessible when further site walkover and site re-appraisal shall be carried out.
- According to CAP\_A13-05, 93 of the 697 Sites would be affected by the Project. As all of the affected Sites were inaccessible for site walkover, it was recommended that further site walkover should be carried out at the time of land resumption when the Sites are accessible to assess the latest conditions and land uses within the Sites. And further Supplementary CAP(s) incorporating the findings of the further site walkovers and any updated sampling and testing strategy should be prepared and submitted to EPD for approval.

1.1.6 Under the Contract No. YL/2021/03 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 1 (“the Contract 1”), a Contamination Assessment Plan (“the CAP (Contract 1)”) was carried out for Contract 1 upon resumption of the land within the assessment area under the contract.

1.1.7 According to the Past CAP(s), incorporating the findings of the further site walkovers and site reappraisal and any updated sampling and testing strategy, should be prepared and submitted to EPD for approval prior to conducting any SI works. Following the completion of the SI works, CAR(s) will be prepared to present findings of the SI works. If contamination is identified, RAP(s), recommending the specific remediation measures, will also be submitted to EPD for approval. Any contaminated soil and groundwater should be treated according to EPD's approved RAP(s).

1.1.8 The Contract No. YL/2021/04 – Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2 (“the Contract 2”) was commissioned by CEDD on November 2022 to carry out the works within the Works Area, as illustrated in **Figure 1-1**, for the Contract with the following scope:

- (a) site clearance and formation (including land decontamination works);
- (b) nullah deckings at various locations;
- (c) construction of proposed Road D1, Road D2, Road L1A, Road L1B and slip road at the existing Shap Pat Heung Interchange;
- (d) improvement to sections of existing Kung Um Road, Kiu Hing Road, Wong Nai Tun Tsuen Road, Lam Tai East Road, Tai Kei Leng Road, Tai Tong Road, Lam Hi Road, Lam Yu Road, Shap Pat Heung Road and Sham Chung Road;



- (e) construction of associated works including water mains, drainage works and sewerage systems, cycle tracks, footpaths, common utility tunnel, box culverts, junction improvement works, slope works, retaining walls, landscaping works, electrical and mechanical works and other ancillary works; and
- (f) implementation of environmental mitigation measures (including noise semi-enclosures, noise barriers and low-noise road surfacing) and environmental monitoring works for the works mentioned above.

## **1.2 The Need & Scope of this Supplementary Contamination Assessment Plan**

- 1.2.1 With reference to Past CAPs, a site re-appraisal on the Sites within the works area in Contract 2 (“the Assessment Area”) should be carried out before site clearance. However, as part of the Assessment Area also falls within the land contamination assessment under Contract 1, the land contamination assessment for the overlapping region is excluded from the scope of this site re-appraisal and SCAP, as illustrated in **Figure 1-2a**. The site appraisal for the accessible concerned Sites, Assessment Area (Part 1) i.e. the northern part of Assessment Area excluding the area covered in Contract 1, have already been carried out and findings were provided in the SCAP dated Aug 2023. As the land resumptions for most of the remaining Sites for the Assessment Area (Part 2), i.e. the southern part of Assessment Area, within the site boundary of Contract 2 have been completed, the findings of the relevant accessible Sites shall be addressed in this SCAP. The Assessment Area and Sites location plan are illustrated in **Figure 1-1** for all Assessment Areas, **Figure 1-2a** for Assessment Area (Part 1), and **Figures 1-2b to 1-2c** for Assessment Area (Part 2). With reference to Figure 1a of EP-553/2018A & Figure 1 of EP-549/2018, the Assessment Area (Part 2) has encroached into the schedule 2 DPs under the 2 of the EPs for the Project. The locations of the DPs, under the 2 EPs, within the Works Area are illustrated in **Figure 1-1**.
- 1.2.2 A review of the Past CAPs shall be conducted to confirm whether the proposed SI works in the CAPs are still valid, and Supplementary CAP(s) (SCAP), presenting findings of the review, the latest site conditions and any updated sampling strategy and testing protocol, should be submitted to EPD for endorsement. Subsequently, the SI works should be carried out according to EPD’s agreed SCAP, with Remediation Action Plan (RAP) if contamination is confirmed and remediation is deemed necessary, for approval by the Director. After the SI works are conducted, Contamination Assessment Report (CAR), with Remediation Action Plan (RAP) if contamination is confirmed and remediation is deemed necessary, shall be prepared to present the sampling and testing results of SI and submitted to EPD for approval. If remediation is required, the Permit Holder shall conduct the remediation in accordance with the approved RAP(s) and submit Remediation Report(s) to document the remediation programme for approval by the Director. It should be noted that no construction works or development shall be carried out within the Assessment Area prior to the approval of the Remediation Report (if necessary).
- 1.2.3 As such, Cinotech Consultants Limited (Cinotech) was commissioned by *CREC Joint Venture* (“the Client”) on behalf of the CEDD to prepare this SCAP to account for the findings from site appraisal and information available to propose a sampling plan for site investigation of the works for the Contract 2.

## **2 LEGISLATION, STANDARDS, GUIDELINES AND CRITERIA**

### **2.1 Statutory Framework**

2.1.1 The land contamination assessment in this SCAP has been prepared with reference to the following documents:

- Guidance Manual for Use of Risk-Based Remediation Goals for Contaminated Land Management (RBRGs Guidance Manual), EPD (Revised on April 2023)
- Practice Guide for Investigation and Remediation of Contaminated Land (PG), EPD (Revised on April 2023)
- Guidance Note for Contaminated Land Assessment and Remediation (GN), EPD (Revised on April 2023).

2.1.2 The following legislation, documents and guidelines may cover or have some bearing upon the assessment of contamination and the handling, treatment and disposal of contaminated materials for the Project:

- Waste Disposal Ordinance (WDO) (Cap 354);
- Waste Disposal (Chemical Waste) (General) Regulation (Cap 354C);
- Dangerous Goods Ordinance (Cap 295);
- Water Pollution Control Ordinance (WPCO) (Cap 358); and
- Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

### 3 SITE APPRAISAL

#### 3.1 Objectives

3.1.1 The Site Appraisal in this SCAP shall review the findings from the Past CAPs and to supplement those for the appraisal of the Site's current situation to fill the information gap, the Site Appraisal shall assess the land contamination potential via the following methods:

- Review of available aerial photos for past years up to 2022
- Inquiry with the Environmental Protection Department (EPD) and Fire Services Department (FSD) on potential land contamination issues in past years up to 2022
- Carry out site walkover and conduct interview with current/past users to assess if changes were made between CAP-2022 and early 2023.

#### 3.2 Future Land Use and Assessment Criteria

##### **Risk-Based Remediation Goals (RBRGs)**

3.2.1 In accordance with Section 2.2 of the PG, the site's future land use and the appropriate set of RBRGs corresponding to the land use scenarios should be determined prior to the site appraisal. RBRGs are threshold contaminant concentrations used as assessment criteria in the SI, below which hazards or risks to human health arising from exposure to soil and/or groundwater are considered minimal. Four sets of RBRGs for different land use scenarios were developed to reflect the typical physical settings in Hong Kong under which people could be exposed to contaminated soil and groundwater. The four RBRGs land use scenarios are as follows:

- urban residential;
- rural residential;
- industrial; and
- public parks.

3.2.2 The exposure characteristics of the site should be compared against the four land use scenarios to facilitate the selection of a land use scenario that most closely matches the exposure characteristics of the site. If the future land use is unknown, the most stringent set of RBRGs should be adopted. Land contamination assessment on the potentially contaminated sites would need to be evaluated against the RBRGs and if there were presence of non-aqueous phase liquid (NAPL), the soil saturation limit (C<sub>sat</sub>) and solubility limit, as stipulated in Table 2.1 and Table 2.2 of the Guidance Manual.

3.2.3 With reference to Revised RODP, as the future land use of the Assessment Area were still under planned to be residential, school and road, it is classified as "Urban Residential", "Rural Residential" and lower of "Industrial or Public Park" respectively in accordance with the EPD's Guidance Manual for Use of RBRGs for Contaminated Land Management. As the Assessment Area is zoned as "Residential (Group A)1" according to the approved OZP, the future Assessment Area shall be filled with residential developments, as befits the characteristics of an "Urban Residential land use

scenario". Nevertheless, the RBRGs for each of the Sites shall be adopted with reference to the future land uses of the Sites, according to the information provided by the Client, which are detailed in **Table 3-5**.

### **Chemicals of Concern (CoCs)**

3.2.4 RBRGs have been developed for 54 CoCs which were selected on the basis that either they are known to occur in the Hong Kong environment, or are in use locally. With reference to Table 2.3 of EPD's Practice Guide for Investigation and Remediation of Contaminated Land (PG), potential sources of contamination in the Project should be identified for determining the parameters for chemical analysis in the SI as follows:

- Metals: antimony, arsenic, barium, cadmium, chromium (III), chromium (VI), cobalt, copper, lead, manganese, mercury, molybdenum, nickel, tin and zinc;
- Petroleum Carbon Ranges (PCRs): carbon ranges C<sub>6</sub> – C<sub>8</sub>, C<sub>9</sub> – C<sub>16</sub> and C<sub>17</sub> – C<sub>35</sub>;
- Volatile Organic Compounds (VOCs): acetone, bromodichloromethane, 2-butanone, chloroform, methyl tert-butyl ether (MTBE), methylene chloride, styrene, tetrachloroethene (TCE), trichloroethene, benzene, toluene, ethylbenzene and xylenes (BTEX);
- Polycyclic Aromatic Hydrocarbons (PAH) : acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene.
- Semi-Volatile Organic Compounds (SVOCs): PAH + bis(2-ethylhexyl)phthalate + Hexachlorobenzene + Phenol
- Polychlorinated Biphenyls (PCBs)
- Other Inorganic Compounds – cyanide, free
- Organometallics – TBTO

## **3.3 Site Geology & Hydrogeology**

3.3.1 The Assessment Area is predominantly overlain by superficial deposits, Terraced Alluvium (Qpa) and Alluvium (Qa) in the central and eastern parts. Moreover, according to the published 1:100,000-scale geological map of Hong Kong, a northeast-southwest trending fault, which belongs to San Tin thrust fault, passes through the center of the Development Site. The San Tin thrust fault is a northwest dipping low angle thrust fault that runs across the northwestern New Territories.

3.3.2 In addition, with reference to recent Ground Investigation works, groundwater level monitoring records from standpipes and piezometers revealed that groundwater levels are generally shallow at about 2 m below the ground surface within the flat land.

### 3.4 Review of Historical Land Uses

- 3.4.1 With reference to the Past CAPs, a review of aerial photographs were undertaken to evaluate the likelihood of potential contamination associated with past land uses within the Site up to 2019, the review on the Aerial Photos taken between 2019 and 2022 have been supplemented in this SCAP. The reviewed aerial photos for the Assessment Area (Part 2) are attached in **Appendix A** and the land use histories of the Site are summarised in **Table 3-1** below.

**Table 3-1 Historical Land Use Changes**

Year	Aerial Photo No./ Reference <sup>[1]</sup>	Observations	Land Use
2022	E146788C	<ul style="list-style-type: none"> <li>No significant changes are recorded.</li> </ul>	Residential/ Agriculture/ Warehousing/ Vehicle services
[1] Aerial photos are from Hong Kong Maps Service 2.0 provided by Lands Department.			

### 3.5 Inquiry with EPD & FSD

- 3.5.1 Information was requested from FSD and EPD's Regional Office (North) on the history of operation and land use of the Works Areas. The EPD was consulted with regard to any records of chemical waste producer (CWP). The FSD was consulted with regard to any records of dangerous goods licence(s). Both departments were also inquired on any reported accidents or spillage/leakage incidents within Assessment Area. The correspondences from EPD and FSD are documented in **Appendix C**. **Table 3-2** below shows the summary of the response from Government Department.

**Table 3-2 Summary of Response from Government Department**

Government Department	Response
Environmental Protection Department Regional Office (North)	For accidents or spillage/leakage incidents, there is no reported chemical spillage accidents in the past five years.
Fire Services Department	No records of dangerous goods license were found, however, fire incidents / incidents of spillage/ leakage of dangerous goods were found, which is detailed in <b>Section 3.5.3</b> .

- 3.5.2 The record of CWP was requested from EPD for inspection, and the registry was inspected on 18<sup>th</sup> May 2023 at EPD's office. The findings from the inspection generally concur with those reported in the Past CAPs with some additional CWPs identified for the Works Area in the Assessment Area (Part 2), which are summarised in the **Table 3-3**.

**Table 3-3 Recorded Chemical Waste Producers within Works Area in the Assessment Area (Part 2)**

Site ID	Licensee Name	Status	Premises Address	Nature of Business
E99	New Martin Motors Service Co.	Valid	Lot 1484, DD119, Kung Um Road, Ma Tin, Yuen Long, N.T.	Repair Motors Service
E100	Invader Professional Cars Beauty Limited	Invalid	1-B Lot 1486, DD119, Tin Liu Tsuen	Automobile Maintenance
E115m, E119, E120, E121	Yat Cheong Motorcar Service	Invalid	Lot 1567-1663, DD119, Kung Um Road, Pak Sha Tsuen, Yuen Long, N.T.	Car Dismantling
	Yat Cheong (China) Development Limited	Invalid	Lot 1567-1663, DD119, Kung Um Road, Pak Sha Tsuen, Yuen Long, N.T.	Vehicle Trading
	Long Way Motor Service	Invalid	Lot 1567-1663, DD119, Kung Um Road, Pak Sha Tsuen, Yuen Long, N.T.	Automobile Maintenance
E119	Chan Chi Ho	Valid	Lot 1614, DD119, Kiu Hing Road, Yuen Long, N.T.	Garage
E119	Gingerman Trading Company Limited	Valid	330 Pak Sha Tsuen, Yuen Long, N.T.	Forklift Repairing
E121	Option Motors Limited	Valid	332A Pak Sha Tsuen, Yuen Long, NT	Vehicle maintenance
E136	Wing Lee Metal Trading Company Limited	Valid	Lot 1524, DD119, Tin Liu Tsuen	Battery refurbishment & electronics recycling
E137	Broad Stream Corporation Limited	Valid	DD119 Lots 1358, 1364 & 1367RP, King Um Road, Yuen Long, N.T.	Recycling and wholesale of electronic and metal products

3.5.3 According to the supplementary information on the recorded incident provided by FSD in the Appendix A of **Appendix C**, the types of incidents with potential land contamination issues are fuel leakage and rubbish fires. The recorded relevant incidents in the vicinity of the Works Area are summarised in **Table 3-4**. Out of the 22 incidents recorded, only 5 were within the Works Area, involving incidents types namely, vegetation fire, rubbish fire and No. 1 fire alarm. As only non-toxic flammable materials e.g. papers / vegetation were involved on paved ground, no additional land contamination issues were involved.

**Table 3-4 Recorded Relevant Incidents in the Vicinity of the Works Area**

No.	Date	Type of Incident	Address	Within Works Area ?	Remarks <sup>[1]</sup>
1	09-May-20	Vegetation Fire	Lamppost AD3965, near Kiu Hing Road	Y	Nil
2	19-Jul-20	Vegetation Fire	Tai Shu Ha West	N	Nil
3	29-Aug-20	Traffic Accident	Tai Shu Ha East, Lamppost H2588	N	Nil
4	14-Sep-20	Rubbish Fire	Tai Shu Ha East	N	Nil
5	13-Nov-20	No.1 Fire Alarm	Tai Shu Ha East	N	Nil
6	01-Dec-20	Vegetation Fire	Tai Shu Ha East	N	Nil
7	31-Jan-21	Vegetation Fire	Kiu Hing Road, Shap Pat Heung Road, near Lamppost BD1436	N	Nil
8	24-May-21	Vegetation Fire	Tai Shu Ha East	N	Nil
9	11-Jul-21	Rubbish Fire	Tai Shu Ha East	N	Nil
10	20-Aug-21	Vegetation Fire	Tai Shu Ha East	N	Nil
11	18-Sep-21	Traffic Accident	Lamppost FB1056, near Shap Pat Hexing Interchange	N	Nil
12	25-Nov-21	Rubbish Fire	Fenced open ground Tin Liu Tsuen	N	Nil
13	26-Nov-21	Rubbish Fire	Lamppost AD3965, near Kiu Hing Road	Y	Wooden pallets near the boundary of the Contract 2 caught fire.
14	10-Jan-22	Rubbish Fire	Lamppost BD0389, near Tai Tong Road	N	Nil
15	27-May-22	Fuel Leakage	Lamppost AD7849, near Tai Tong Road	N	Nil
16	13-Jun-22	Rubbish Fire	Lamppost BD0251, near Sham Chung Road	Y	Domestic waste e.g. wood / carton box located at the entrance of U16 in the paved area caught fire.
17	25-Jul-22	Electric Fire	Lamppost CD0059, near Lam Yu Road Pavement	N	Nil
18	24-Sep-22	Rubbish Fire	Pat Heung Road, near Lamppost BD1434	N	Nil

No.	Date	Type of Incident	Address	Within Works Area ?	Remarks <sup>[1]</sup>
19	04-Nov-22	Traffic Accident	Lamppost BD4365, near Kiu Hing Road	N	Nil
20	08-Nov-22	Traffic Accident	Lamppost BD0389, Near Tai Tong Road	N	Nil
21	08-Jan-23	Vegetation Fire	Lamppost BD2152, Near Kung Um Road	Y	Nil
22	03-Mar-23	No.1 Fire Alarm	Lamppost BD0251, near Kiu Hing Road	Y	Nil

[1] The details of the incidents are supplemented by the Resident Site Staff for the YLS site formation contracts.

### 3.6 Review of Site Walkover / Observations from Recent Site Walkover and Interviews with Current/Past Users

- 3.6.1 With reference to the Past CAPs, a site appraisal on the Sites (“the Assessment Area”) should be carried out before site clearance. For this SCAP’s reappraisal, the Assessment Area (Part 2) were visited between June and Aug 2023. Site appraisal for Sites E136 and E138 were conducted in October 2023 due to the delayed handover of the land. However, as the site appraisal for E135 was not able to be conducted due to land resumption issues, upon this reporting, it shall be processed once Site E135 is transferred to the Client’s possession. A separate SCAP for E135 shall be submitted by the Client/contractor of subsequent phases for EPD’s approval before commencing any construction works at E135. As some of the surveyed Sites were either located in the public areas or vacated or inaccessible for inspection, no interview with the Site owner could be conducted during the Site walkover. For sites that were still in operation, none of the current / past users of the Assessment Area (Part 2) were available for interview.
- 3.6.2 According to the site appraisal, apart from the existing roads, the Assessment Area (Part 2) was occupied mainly by access areas, vehicle maintenance, car parking, open storage area, and waste recycling. Most of the surveyed Sites were fully paved and in an acceptable condition generally, nevertheless, the pavement of some of the Sites were partially eroded. Since the associated land use or site conditions for some of the Sites could have potential land contamination issues, SI works are recommended for the potentially contaminated areas. The site walkover checklist and site photos recorded for the Sites visited for this SCAP are attached in **Appendix D** and **Appendix E**, respectively. The findings of the site appraisal for the Assessment Area are summarised in **Table 3-5** below. The Sites with potentially contaminated land uses/activities and requiring intrusive SI works, and also the inaccessible Site, are illustrated in **Figure 3-1**.



**Table 3-5 Site Appraisal Findings of the Assessment Area**

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
E77	West of Kung Um Road	30	- The Site was inaccessible for site inspection. Small container office was observed from the outside. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site	Warehousing / office in containers were observed. However, only the public / drainage area of the Site is located within the Works Area, and no land contaminating activities were recorded [App E1]	Warehouse (Outside Works Area)	Nil	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E98	West of Lam Tai West Road	2,680	- The site was inaccessible for site inspection. - Storage of construction equipment / machineries were observed from the outside. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.	- The Site provided the assembling, finishing and storage of the cranes and associate parts /equipment - The Site was mostly paved and generally in good condition. - Eastern part of the Site was occupied by an existing nullah that connects to the major nullah, located between	Construction Materials storage	Open area storage (2239m <sup>2</sup> )	Loading, unloading and storage of goods, fuel storage and transfer, maintenance of equipment and vehicles.	Open space, Residential – Urban high rise, Roads including pedestrian walkway	Urban Residential

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
				Lam Tai East and West Road. In addition, a site office & car park was found within the Temporary Storage area . [App E7]					
E99	West of Kung Um Road	40	The site was inaccessible for site inspection. - Based on peripheral observations, temporary structure and parked vehicles were observed within the site. - Based on findings of the EIA study, there was 1 valid CWP record registered for automobile maintenance for the site. - Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.	- Only car parking and no maintenance was recorded in the Works Area - The ground was fully paved. [App E1]	Vehicle Maintenance (Outside Works Area)	Car parking	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E100	West of Kung Um Road	20	The site was inaccessible for site inspection. - Gate closed. A warehouse-type structure was observed from the outside. - Based on findings of the EIA study, there was 1 invalid CWP record registered for automobile	- Access road for a warehouse - The ground was fully paved. [App E1]	Warehousing / Vehicle Maintenance (Outside Works Area)	Access	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential	N/A	N/A

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
			<p>maintenance for the site.</p> <p>- Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.</p>				land contamination activities are recorded in the Site.		
E102	West of Kung Um Road	2	<p>- The site was inaccessible for site inspection.</p> <p>- Gate closed. A large temporary structure was observed behind the closed gate.</p> <p>- Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.</p>	<p>- Access road for a warehouse</p> <p>- The ground was fully paved. [App E1]</p>	Suspected Warehouse (Outside Works Area)	Access	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E107	West of Kung Um Road	10	<p>- The site was inaccessible for site inspection.</p> <p>- Based on peripheral observations, a temporary structure with storage of wooden pallets and parked vehicle were observed within the site.</p> <p>- Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site</p>	<p>- Access road for a warehouse</p> <p>- The ground was fully paved. [App E1]</p>	Suspected Vehicle Maintenance (Outside Works Area)	Access	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are	N/A	N/A

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
							recorded in the Site.		
E108-1	West of Kung Um Road	10	-The site was inaccessible for site inspection - Gate closed. Temporary structures and containers were observed behind the closed gate. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site	The area was used for car parking only. [App E2]	Warehouse (Outside Works Area)	Car parking	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E109	West of Kung Um Road	30	The site was inaccessible for site inspection. - Suspected vehicle maintenance activities were observed from the outside. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.	Only landscaping area were occupied within the Works Area [App E2]	Suspected Vehicle Maintenance (Outside Works Area)	Landscaping	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
E111	West of Kung Um Road	20	- The site was inaccessible for site inspection. - Gate closed. Based on peripheral observation, some open storage of materials was observed behind The closed gate. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.	Only landscaping area occupies the area within the Works Area [App E2]	Suspected Open Storage Area (Outside Works Area)	Landscaping	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E113	West of Kung Um Road	10	- The site was inaccessible for site inspection. - Based on peripheral observations, temporary structures and parked vehicles were observed within the site. Exact site land use / activities cannot be confirmed. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.	- Access road / landscaping area outside the premises [App E3]	Suspected Vehicle Maintenance/ Open Area Storage (Outside Works Area)	Access / Landscaping	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E114	West of Kung Um Road	1	- The site was inaccessible for site inspection. - Based on peripheral observations, temporary structures and	Only landscaping area were occupied within the Works Area [App E3]	Suspected Warehouse (Outside	Landscaping	As the potential land contaminating activities of the	N/A	N/A

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
			parked vehicles were observed within the site. Exact site land use / activities cannot be confirmed. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.		Works Area)		Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.		
E115m	West of Kung Um Road	10	- The site was inaccessible for site inspection. - Based on peripheral observations, a large warehouse with several chemical drums and forklifts were observed. - Based on EPD information there were 3 invalid CWP records registered for car dismantling / vehicle trading / automobile maintenance for the site. - Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site - According to the EIA-CAP, vehicle maintenance was also recorded at the Site.	Only landscaping area were occupied within the Works Area [App E3]	Warehousing / Vehicle Maintenance (Outside Works Area)	Landscaping	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
E119	West of Kung Um Road	90	- The site was inaccessible for site inspection. - Based on peripheral observations, a large warehouse with several some chemical drums and vehicle maintenance activities were observed. - Based on EPD information, there were 2 valid CWP records registered for garage and forklift repairing for the site. There were also 3 invalid CWP records registered for car dismantling / vehicle trading / automobile maintenance for the site. - Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.	- The Site was occupied by 如興園 for warehousing and vehicle maintenance. - However, only car parking and access road on fully paved ground were found within the Works Area and no land contaminating activities were identified. [App E3]	Vehicle Maintenance (Outside Works Area)	Car parking / access	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	N/A	N/A
E120	West of Kung Um Road	30	- The site was inaccessible for site inspection. - Gate closed. Based on peripheral observations, large temporary structure was observed behind the closed gate. - Based on EPD information, there were 3 invalid CWP records registered for car dismantling / vehicle trading / automobile maintenance for the site.	Abandoned plantation was found within the Works Area [App E3]	Vehicle maintenance (Outside Works Area)	Idle	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are	N/A	N/A

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
			- Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.				recorded in the Site.		
E121	West of Kung Um Road	557	<ul style="list-style-type: none"> <li>- The site was inaccessible for site inspection.</li> <li>- Based on peripheral observations, a large warehouse for vehicle maintenance was observed.</li> <li>- Based on EPD information, there was 1 valid CWP record registered for vehicle maintenance for the site.</li> <li>- Based on EPD information, there were 3 invalid CWP record registered for car dismantling / vehicle trading / automobile maintenance for the site.</li> <li>- Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site</li> <li>- According to the EIA, open area storage was also recorded.</li> </ul>	<ul style="list-style-type: none"> <li>- The Site was occupied by 安迅汽車有限公司, and signs of vehicle maintenance was recorded within a temporary structure.</li> <li>- Only access road was observed in the remaining part of the Site. [App E3]</li> </ul>	Vehicle maintenance/ Open Area Storage	Vehicle maintenance (320m <sup>2</sup> )	Loading, unloading and storage of goods, fuel storage and transfer, maintenance of equipment and vehicles.	Mixed use, Roads including pedestrian walkway, Open space	Urban Residential
E135	East of Lam Tei East Road	230	<ul style="list-style-type: none"> <li>- The site was inaccessible for site inspection.</li> <li>- Based on peripheral observations, a warehouse-type temporary structure was observed.</li> <li>- Based on EPD / FSD information, there were no chemical spillage</li> </ul>	The Site was inaccessible for site inspection.	Warehouse	[3]	[3]	[3]	[3]



Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
			/ CWP / DG / incident records for the site						
E136	East of Lam Tei East Road	240	<ul style="list-style-type: none"> <li>- The site was inaccessible for site inspection.</li> <li>- Based on peripheral observations, waste recycling activities were observed at the site. Some excavators and oil drums on concrete paved ground were observed.</li> <li>- Based on findings of the EIA study, there was 1 valid CWP record registered for recycling for the site.</li> <li>- Based on EPD information, there was 1 valid CWP record registered for battery refurbishment and electronics recycling for the site.</li> <li>- Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.</li> </ul>	<ul style="list-style-type: none"> <li>- Most of area of the Site had been vacated, and the ground was fully paved in good condition.</li> <li>- Chemical waste storage area with a fully paved ground was identified at the west corner of the Site. [App E4]</li> </ul>	Open Area Storage/ Waste Recycling	Open Area Storage	Loading, unloading and storage of electrical wastes.	Residential – Urban high rise, Roads including pedestrian walkway	Urban Residential
E137	East of Lam Tei East Road	619	<ul style="list-style-type: none"> <li>- The site was inaccessible for site inspection.</li> <li>- Gate closed. Temporary structure was observed behind the closed gate.</li> <li>- Based on EPD information, there was 1 valid CWP record registered for recycling and wholesale of electronic and metal</li> </ul>	<ul style="list-style-type: none"> <li>- The Site had been vacated.</li> <li>- Chemical waste storage area was identified at the southeastern corner of the Site.</li> <li>- The ground was fully paved with</li> </ul>	Open Area Storage/ Waste Recycling (Outside Works Area)	Open area storage	Loading, unloading and storage of goods, fuel storage and transfer, maintenance of equipment and vehicles.	Residential – Urban high rise, Roads including pedestrian walkway	Urban Residential

Site ID <sup>[1]</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
			products for the site. - Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.	some cracks on the superficial layer of the concrete slab on the ground, but no stains were found. [App E5]					
E138	East of Lam Tei East Road	5	- The site was inaccessible for site inspection. - Gate closed. Temporary structure and some machineries were observed behind the closed gate. - Based on EPD information, there was 1 valid CWP record registered for recycling and wholesale of electronic and metal products for the site. - Based on EPD / FSD information, there were no chemical spillage / DG / incident records for the site.	- The Site had been vacated. [App E4]	Suspected Warehouse / Waste Recycling (Outside Works Area)	Open area	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are recorded in the Site.	Residential – Urban high rise, Roads including pedestrian walkway	N/A
E269	West of Kung Um Road	50	- The site was inaccessible for site inspection. - Gate closed. Some temporary structures were observed behind the closed gate. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.	- Only public access / drainage area was identified within the Works Area [App E6]	Warehouse (Outside Works Area)	Access / drainage area	As the potential land contaminating activities of the Site is restricted to outside of the Works Area, no potential land contamination activities are	N/A	N/A

Site ID <sup>(1)</sup>	Descriptions of Locations within the Assessment Area	Approximate Area (m <sup>2</sup> )	Site Observations and Remarks on Potential Land Contamination Issue		Land Use		Overall Recorded Potential Land Contamination Activities with Potential COCs <sup>[2]</sup>	Future Land Use	Relevant RBRGs Land Use Scenario adopted for the SI
			Recorded in Past CAPs	Recorded for this SCAP [Ref. App No. for Photo Record]	Recorded in Past CAPs	Current Site Survey			
							recorded in the Site.		
E477	North of Wong Ngai Tun Tsuen Road	1,070	- The site was occupied by vegetation only. No potentially contaminating land uses / activities were observed within the site. - Based on EPD / FSD information, there were no chemical spillage / CWP / DG / incident records for the site.	- The land had been covered by vegetation - The vegetation were demolished during site clearance [App E6]	Vegetated Land	Vegetated Land	Nil	N/A	N/A

- (1) Site boundaries for sites with “” in the site IDs have been adjusted under this SCAP.
- (2) The recorded potential land contamination activities with based on the Past CAPs and current site-reappraisal under this SCAP, with reference to Table 2.3 of PG.
- (3) As the site appraisal for E135 was not able to be conducted due to land resumption issues, upon this reporting, it shall be processed once Site E135 is transferred to the Client’s possession. Any construction works at E135 are strictly prohibited until land contamination assessment is completed.

## 4 SAMPLING STRATEGY

### 4.1 Sampling & Testing Plan

- 4.1.1 Sampling and testing plan proposed in this SCAP is to determine the presence, nature and extent of contamination within the potential contaminated area of possible contamination within the assessment area. The proposed representative sampling locations for the Assessment Area with potential contamination issue are detailed in **Table 4-1** and illustrated in **Appendix F**. The exact sampling locations are subject to fine adjustment according to the actual site conditions and existence of underground structures/utilities. The Chemicals of Concern (COCs) proposed for laboratory analysis included Metals, VOCs, SVOCs, PCRs and PCBs.
- 4.1.2 According to the Practice Guide for Investigation and Remediation of Contaminated Land, three or more soil samples, disturbed or undisturbed, shall be taken at each sampling point to verify vertical distribution of contaminants.
- 4.1.3 The sampling strategies are proposed with reference to the grid sampling method and minimum sampling points as per Table 2.1 of the PG. A grid sampling approach based on the PG and specified grid size are adopted for the sampling strategy for the potentially contaminated Sites.
- 4.1.4 Soil samples shall be collected at 0.5mbgl, 1.0mbgl and 2.0mbgl to assess the vertical profile of potential contamination. Trial pit excavated down to at least 2.0mbgl should be carried out in case of the presence of underground utilizes, within which the disturbed soil samples shall be collected at 0.5mbgl, 1.0mbgl and 2.0mbgl below the prevailing ground or concrete slab level with stainless steel hand tools at each sampling location. Sampling at further depths shall only be carried out if the contamination were recorded in samples at shallow depths, according to the adopted criteria, using dry borehole drilling. A groundwater sample shall be collected at each sampling location if groundwater is encountered during sampling.

**Table 4-1 Sampling and Testing Plan for the Potentially Contaminated Sites**

Site ID	Recorded Potentially Contaminated Land Uses / Activities	Approximate Area (m <sup>2</sup> )	Square Grid Size [m <sup>2</sup> ]	No. of Boreholes [Ref. App No. for Photo Record]	Sampling Locations ID	Sampling Method	Sample Matrix/ Depth <sup>(1)(4)</sup>	Parameters to be Tested <sup>(2)</sup>				
								Metals <sup>(3)</sup>	VOCs	SVOCs	PCRs	PCBs
E98	Loading, unloading and storage of goods, fuel storage and transfer, maintenance of equipment and vehicles.	2239	13	13 [App F4]	E98-1 E98-2 E98-3 E98-4 E98-5 E98-6 E98-7 E98-8 E98-9 E98-10 E98-11 E98-12 E98-13	Trial pit excavation down to 2mbgl by hand tools for collecting soil samples. If GW is encountered, GW monitoring well shall be installed at 2m below GW level.	Soil: <u>(i) 0.5m bgl;</u> <u>(ii) 1.0m bgl;</u> <u>(iii) 2.0m bgl; and</u>  GW: <u>One GW sample shall be collected if GW is encountered</u>	Full List/ Mercury	Full List	Full List	Full List	Nil
E121	Loading, unloading and storage of goods, fuel storage and transfer, maintenance of equipment and vehicles.	320	13	4 [App F1]	E121-1 E121-2 E121-3 E121-4	Trial pit excavation down to 2mbgl by hand tools for collecting soil samples. If GW is encountered, GW monitoring well shall be installed at 2m below GW level.	Soil: <u>(i) 0.5m bgl;</u> <u>(ii) 1.0m bgl;</u> <u>(iii) 2.0m bgl; and</u>  GW: <u>One GW sample shall be collected if GW is encountered</u>	Full List/ Mercury	Full List	Full List	Full List	Nil

Site ID	Recorded Potentially Contaminated Land Uses / Activities	Approximate Area (m <sup>2</sup> )	Square Grid Size [m <sup>2</sup> ]	No. of Boreholes [Ref. App No. for Photo Record]	Sampling Locations ID	Sampling Method	Sample Matrix/ Depth <sup>(1)(4)</sup>	Parameters to be Tested <sup>(2)</sup>				
								Metals <sup>(3)</sup>	VOCs	SVOCs	PCRs	PCBs
E136	Loading, unloading and storage of electrical wastes.	240	13	4 [App F2]	E136-1 E136-2 E136-3 E136-4	Trial pit excavation down to 2mbgl by hand tools for collecting soil samples. If GW is encountered, GW monitoring well shall be installed at 2m below GW level.	Soil: <u>(i) 0.5m bgl;</u> <u>(ii) 1.0m bgl;</u> <u>(iii) 2.0m bgl; and</u>  GW: <u>One GW sample shall be collected if GW is encountered</u>	Full List/ <i>Mercury</i>	Full List	Full List	Full List	Full List
E137	Loading, unloading and storage of goods, fuel storage and transfer, maintenance of equipment and vehicles.	619	13	7 [App F3]	E137-1 E137-2 E137-3 E137-4 E137-5 E137-6 E137-7	Trial pit excavation down to 2mbgl by hand tools for collecting soil samples. If GW is encountered, GW monitoring well shall be installed at 2m below GW level.	Soil: <u>(i) 0.5m bgl;</u> <u>(ii) 1.0m bgl;</u> <u>(iii) 2.0m bgl; and</u>  GW: <u>One GW sample shall be collected if GW is encountered</u>	Full List/ <i>Mercury</i>	Full List	Full List	Full List	Nil

**Remarks:**

- (1) bgl = below ground level; GW = groundwater
- (2) – Full list refers to the parameters as shown in Table 2.1 – RBRGs for Soil & Soil Saturation Limit and Table 2.2 – RBRGs for Groundwater and Solubility Limit under VOCs, SVOCs, metals and PCRs in the Guidance Manual.
  - BTEX includes benzene, toluene, ethylbenzene and total xylenes.
  - PAHs include acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene and pyrene.
  - Since RBRG value of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, bis-(2-Ethylhexyl)phthalate, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene and Phenol were not available for groundwater, the said parameters would not be tested in groundwater sample.
- (3) The COCs shown in italic are the CoCs adopted for Groundwater samples.
- (4) Sampling at further depths shall only be carried out if the contamination were recorded in samples at shallow depths, according to the adopted criteria, using dry borehole drilling. The details of the sampling method are described in **Section 4.2.8** to **Section 4.2.18**.
- (5) As fast track programme as described in **Section 7.2**, sampling plan as proposed in CAP\_A9\_03 is adopted accordingly.

## 4.2 Sampling Methodology

- 4.2.1 Soil samples shall be collected using borehole drilling or trial pitting depending on the site condition. All soil sampling work shall be supervised by a land contamination specialist.

### **Trial Pit Excavation**

- 4.2.2 The hard surface of each exploratory borehole shall be excavated and removed by hand digging or using a mechanical device to allow visual inspection of the ground conditions. For safety purposes, the trial pit should be excavated down to at least 1.2m in depth. Available utility service plans will be investigated and utility scanning will be executed prior to any ground disturbance to ensure the clearance of underground utilities at all proposed trial pit locations.
- 4.2.3 Prior to each sampling event, the soil sampling equipment shall be decontaminated either by steam cleaning or by washing in a lab-grade detergent, double-rinsed with potable water, and finally rinsed with deionised water (see **Section 4.2.27** below).
- 4.2.4 The excavated materials will be placed away from the edge next to the trial pit to prevent collapse. Once sampling is completed, the trial pits will be backfilled instantaneously in reverse order to which they were excavated.
- 4.2.5 Once sampling is completed, the borehole shall be backfilled with bentonite / cement grout. Surface restoration is required unless a water monitoring well is required to be installed.
- 4.2.6 Soil sampling methods and techniques including decontamination procedures, sample collection, preparation, preservation and chain-of-custody documentation are developed by the United States Environmental Protection Agency (USEPA).
- 4.2.7 If groundwater is not encountered, the disturbed soil sample shall be collected at nominal depths of 0.5m, 1.0m, and 2.0m in the trial pit by hand tools. Sampling at further depths shall only be carried out if the contamination was recorded in samples at shallow depths, according to the adopted criteria, using dry borehole drilling as described in the following sections. If groundwater is encountered during sampling and the borehole(s) should generally be drilled to a depth minimum of 2m below the water table to allow for groundwater sampling.

### **Borehole (Dry) Drilling**

- 4.2.8 Borehole drilling is the most common method to examine and determine the presence of potential soil and groundwater contamination. Borehole drilling by means of dry rotary drilling method without the use of flushing medium will be adopted in order to avoid potential cross contamination.
- 4.2.9 Utility scanning will be inspected prior to any ground disturbance to ensure the clearance of underground utilities at all proposed borehole locations. Moreover, an inspection pit will be excavated down to about 1.2m bgl to manually perform underground utility clearance prior to any ground disturbance at all proposed borehole locations.
- 4.2.10 All drilling equipment that may potentially come in contact with soil samples shall be decontaminated in accordance with the procedures outlined in **Section 4.2.27** prior to mobilizing the drilling rig to the borehole location.
- 4.2.11 Borehole shall be advanced to the desired sampling depth without the addition of drilling mud and water. The drill rods and drill bit shall be removed from the borehole when the

desired depth is reached. Soil materials shall be retrieved for visual inspection at every 1m from the bottom of inspection pit to the final soil sampling depth. Samples shall then be collected using a cleaned sampler fitted with stainless-steel liner sleeves. The sampler shall be attached to drive rods and driven with the aid of the drill-rig hammer.

- 4.2.12 After the sampler has been driven to the desired depth, it shall be carefully removed from the borehole, detached from the drive rods, and placed on a work table. The expose ends of the sampler shall be quickly covered with Teflon™ sheeting and plastic caps, and wrapped with Parafilm™ tape. Each sample ring shall be labelled and handled using the procedures discussed in **Section 4.2.19**.
- 4.2.13 The drill bit and rods shall then be lowered back into the borehole, and drilling shall recommence until the next target sampling depth is reached. The sampling procedures shall then be repeated until the total target depth of the boring has been reached.
- 4.2.14 Prior to each sampling event, the soil sampling equipment shall be decontaminated either by steam cleaning or by washing in a lab-grade detergent, doubled rinsed with potable water, and final rinsed with deionised water (see **Section 4.2.27** below).
- 4.2.15 Undistributed soil samples will be collected using U76 / U100 sampler at sampling depth from 3.0m bgl and onwards. Additional samples shall be collected for laboratory analysis whenever there are suspected signs of contamination. The location and depth of the additional samples will be determined by the on-site land contamination specialist subject to the actual site condition and engineering constraints. If hard materials are encountered during borehole drilling before reaching the proposed terminal drilling depth, drilling through the hard materials should be attempted, and if in vain, alternative sampling location should adopted, which shall be determined by the land contamination specialist.
- 4.2.16 Once sampling is completed, the borehole shall be backfilled with bentonite / cement grout. Surface restoration is required unless water monitoring well is required to be installed.
- 4.2.17 Soil sampling methods and techniques including decontamination procedures, sample collection, preparation, preservation and chain-of-custody documentation are developed by United States Environmental Protection Agency (USEPA).
- 4.2.18 If sampling at further depths is required as described in **Section 4.2.7**, the soil sample shall be collected at nominal depths of 3.0m and 6.0mbgl or approximately 2m below water table. If groundwater is encountered during sampling and the borehole(s) should generally be drilled to a depth minimum of 2m below the water table to allow for groundwater sampling, and a soil sample shall be collected at 2m below groundwater level instead of the final proposed sampling depth at 6mbgl.

#### **Sample Size and Handling Procedures**

- 4.2.19 Soil samples must be individually labelled and described on site prior to sending to a HOKLAS accredited laboratory for analysis. Description shall include, but not be limited to the following:
- i) sampling location where the soil sample collected;
  - ii) sample identification number;
  - iii) soil sampling depth (with respect to lowest level of concrete slab);
  - iv) estimated physical characteristics (clay, silt, sand, gravel, stone, cobble, colour, odour, moisture);



- v) level of groundwater table (if any);
- vi) colour photograph; and
- vii) any other relevant information.

- 4.2.20 Before sampling commences, the laboratory will be consulted on the particular sample size and preservation procedures which are required for each chemical analysis. The samples must be stored in an insulated box with refrigeration between 2 to 4°C (but not frozen) immediately after being placed in an appropriate pre-washed glass bottles or sampling containers (provided by the laboratory) without being agitated. Headspace should also be minimised when volatile parameters are to be determined. It must be ensured that samples containers and the box are tightly closed and the lid of glass jar should be covered with Teflon liner.
- 4.2.21 A land contamination specialist shall be on site to oversee all soil sampling and determine the appropriate depth at each sampling point with respect to the actual site conditions. He/she is required to supervise soil and field reporting as stated in Section 3.3.1 and Section 3.6 of Practice Guide (e.g. soil profiling, sign of contamination, groundwater level, presence of non-aqueous phase liquid).

### **Groundwater Sampling**

- 4.2.22 At each proposed sampling point, one groundwater sample shall be collected if groundwater is encountered at the sampling location. A groundwater monitoring well should be installed at the drill hole of each required sampling point. The design of the well should be made with reference to the PG, as shown in **Appendix G**, and approved by the land contamination specialist.
- 4.2.23 Upon completion of installation of monitoring wells and prior to purging and sampling, groundwater levels should be measured and recorded. Prior to sampling, the wells should be purged with at least approximately five times the well volume at each sampling event to remove silt and drilling fluid residue from the wells. Samples should be taken by using a Teflon bailer within 24 hours of the wells being purged.
- 4.2.24 The presence of any free product floating on the top of the groundwater and the thickness should be recorded. The floating layer should be removed/recovered and analysed by the laboratory.
- 4.2.25 Following the dewatering process (and allowing groundwater to permeate back into the hole if it has been purged dry), sufficient quantity of groundwater sample would be collected from each station and stored in individual containers for analysis.
- 4.2.26 Before sampling commences, the laboratory will be consulted on the particular sample size and preservation procedures which are required for each chemical analysis. Between samples, all equipment used for sample handling and storage shall be thoroughly decontaminated with laboratory-grade detergent. Samples shall be stored in appropriate pre-washed containers (provided by laboratory) and put in an insulated box between 2 – 4°C (but not frozen) immediately. Headspace should also be minimised. It must be ensured that the sample containers and the box are tightly closed.

### **Decontamination**

- 4.2.27 All equipment employed for sample handling and storage must be decontaminated before and after collection of each sample to minimize the potential of cross-contamination between

sampling locations and depths. The following is the standard procedure for cleaning drilling equipment and sampling equipment on site:

- i) Clean with steam or lab-grade detergent (using brush if necessary) to remove particulate matter and surface films.
- ii) Rinse thoroughly with tap water (for drilling equipment) or distilled water (for sampling equipment) and then with deionised water.
- iii) After field cleaning, the equipment shall be handled by personnel wearing disposable latex gloves to avoid the transfer of contaminants from other sources. If the equipment is not to be used immediately it should be covered with clean plastic sheeting or wrapped in aluminium foil to avoid re-contamination. Also, provisions should be made to handle any decontamination fluids.
- iv) The drilling equipment and sampling equipment shall be cleaned according to the above procedures between sampling holes.

4.2.28 The samples should be scooped directly from the sampling tool into the sample containers using a stainless steel scoop. If a gloved hand comes into contact with the sample, then new gloves should be used for each sample.

### **Boring Log**

4.2.29 Boring logs shall be prepared and maintained for all borings drilled for the site investigation, including both mechanically drilled borings and hand-auger borings. The logs shall include the following sampling information for each boring:

- i) Site name;
- ii) Boring number and location;
- iii) Name of supervising site geologist, engineer, or environmental consultant;
- v) Date and time boring was started and completed and time each sample was collected;
- vi) Weather conditions, especially any inclement conditions that may affect sample integrity;
- vii) Sample depths;
- viii) Lithologic description for soils encountered and for each sample collected in accordance with the Unified Soils Classifications System (USCS); and
- ix) Description of any visible or other evidence of soil contamination (e.g. staining, odour, or other indication).

### **Quality Control and Quality Assurance (QA/QC)**

4.2.30 A chain of custody system shall be operated as part of the QA/QC procedure. The laboratory accredited QA/QC procedures shall be followed as below:

**Table 4-2 QA/QC Requirements**

<b>Samples taken under QA/QC procedures</b>	<b>Sampling Frequency</b>	<b>Testing Parameters</b>
Duplicate samples	- 1 for every 20 Soil samples	All parameters that are tested for the proposed soil and groundwater samples at the proposed sampling points <sup>1</sup>
Equipment blank	- 1 for every 20 GW samples	
Field Blank		
Trip Blank	1 for every trip with samples that require the analysis of VOCs	All VOCs parameters that are tested for the proposed soil and groundwater samples at the proposed sampling points <sup>1</sup>

**Remarks:**

1) Refer to **Table 4-1** for the proposed testing parameters at the proposed sampling points and **Table 5-1 & Table 5-2** for the laboratory analysis schedule.

## 5 LABORATORY ANALYSIS

- 5.1.1 With reference to the future land use as stated in **Table 3-5**, sets of RBRGs, as listed in Table 2.1 of EPD's *Guidance Manual for Use of Risk-Based Remediation Goals for Contaminated Land Management*, are adopted based on the future land use at each corresponding site as the land contamination assessment criteria. The key chemicals of concerns include Metals, VOCs, SVOCs, PCRs, and PCBs.
- 5.1.2 The soil and groundwater samples shall be sent to the HOKLAS accredited laboratory for analysis in accordance to the chain of custody. All laboratory test methods must be accredited by the Hong Kong Laboratory Accreditation Scheme (HOKLAS). The schedule for laboratory analysis is listed in **Table 5-1** and **Table 5-2**.

**Table 5-1 Laboratory Analysis Schedule for Soil Samples**

Chemical	Analytical Method	Reporting Limit for Soil (mg/kg)	RBRGs (mg/kg) for Different Land Use Scenarios			Csat (mg/kg)
			Urban Residential	Industrial	Public Parks	
<b>Metal</b>						
Antimony	USEPA 6020	1	2.95E+01	2.61E+02	9.79E+01	-
Arsenic	USEPA 6020	1	2.21E+01	1.96E+02	7.35E+01	-
Barium	USEPA 6020	1	1.00E+04*	1.00E+04*	1.00E+04*	-
Cadmium	USEPA 6020	0.2	7.38E+01	6.53E+02	2.45E+02	-
Chromium (III) #	USEPA 6020	1	1.00E+04*	1.00E+04*	1.00E+04*	-
Chromium (VI)	USEPA Method 3060 / APHA Method 3500 Cr:D	1	2.21E+02	1.96E+03	7.35E+02	-
Cobalt	USEPA 6020	1	1.48E+03	1.00E+04*	4.90E+03	-
Copper	USEPA 6020	1	2.95E+03	1.00E+04*	9.79E+03	-
Lead	USEPA 6020	1	2.58E+02	2.29E+03	8.57E+02	-
Manganese	USEPA 6020	1	1.00E+04*	1.00E+04*	1.00E+04*	-
Mercury	USEPA 6020	0.2	1.10E+01	3.84E+01	4.56E+01	-
Molybdenum	USEPA 6020	1	3.69E+02	3.26E+03	1.22E+03	-
Nickel	USEPA 6020	1	1.48E+03	1.00E+04*	4.90E+03	-
Tin	USEPA 6020	1	1.00E+04*	1.00E+04*	1.00E+04*	-
Zinc	USEPA 6020	1	1.00E+04*	1.00E+04*	1.00E+04*	-
<b>VOCs</b>						
2-Propanone (Acetone)	USEPA 8260	50	9.59E+03	1.00E+04*	1.00E+04*	***
Benzene	USEPA 8260	0.2	7.04E-01	9.21E+00	4.22E+01	3.36E+02
Bromodichloromethane	USEPA 8260	0.1	3.17E-01	2.85E+00	1.34E+01	1.03E+03
2-Butanone (MEK)	USEPA 8260	5	1.00E+04*	1.00E+04*	1.00E+04*	***
Chloroform	USEPA 8260	0.04	1.32E-01	1.54E+00	2.53E+02	1.10E+03
Ethylbenzene	USEPA 8260	0.5	7.09E+02	8.24E+03	1.00E+04*	1.38E+02
Methyl tert-Butyl Ether	USEPA 8260	0.5	6.88E+00	7.01E+01	5.05E+02	2.38E+03
Methylene Chloride	USEPA 8260	0.5	1.30E+00	1.39E+01	1.28E+02	9.21E+02
Styrene	USEPA 8260	0.5	3.22E+03	1.00E+04*	1.00E+04*	4.97E+02
Tetrachloroethene	USEPA 8260	0.04	1.01E-01	7.77E-01	1.84E+00	9.71E+01

Chemical	Analytical Method	Reporting Limit for Soil (mg/kg)	RBRGs (mg/kg) for Different Land Use Scenarios			Csat (mg/kg)
			Urban Residential	Industrial	Public Parks	
Toluene	USEPA 8260	0.5	1.44E+03	1.00E+04*	1.00E+04*	2.35E+02
Trichloroethene	USEPA 8260	0.1	5.23E-01	5.68E+00	6.94E+01	4.88E+02
Xylenes (Total)	USEPA 8260	2	9.50E+01	1.23E+03	1.00E+04*	1.50E+02
<b>SVOCs</b>						
Acenaphthene	USEPA 8270	0.5	3.51E+03	1.00E+04*	1.00E+04*	6.02E+01
Acenaphthylene	USEPA 8270	0.5	2.34E+03	1.00E+04*	1.00E+04*	1.98E+01
Anthracene	USEPA 8270	0.5	1.00E+04*	1.00E+04*	1.00E+04*	2.56E+00
Benzo(a)anthracene	USEPA 8270	0.5	1.20E+01	9.18E+01	3.83E+01	-
Benzo(a)pyrene	USEPA 8270	0.5	1.20E+00	9.18E+00	3.83E+00	-
Benzo(b)fluoranthene	USEPA 8270	0.5	9.88E+00	1.78E+01	2.04E+01	-
Benzo(g,h,i)perylene	USEPA 8270	0.5	1.80E+03	1.00E+04*	5.74E+03	-
Benzo(k)fluoranthene	USEPA 8270	0.5	1.20E+02	9.18E+02	3.83E+02	-
bis(2-ethylhexyl)phthalate	USEPA 8270	0.5	3.00E+01	9.18E+01	9.42E+01	-
Chrysene	USEPA 8270	0.5	8.71E+02	1.14E+03	1.54E+03	-
Dibenz(a,h)anthracene	USEPA 8270	0.5	1.20E+00	9.18E+00	3.83E+00	-
Fluoranthene	USEPA 8270	0.5	2.40E+03	1.00E+04*	7.62E+03	-
Fluorene	USEPA 8270	0.5	2.38E+03	1.00E+04*	7.45E+03	5.47E+01
Hexachlorobenzene	USEPA 8270	0.1	2.43E-01	5.82E-01	7.13E-01	-
Indeno(1.1.3.cd)pyrene	USEPA 8270	0.5	1.20E+01	9.18E+01	3.83E+01	-
Naphthalene	USEPA 8270	0.5	1.82E+02	4.53E+02	9.14E+02	1.25E+02
Phenanthrene	USEPA 8270	0.5	1.00E+04*	1.00E+04*	1.00E+04*	2.80E+01
Phenol	USEPA 8270	0.5	1.00E+04*	1.00E+04*	1.00E+04*	7.26E+03
Pyrene	USEPA 8270	0.5	1.80E+03	1.00E+04*	5.72E+03	-
<b>PCRs</b>						
C6 - C8 Fraction	USEPA 8260/8015	5	1.41E+03	1.00E+04*	1.00E+04*	1000
C9 - C16 Fraction	USEPA 8260/8015	200	2.24E+03	1.00E+04*	1.00E+04*	3000
C17 - C35 Fraction	USEPA 8260/8015	500	1.00E+04*	1.00E+04*	1.00E+04*	5000
<b>PCBs</b>						
PCBs	USEPA 8270	1.00E-01	2.36E-01	7.48E-01	7.56E-01	-

# Chromium III = Total Chromium – Chromium VI

\* indicates a 'ceiling limit' concentration.

\*\*\* Soil saturation limit value exceeds the "ceiling limit" therefore the RBRG applies.

**Table 5-2 Laboratory Analysis Schedule for Groundwater/ QA/QC Samples**

Chemical	Analytical Method	Reporting Limit (mg/L)	RBRGs (mg/L) for Different Land Use Scenarios (mg/L)		Solubility Limit (mg/L)
			Urban Residential	Industrial	
<b>Metal</b>					
Antimony	USEPA 6020	1.00E-03	-	N/A	-
Arsenic	USEPA 6020	1.00E-02	-	N/A	-
Barium	USEPA 6020	1.00E-03	-	N/A	-
Cadmium	USEPA 6020	2.00E-04	-	N/A	-
Chromium (III)	USEPA 6020	2.00E-02	-	N/A	-
Chromium (VI)	USEPA Method 3060/ APHA Method 3500 Cr:D	2.00E-02	-	N/A	-
Cobalt	USEPA 6020	1.00E-03	-	N/A	-
Copper	USEPA 6020	1.00E-03	-	N/A	-
Lead	USEPA 6020	1.00E-03	-	N/A	-
Manganese	USEPA 6020	1.00E-03	-	N/A	-
Mercury	USEPA 6020	5.00E-04	6.79E+00	6.79E+00	-
Molybdenum	USEPA 6020	1.00E-03	-	N/A	-
Nickel	USEPA 6020	1.00E-03	-	N/A	-
Tin	USEPA 6020	1.00E-03	-	N/A	-
Zinc	USEPA 6020	1.00E-02	-	N/A	-
<b>VOCs</b>					
2-Propanone (Acetone)	USEPA 8260	5.00E-01	1.00E+04*	1.00E+04	***
Benzene	USEPA 8260	5.00E-03	5.40E+01	5.40E+01	1.75E+03
Bromodichloromethane	USEPA 8260	5.00E-03	2.62E+01	2.62E+01	6.74E+03
2-Butanone (MEK)	USEPA 8260	5.00E-02	1.00E+04*	1.00E+04	***
Chloroform	USEPA 8260	5.00E-03	1.13E+01	1.13E+01	7.92E+03
Ethylbenzene	USEPA 8260	5.00E-03	1.00E+04*	1.00E+04	1.69E+02
Methyl tert-Butyl Ether	USEPA 8260	5.00E-03	1.81E+03	1.81E+03	***
Methylene Chloride	USEPA 8260	5.00E-02	2.24E+02	2.24E+02	***
Styrene	USEPA 8260	5.00E-03	1.00E+04*	1.00E+04	3.10E+02
Tetrachloroethene	USEPA 8260	5.00E-03	2.95E+00	2.95E+00	2.00E+02
Toluene	USEPA 8260	5.00E-03	1.00E+04*	1.00E+04	5.26E+02
Trichloroethene	USEPA 8260	5.00E-03	1.42E+01	1.42E+01	1.10E+03
Xylenes (Total)	USEPA 8260	2.00E-02	1.57E+03	1.57E+03	1.75E+02
<b>SVOCs</b>					
Acenaphthene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	4.24E+00
Acenaphthylene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	3.93E+00
Anthracene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	4.34E-02

Chemical	Analytical Method	Reporting Limit (mg/L)	RBRGs (mg/L) for Different Land Use Scenarios (mg/L)		Solubility Limit (mg/L)
			Urban Residential	Industrial	
Benzo(a)anthracene	USEPA 8270	2.00E-03	-	N/A	-
Benzo(a)pyrene	USEPA 8270	2.00E-03	-	N/A	-
Benzo(b)fluoranthene	USEPA 8270	1.00E-03	7.53E+00	7.53E+00	1.50E-03
Benzo(g,h,i)perylene	USEPA 8270	2.00E-03	-	N/A	-
Benzo(k)fluoranthene	USEPA 8270	2.00E-03	-	N/A	-
Bis(2-ethylhexyl)phthalate	USEPA 8270	2.00E-02	-	N/A	-
Chrysene	USEPA 8270	1.00E-03	8.12E+02	8.12E+02	1.60E-03
Dibenz(a,h)anthracene	USEPA 8270	2.00E-03	-	N/A	-
Fluoranthene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	2.06E-01
Fluorene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	1.98E+00
Hexachlorobenzene	USEPA 8270	4.00E-03	6.95E-01	6.95E-01	6.20E+00
Indeno(1.1.3.cd)pyrene	USEPA 8270	2.00E-03	-	N/A	-
Naphthalene	USEPA 8270	2.00E-03	8.62E+02	8.62E+02	3.10E+01
Phenanthrene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	1.00E+00
Phenol	USEPA 8270	2.00E-03	-	N/A	-
Pyrene	USEPA 8270	2.00E-03	1.00E+04*	1.00E+04	1.35E-01
<b>PCRs</b>					
C6 - C8 Fraction	USEPA 8260/8015	2.00E-02	1.15E+03	1.15E+03	5.23E+00
C9 - C16 Fraction	USEPA 8260/8015	5.00E-01	9.98E+03	9.98E+03	2.80E+00
C17 - C35 Fraction	USEPA 8260/8015	5.00E-01	1.78E+02	1.78E+02	2.80E+00
<b>PCBs</b>					
PCBs	USEPA 8270	1.00E-03	4.33E-01	5.11E+00	3.10E-02

# Chromium III = Total Chromium – Chromium VI

\* indicates a 'ceiling limit' concentration.

\*\*\* Solubility limit value exceeds the "ceiling limit" therefore the RBRG applies.

## 6 HEALTH AND SAFETY

6.1.1 The following measures should be implemented to reduce potential impacts on workers during site investigation works. These measures will also mitigate against transferring contamination to groundwater, to surface water courses or to the air.

- A written emergency plan applicable to the site investigation, scheduled meetings and instructions shall be developed and regularly reviewed to ensure safety practices are emphasised and discussed. Evacuation route, storage location of safety equipment and medical equipment shall be explained in the plan.
- Safety devices and barriers shall be maintained properly to minimize risk during the site investigation.
- Site workers should wear gloves, masks, safety boots, eye protection and other protective clothing where exposure to vapours or contaminated soil may be encountered.
- Sampling and first aid equipment shall be maintained in good operating condition for immediate use.
- Trial pits should not be entered by anyone once the depth has equalled or exceeded 1.2 m unless appropriate safety precautions (i.e. shoring, stepping and/or sloping of sides) are taken.
- The use of handling equipment shall be maximized to reduce the potential contacts between excavated contaminated materials and workers.
- Excavation machineries and vehicles shall be washed prior to leaving the Site.
- Adequate washing facilities should be provided and smoking, eating and open flames should be prohibited in the area.
- Contaminated soils, which have been stockpiled or are being transported, should be covered with tarpaulin.
- Leakage of pollutants or leaching from excavated soil should be prevented by storing on an impermeable surface.
- Abnormality should be reported to the Resident Engineer immediately.

## 7 WAY FORWARD AND PROGRAMME SCHEDULE

### 7.1 Overview

- 7.1.1 This SCAP is carried out prior to the commencement of the SI works under the Contract to review the Past CAPs and supplement findings of the latest site condition. The findings generally concur with those in the Past CAPs. The SCAP should be submitted to EPD for endorsement, and after which the SI works should be carried out according to EPD's agreed SCAP. The remaining area of the Assessment Area, i.e. E135, shall be addressed in a separate SCAP submission.
- 7.1.2 Following completion of required SI works within the Assessment Area and receipt of laboratory test results, CAR(s) should be prepared to present the findings of the SI works and to discuss the presence, nature and extent of contamination. If contamination is identified, RAP(s) which provides details of the remedial actions for the identified contaminated soil and / or groundwater should be endorsed by EPD.
- 7.1.3 Remediation action, if necessary, will be carried out according to EPD endorsed RAP(s) and Remediation Report(s) (RR(s)) will be submitted after completion of the remediation action. The RR(s) should be endorsed by EPD prior to the commencement of construction works at the respective identified contaminated areas (if any).

### 7.2 Fast -track Programme and Proposed Way Forward for Interim Period

- 7.2.1 As time for carrying out the contamination sampling works will be critical for the overall programme for the site formation and infrastructure works in Contract 2. To fast-track the programme, it is proposed that some sampling works shall proceed first.
- 7.2.2 Prior to the final acceptance of this SCAP (also referred as "interim period"), the sampling works shall commence for the Sites, which have previously identified as potentially contaminated sites and re-confirmed under the site re-appraisal within the Assessment Area (Part 2) . The sampling approach will proceed with inspection pits and borehole drilling up to 3mbgl and 6mbgl will only be conducted if
- (a) there is a need to confirm preliminary results;
  - (b) in case the samples collected at shallower levels with inspection pits are confirmed to have contamination exceedance. Sampling location shall follow those illustrated in Sampling Location Plans in **Appendix F**.
- 7.2.3 For Sites with no contamination observed and obvious historical potentially contaminating activities recorded in this SCAP, no further action shall be carried out.



## 8 CONCLUSION

- 8.1.1 Under the Contract (YL/2021/04), this SCAP has assessed the land contamination potential to supplement information in the past CAP(s). In this study, site appraisal was conducted for Assessment Area (Part 2), especially for the previously identified potentially contaminated sites, to identify any land contamination potential through site inspection, review of the aerial photos and interview with current user or information provided by the Client. Based on the findings to the Site Appraisals, land contamination issues are expected at the Sites and sampling and testing plan is proposed.
- 8.1.2 No construction works or development shall be carried out within the subject Site prior to the approval of the Remediation Report (if necessary).
- 8.1.3 Due to land handover issues at E135, a separate SCAP for E135 shall be submitted by the Client/contractor of subsequent phases for EPD's approval before commencing any construction works at E135.
- 8.1.4 A Contamination Assessment Report (CAR) should be compiled following the site investigation. The CAR should present the methodology used during the soil boring and sampling work, details of field observations and interpretation of laboratory testing results for soil and groundwater contamination. It will incorporate the investigation results and observation from all sampling locations.
- 8.1.5 If land contamination is confirmed, a Remediation Action Plan (RAP) should be drawn up to formulate necessary remedial measures. The sequential CAR and RAP should be endorsed by EPD before implementation of any remediation work. Upon completion of the necessary remediation works, a Remediation Report (RR) should be submitted to the EPD to demonstrate that the contaminated soil/groundwater has been cleaned and their quality satisfies with the adopted RBRG criteria.

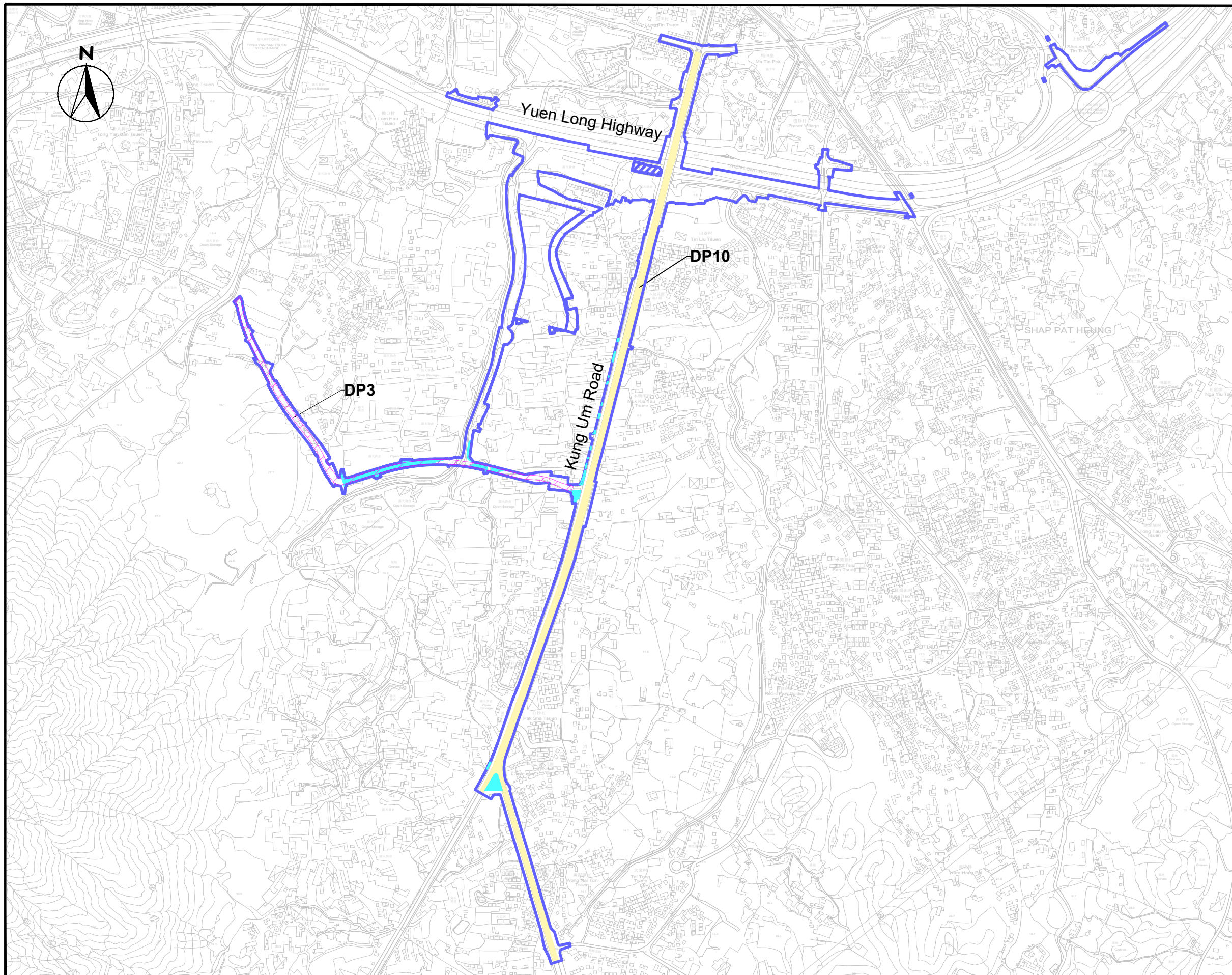
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## FIGURES

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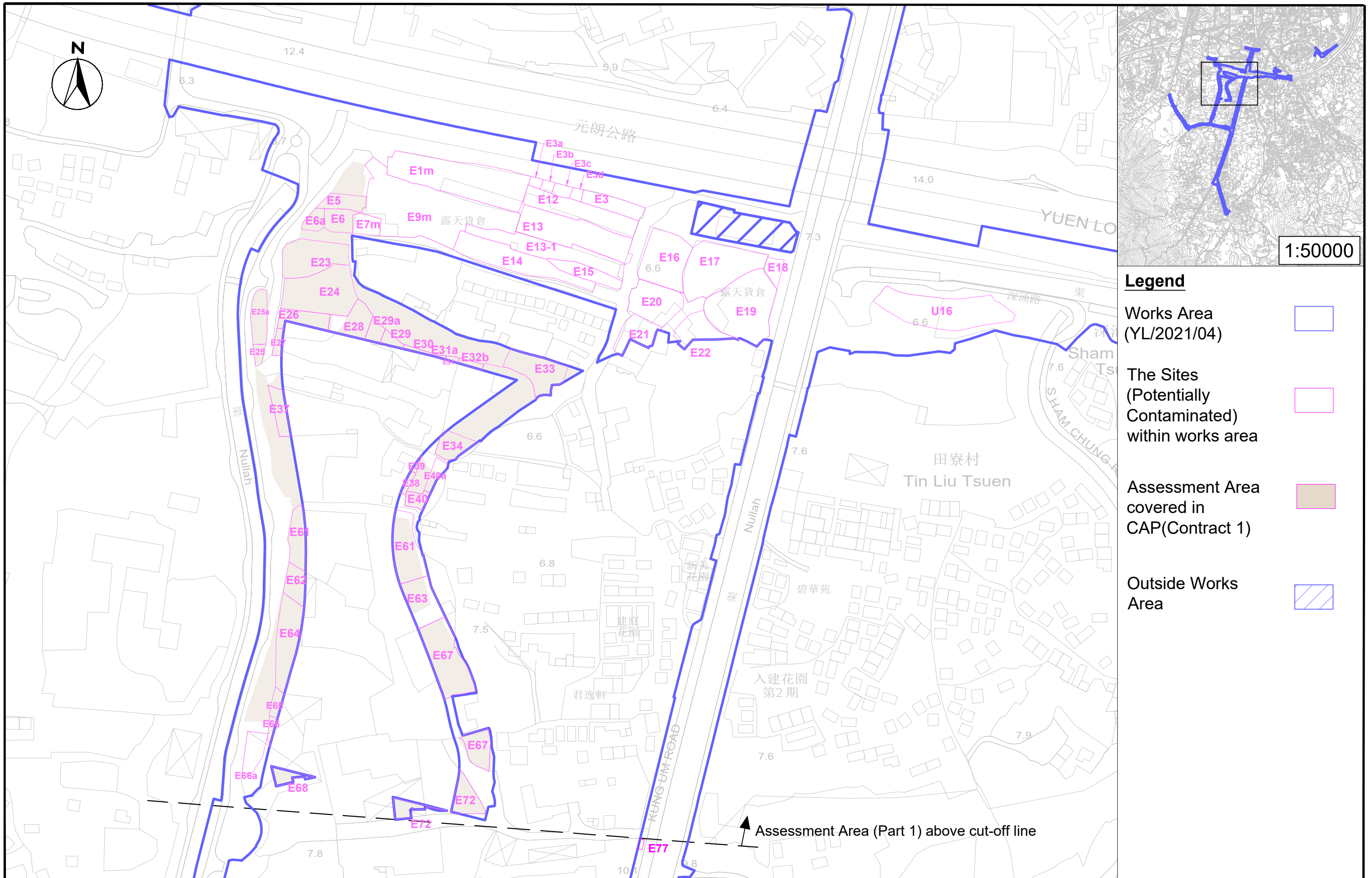
**Legend**

- Works Area (YL/2021/04)
  
- Assessment Area with Potentially Contaminated Sites for this SCAP
  
- Area of DP10 for EP-553/2018A within the Works Area (YL/2021/04)
  
- Area of DP3 for EP-549/2018 within the Works Area (YL/2021/04)
  
- Out of Works Area



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Site Location Plan**

SCALE	1:10000@A3	DATE	20 September 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	1-1
		REV	-



**Legend**

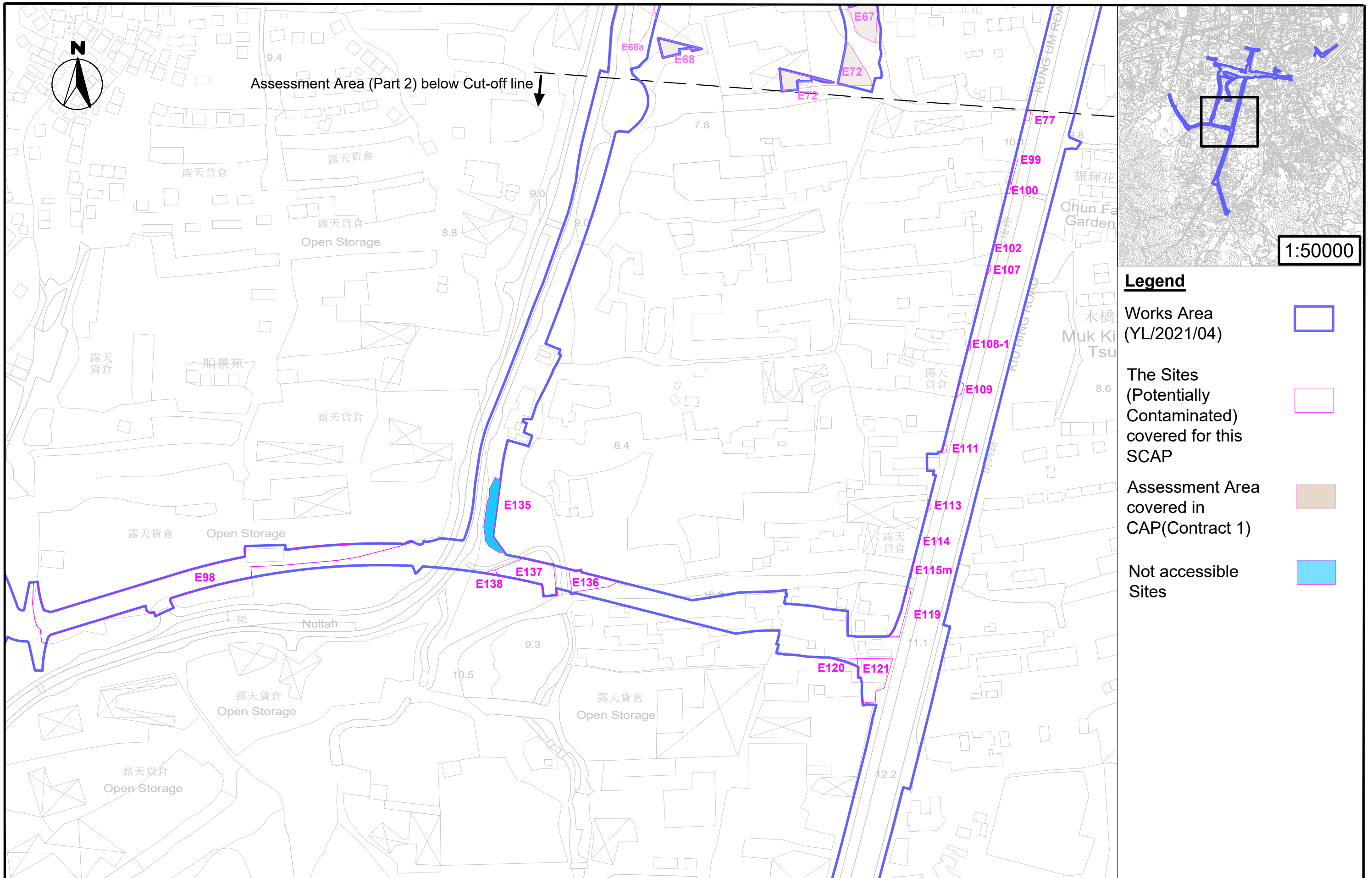
- Works Area (YL/2021/04)
- The Sites (Potentially Contaminated) within works area
- Assessment Area covered in CAP(Contract 1)
- Outside Works Area



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Location of the Sites (Potentially Contaminated) within the Assessment Area (Part 1)**

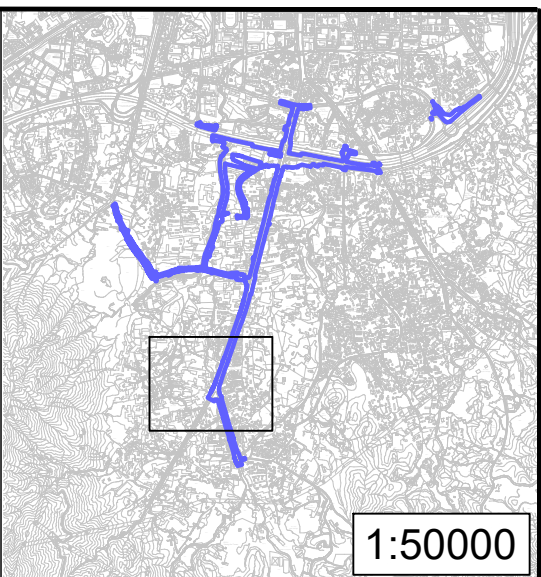
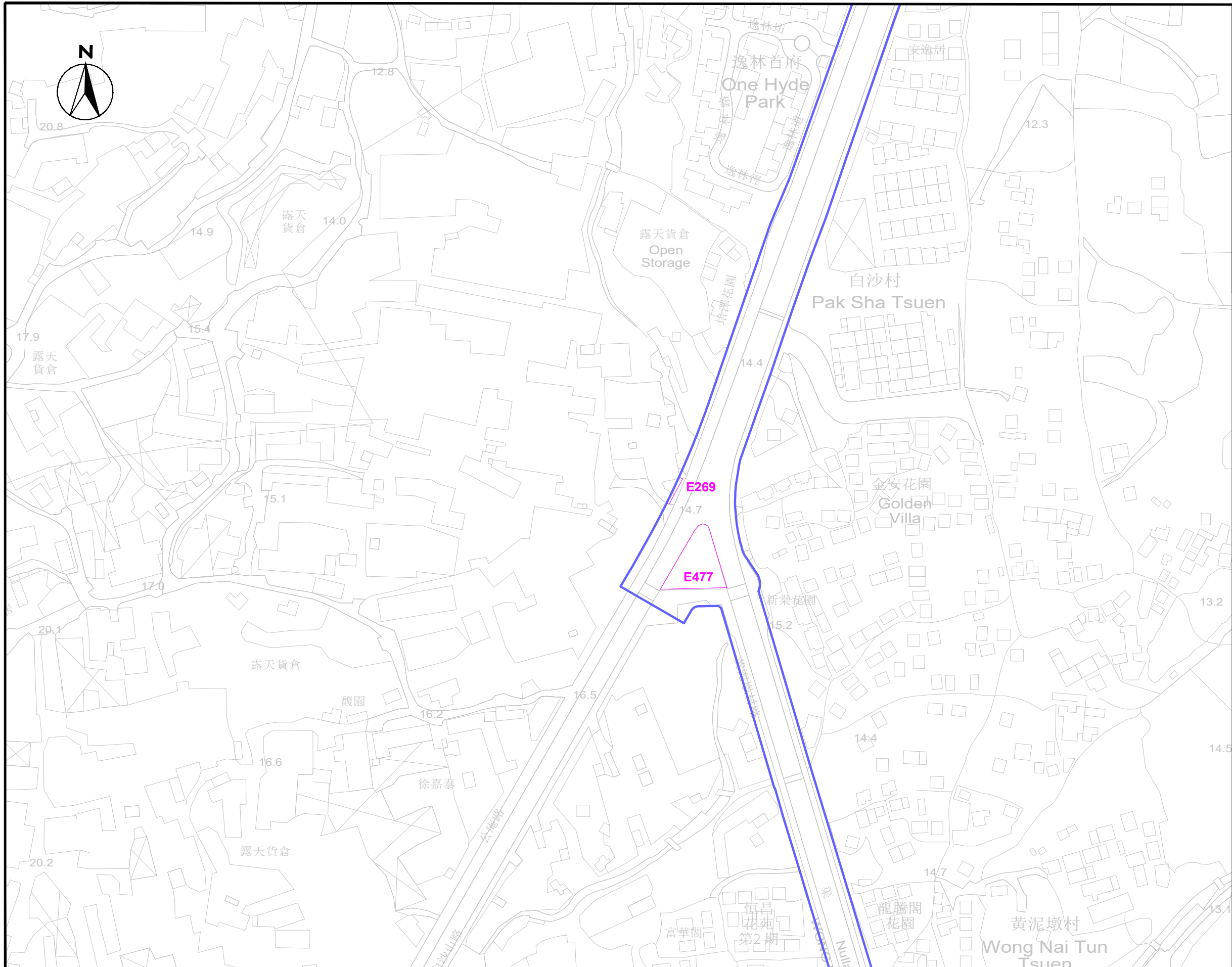
SCALE	1:10000@A3	DATE	19 September 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	1-2a
		REV	-

F:\Projects\LC23032 - YL202104-SC1013 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2\Drawings\CAD\Part 2v2\SCAP-2\_v2.0\_Location & Layout\_230918.dwg



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Location of the Sites (Potentially Contaminated) within the Assessment Area (Part 2)**

SCALE	1:10000@A3	DATE	16 November 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	1-2b
		REV	-



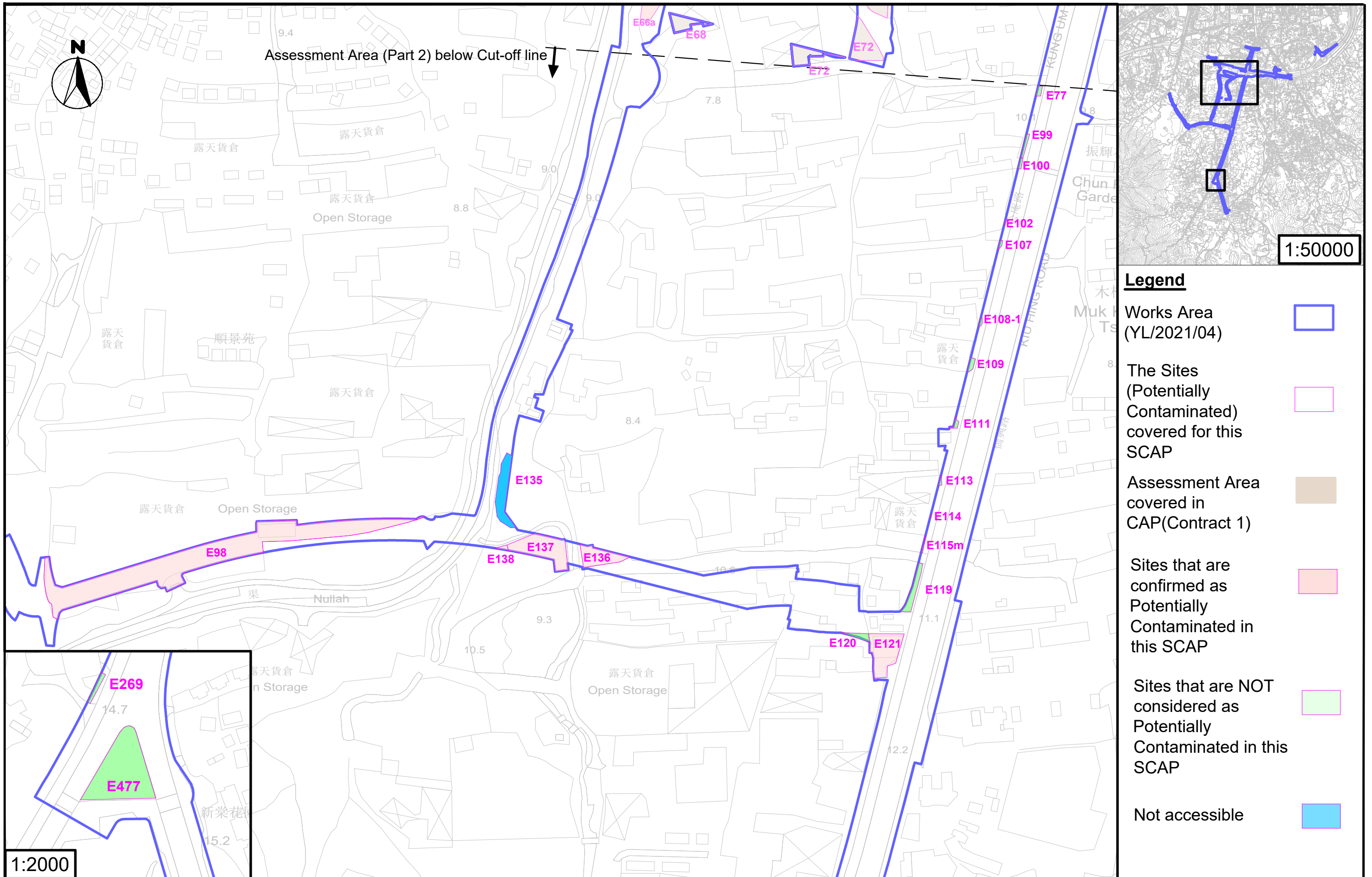
**Legend**

- Works Area (YL/2021/04)
- The Sites (Potentially Contaminated) within works area
- Assessment Area covered in CAP(Contract 1)



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Location of the Sites (Potentially Contaminated) within the Assessment Area (Part 2)**

SCALE	1:10000@A3	DATE	19 September 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	1-2c
		REV	-



**Legend**

- Works Area (YL/2021/04) □
- The Sites (Potentially Contaminated) covered for this SCAP □
- Assessment Area covered in CAP(Contract 1) ■
- Sites that are confirmed as Potentially Contaminated in this SCAP ■
- Sites that are NOT considered as Potentially Contaminated in this SCAP ■
- Not accessible ■

1:2000

1:50000



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Potentially Contaminated Sites Confirmed under this SCAP**

SCALE	1:2500@A3	DATE	16 November 2023
CHECK	CC	DRAWN	EH
JOB No.	LC23032	FIGURE No.	3-1
		REV	-

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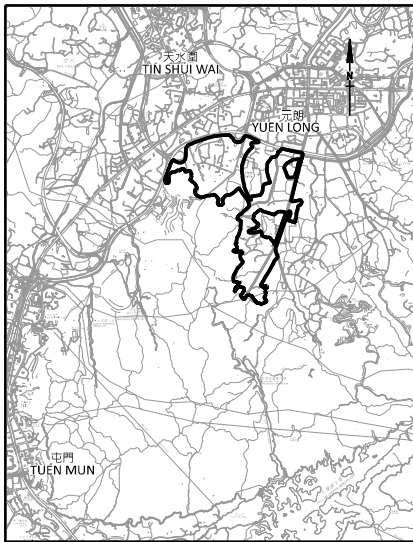
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**APPENDIX A  
REVISED RODP**

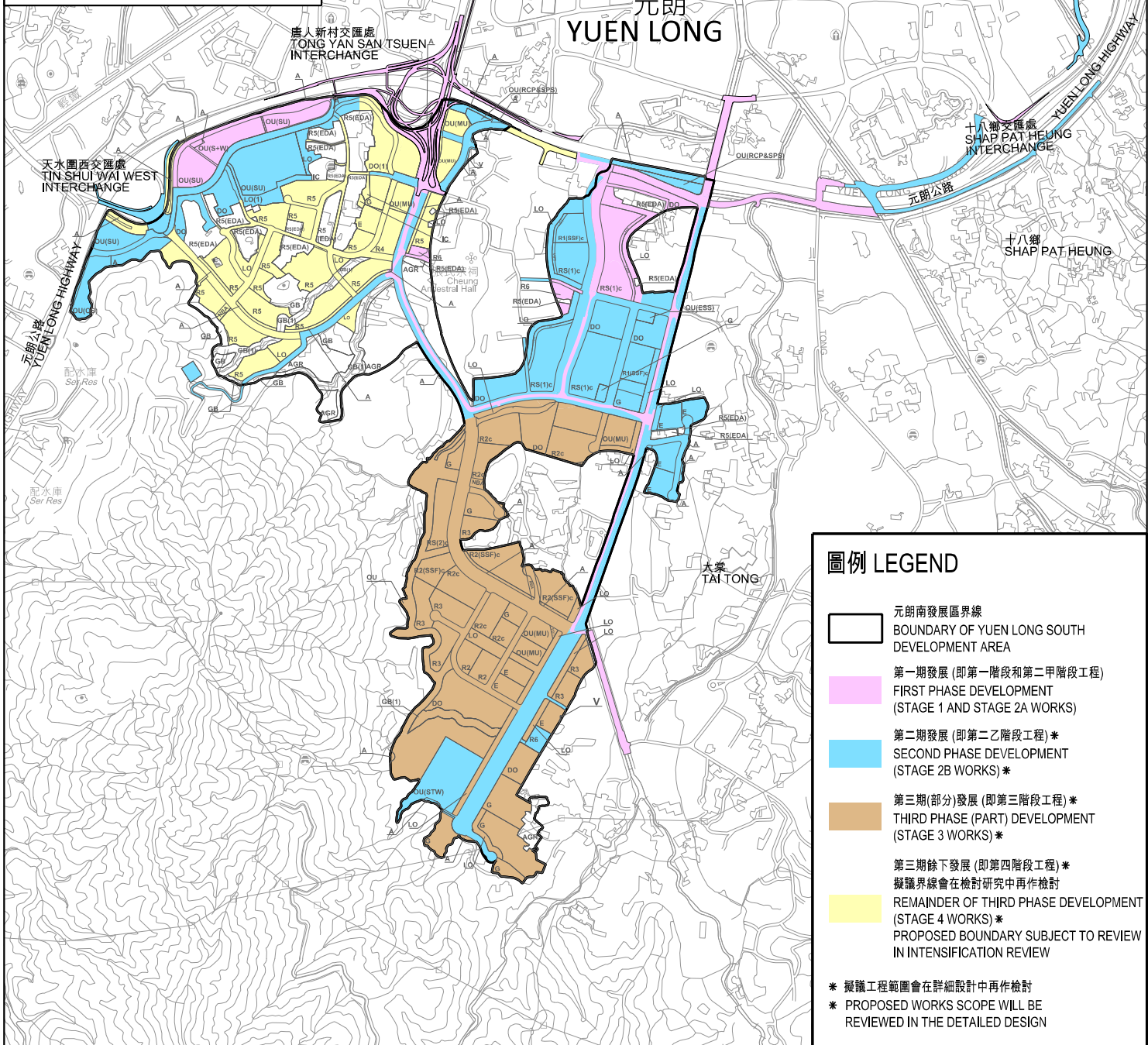
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位置圖  
LOCATION PLAN



圖例 LEGEND

-  元朗南發展區界線  
BOUNDARY OF YUEN LONG SOUTH DEVELOPMENT AREA
  -  第一期發展 (即第一階段和第二阶段工程)  
FIRST PHASE DEVELOPMENT (STAGE 1 AND STAGE 2A WORKS)
  -  第二期發展 (即第二乙階段工程)\*  
SECOND PHASE DEVELOPMENT (STAGE 2B WORKS)\*
  -  第三期(部分)發展 (即第三階段工程)\*  
THIRD PHASE (PART) DEVELOPMENT (STAGE 3 WORKS)\*
  -  第三期餘下發展 (即第四階段工程)\*  
REMAINDER OF THIRD PHASE DEVELOPMENT (STAGE 4 WORKS)\*
  -  擬議界線會在檢討研究中再作檢討  
PROPOSED BOUNDARY SUBJECT TO REVIEW IN INTENSIFICATION REVIEW
- \* 擬議工程範圍會在詳細設計中再作檢討  
\* PROPOSED WORKS SCOPE WILL BE REVIEWED IN THE DETAILED DESIGN

圖則名稱 drawing title

元朗南發展各期發展示意圖  
YUEN LONG SOUTH DEVELOPMENT PHASING PLAN

# 元朗南

# 經修訂的建議發展大綱圖 Revised Recommended Outline Development Plan

房屋用地規劃及工程研究- 勘查研究  
PLANNING AND ENGINEERING STUDY FOR  
HOUSING SITES IN YUEN LONG SOUTH - INVESTIGATION

經洪水橋/厦村新發展區  
連接至西鐵天水圍站的  
環保運輸服務示意走線  
(研究中)  
Indicative Corridor of EFTS with  
Possible Connection to West Rail  
TSW Station via the EFTS of  
the HSK/HT NDA (Under Study)

洪水橋/厦村  
新發展區  
Hung Shui Kiu/Ha Tsuen  
New Development Area

擬建洪水橋站  
Proposed  
Hung Shui Kiu  
Station

0 200 400m 米  
北 N

## 圖示 LEGEND

- |  |                  |  |   |
|--|------------------|--|---|
|  | 發展區              |  | 小學  |
|  | 鄰近發展區的認可殯葬區      |  | 警區警署  |
|  | 臨街零售             |  | 郵局  |
|  | 蘆葦床/蓄洪池          |  | 擬議街市(有待進一步研究, 包括一個位於中心位置及方便易達的「政府」用地的街市的可能需要) |
|  | 郊野公園             |  | 單車停放處   |
|  | 河道               |  | 社區會堂  |
|  | 主要道路             |  | 體育中心  |
|  | 發展區內具較高生態價值的河溪   |  | 污水抽水站   |
|  | 鄰近發展區的自然河溪       |  | 電力支站  |
|  | 環保運輸服務(研究中)      |  | 垃圾收集站   |
|  | 擬議道路改善工程(有待詳細設計) |  | 已婚警察宿舍  |
|  | 現有輕鐵站            |  | 配水庫   |
|  | 現有西鐵站            |  | 擬議公共運輸交匯處                                     |
|  | 普通科診所            |  | 非建築用地   |
|  | 歷史建築物            |  | 低矮建築帶   |
|  | 社會福利設施           |  | 蓄洪湖   |
|  | 區消防局及救護站         |  | 蓄洪缸   |
|  | 幼稚園              |  |   |

擬議公共運輸交匯處  
Proposed Public Transport Interchange

## 土地用途地帶 LAND USE ZONING

- |  |  |
|--|--|
|  | 公共房屋第一區 - 租住公屋(包括商業用途)   |
|  | Special Residential - Zone 1 - Public Rental Housing (with Commercial) |
|  | 住宅發展第一區(資助出售房屋包括商業用途)  |
|  | Residential - Zone 1 (Subsidised Sale Flats with Commercial)           |
|  | 公共房屋第二區 - 租住公屋(包括商業用途)   |
|  | Special Residential - Zone 2 - Public Rental Housing (with Commercial) |
|  | 住宅發展第二區(資助出售房屋包括商業用途)  |
|  | Residential - Zone 2 (Subsidised Sale Flats with Commercial)           |
|  | 住宅發展第二區(包括商業用途)  |
|  | Residential - Zone 2 (with Commercial)                                 |
|  | 住宅發展第二區  |
|  | Residential - Zone 2   |
|  | 住宅發展第三區  |
|  | Residential - Zone 3   |
|  | 住宅發展第四區  |
|  | Residential - Zone 4   |
|  | 住宅發展第五區  |
|  | Residential - Zone 5   |
|  | 住宅發展第五區(現有發展區)   |
|  | Residential - Zone 5 (Existing Development Area)                       |
|  | 住宅發展第六區  |
|  | Residential - Zone 6   |
|  | 其他指定用途(混合發展)   |
|  | Other Specified Uses (Mixed Use)                                       |
|  | 鄉村式發展  |
|  | Village Type Development   |
|  | 其他指定用途(貯物用途)   |
|  | Other Specified Uses (Storage Use)                                     |
|  | 其他指定用途(露天貯物)   |
|  | Other Specified Uses (Open Storage)                                    |
|  | 其他指定用途(貯物及工場用途)  |
|  | Other Specified Uses (Storage and Workshop Uses)                       |
|  | 其他指定用途(污水處理廠)  |
|  | Other Specified Uses (Sewage Treatment Works)                          |
|  | 其他指定用途   |
|  | Other Specified Uses   |
|  | 其他指定用途(山邊河道及觀景單車徑)   |
|  | Other Specified Uses (Hillside River Corridor with Scenic Cycle Track) |
|  | 政府   |
|  | 機構或社區  |
|  | 教育   |
|  | 地區休憩用地   |
|  | District Open Space  |
|  | 地區休憩用地(1)  |
|  | District Open Space (1)  |
|  | 鄰舍休憩用地   |
|  | Local Open Space   |
|  | 鄰舍休憩用地(1)  |
|  | Local Open Space (1)   |
|  | 美化市容地帶   |
|  | Amenity  |
|  | 農業   |
|  | Agriculture  |
|  | 綠化地帶   |
|  | Green Belt   |
|  | 綠化地帶(1)  |
|  | Green Belt (1)   |

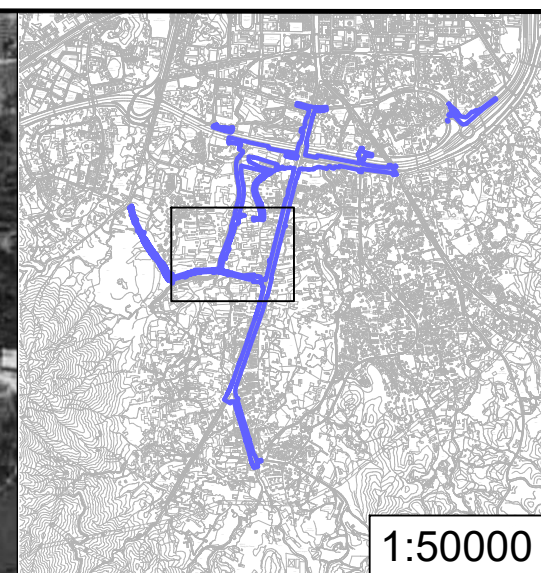
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**APPENDIX B**  
**AERIAL PHOTO RECORD (1964 - 2022)**

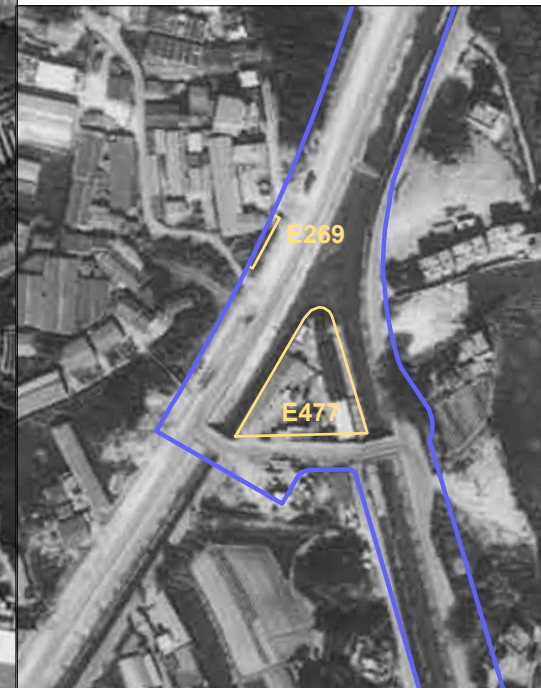
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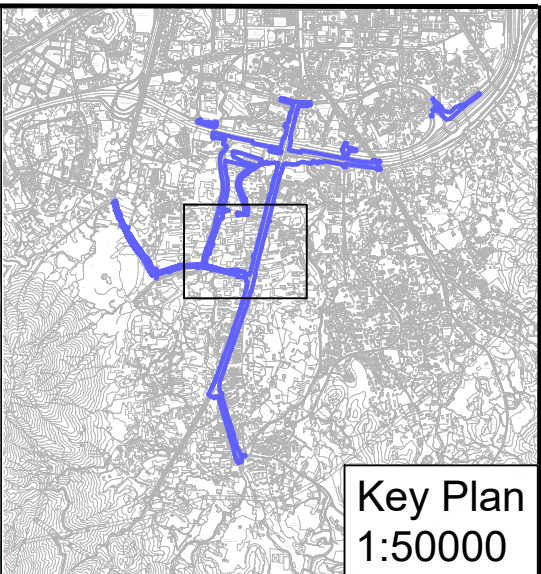
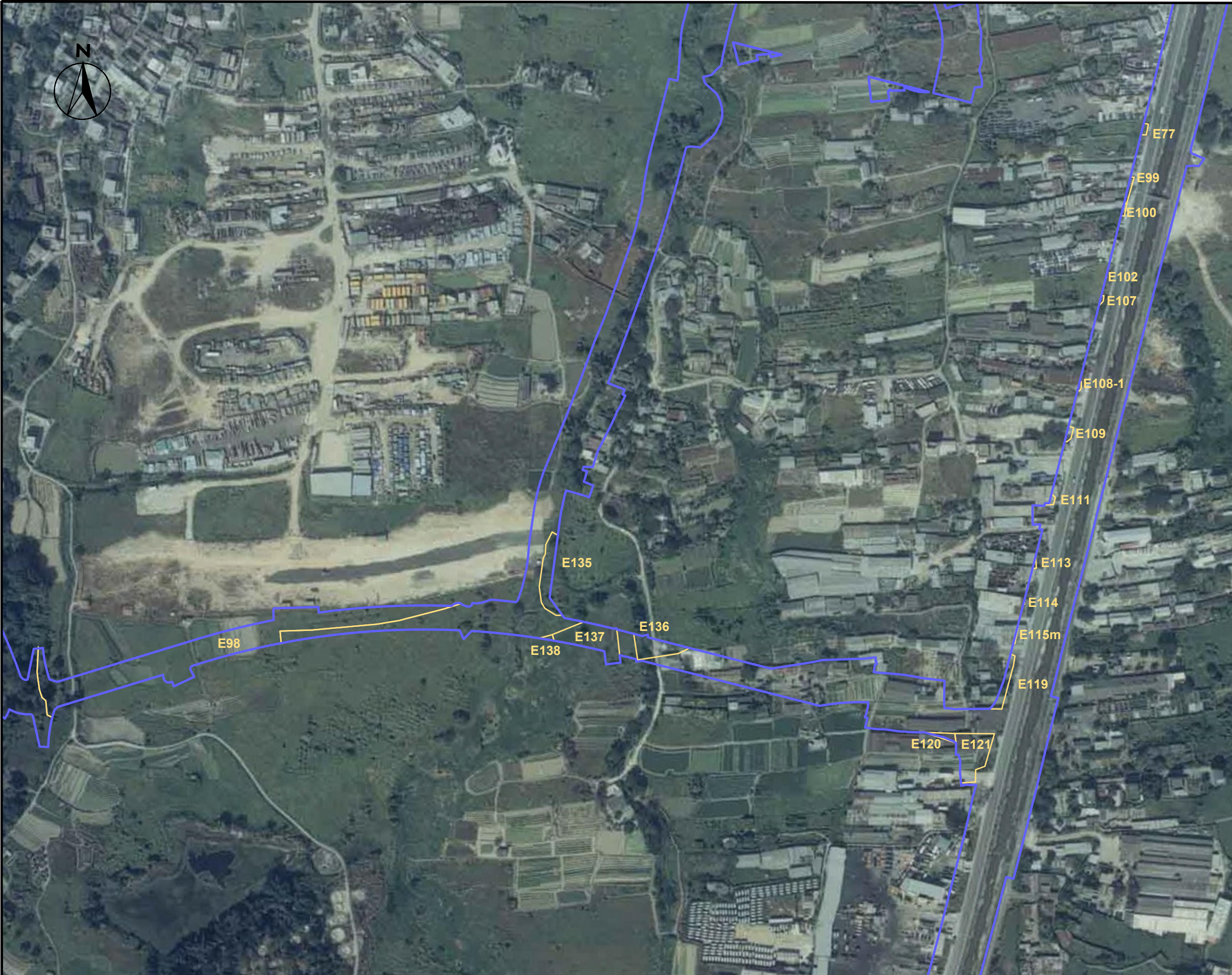
**Legend**

Project Boundary (YL/2021/04)	
Potentially Contaminated Sites (Covered for this SCAP)	



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
 Year: 1988 Photo No.: A15987

SCALE	1:2500@A3	DATE	18 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix B
		REV	-



Key Plan  
1:50000

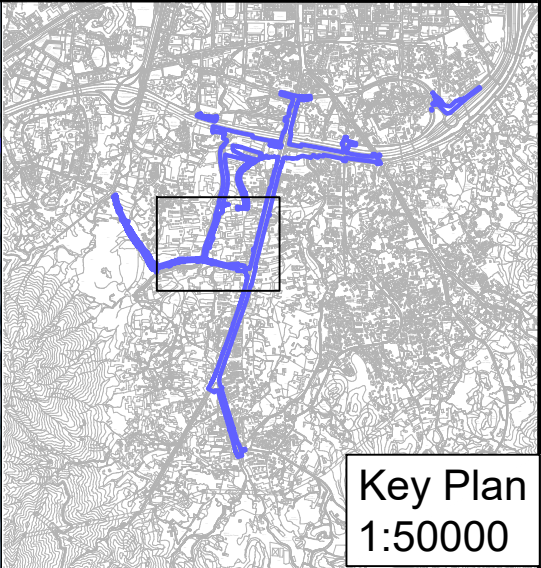
**Legend**

- Project Boundary (YL/2021/04)
- Sites (Potentially Contaminated) within Assessment Area



	YL/2021/04	SCALE	1:2500@A3	DATE	18 Aug 2023
	Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2	CHECK	CC	DRAWN	KC
	Year: 1994	JOB No.	LC23032	FIGURE No.	Appendix B
	Photo No.: CN08801				-

F:\Projects\LC23032 - YL202104-SC1013 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2\Drawings\CAD\Part 2\2\SCAP-2\_v2.0\_Aerial Photos\_230919.dwg



Key Plan  
1:50000

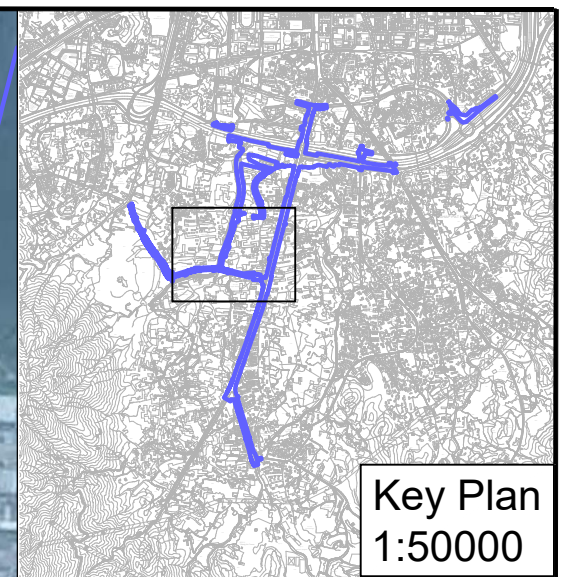
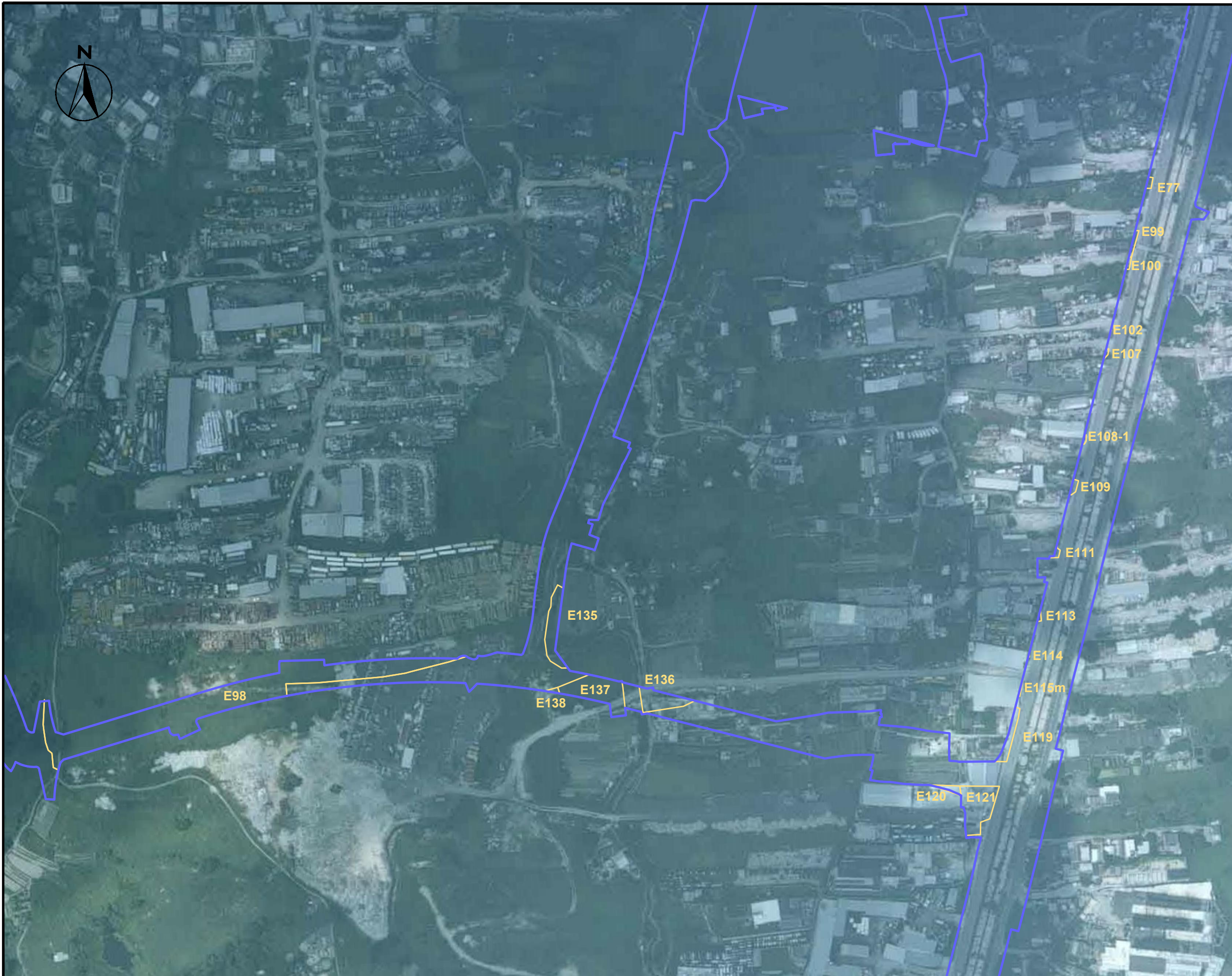
**Legend**

- Project Boundary (YL/2021/04)
- Sites (Potentially Contaminated) within Assessment Area



	YL/2021/04		SCALE	1:2500@A3	DATE	18 Aug 2023	
	Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2		CHECK	CC	DRAWN	KC	
	Year: 1999		JOB No.	LC23032	FIGURE No.	Appendix B	REV
	Photo No.: CN22407				-		

F:\Projects\LC23032 - YL202104-SC1013 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2\Drawings\CAD\Part 2\2\SCAP-2\_v2.0\_Aerial Photos\_230919.dwg



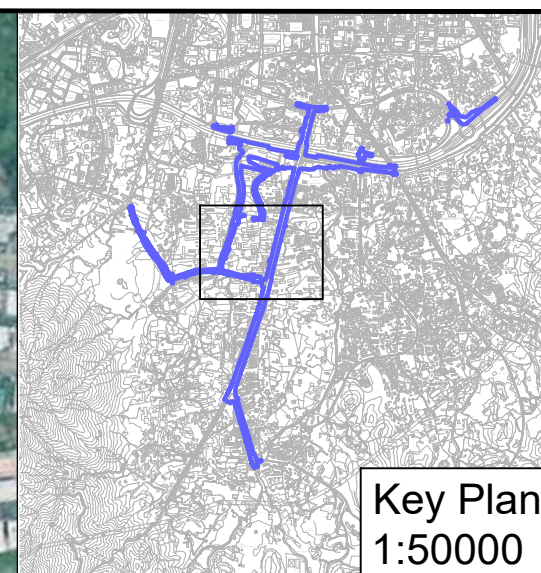
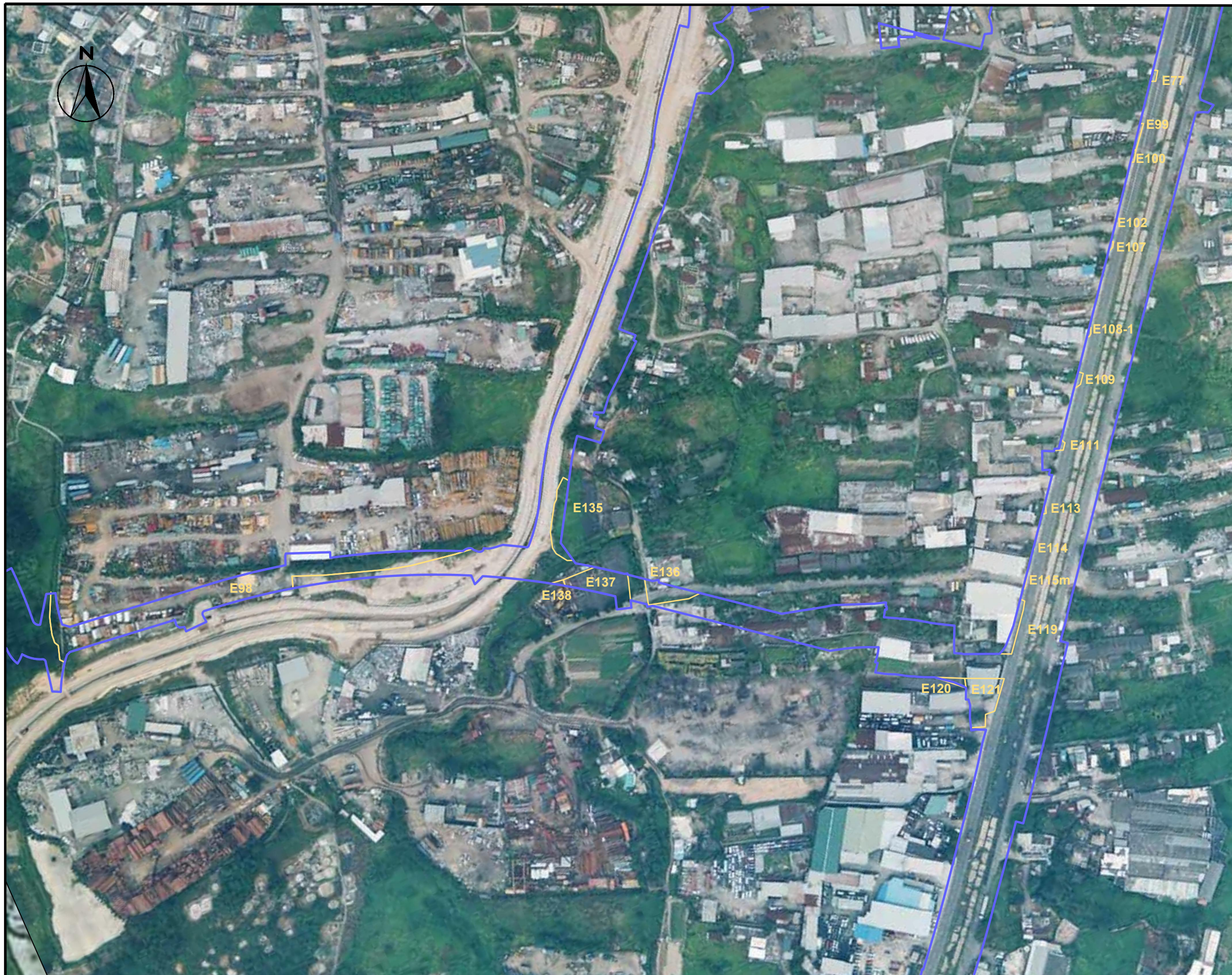
**Legend**

Project Boundary (YL/2021/04)	
Sites (Potentially Contaminated) within Assessment Area	



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Year: 2000**      **Photo No.: CN27964**

SCALE	1:2500@A3	DATE	18 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix B
		REV	-



**Legend**

Project Boundary (YL/2021/04)

Sites (Potentially Contaminated) within Assessment Area

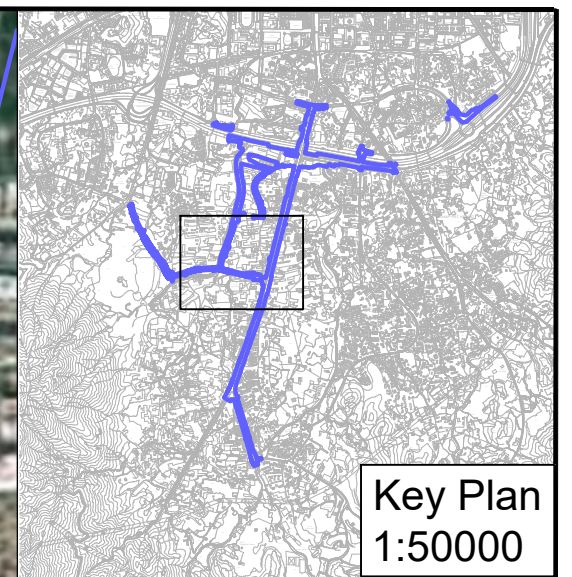


YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Year: 2005** **Photo No.: CW66689**

SCALE	1:2500@A3	DATE	18 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix B
		REV	-

F:\Projects\LC23032 - YL202104-SC1013 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2\Drawings\CAD\Part 2\2\SCAP-2\_v2.0\_Aerial Photos\_230919.dwg





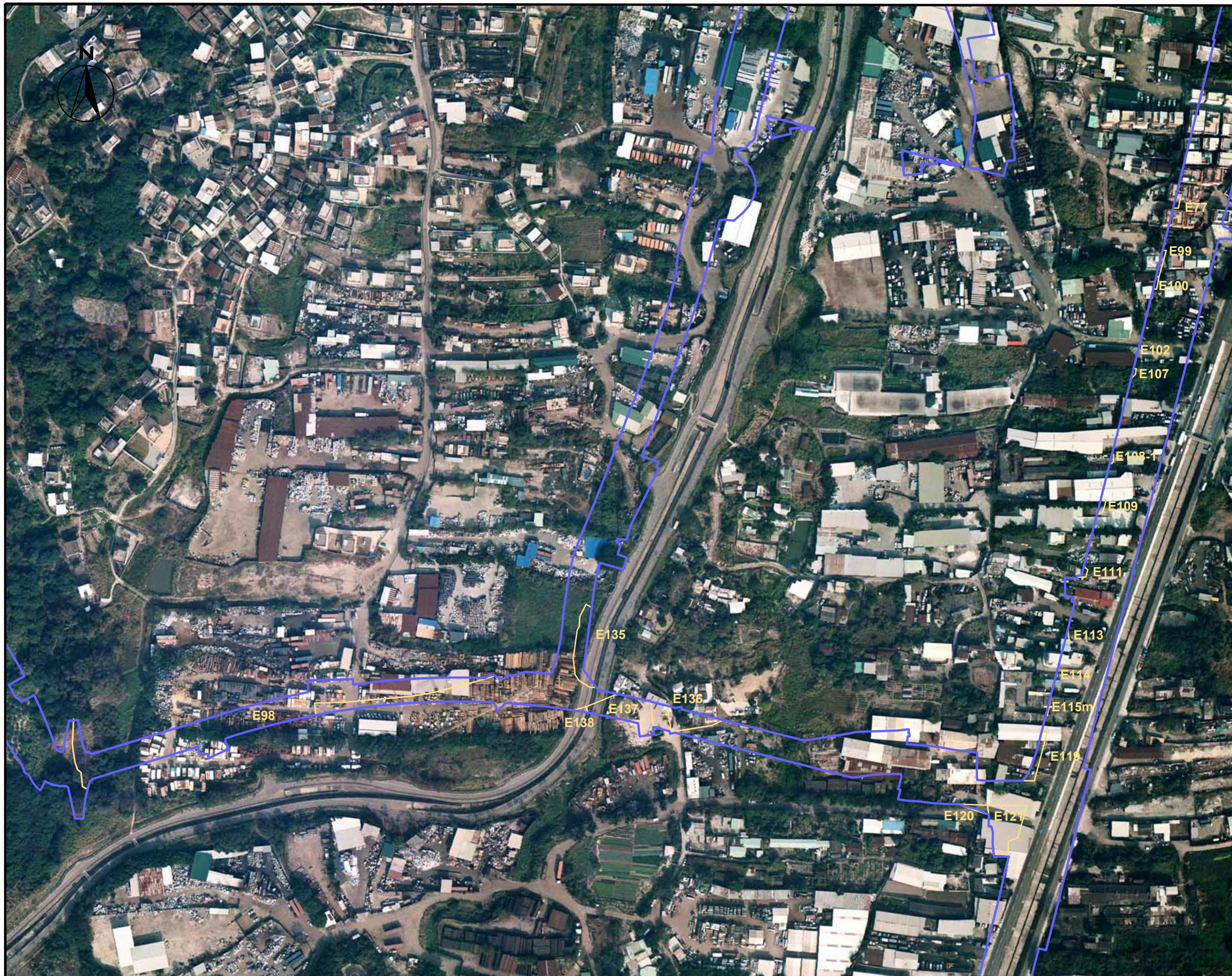
**Legend**

Project Boundary (YL/2021/04)	
Sites (Potentially Contaminated) within Assessment Area	



YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Year: 2006**  
**Photo No.: CW74256**

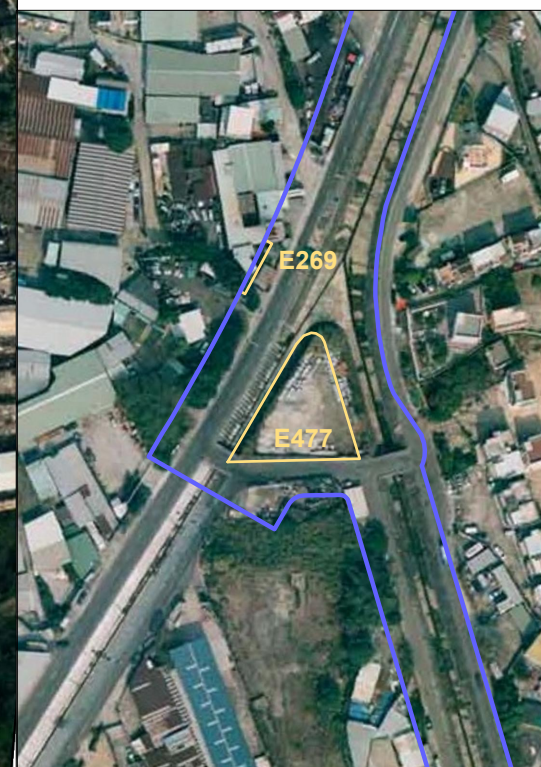
SCALE	1:2500@A3	DATE	18 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix B
		REV	-



**Legend**

Project Boundary (YL/2021/04)

Sites (Potentially Contaminated) within Assessment Area



SCALE	1:2500@A3	DATE	15 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix B
		REV	-

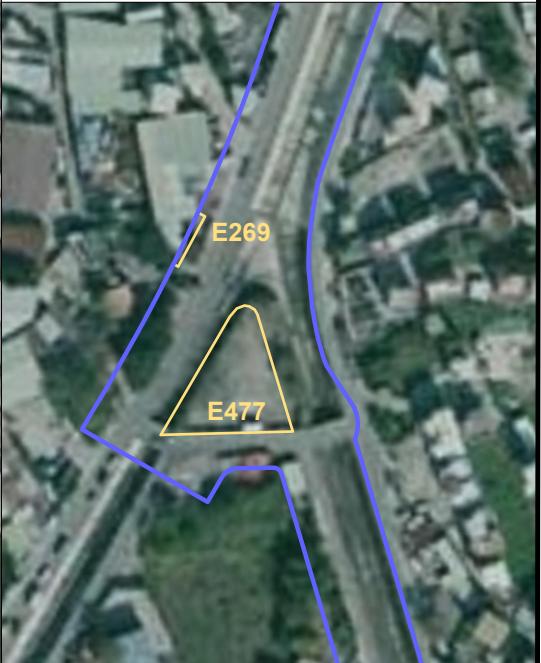


**Key Plan**  
1:50000

**Legend**

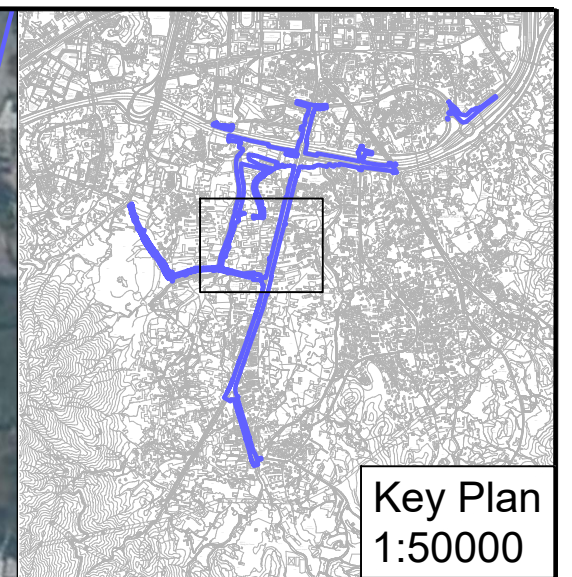
Project Boundary (YL/2021/04)

Sites (Potentially Contaminated) within Assessment Area





	YL/2021/04		SCALE	1:2500@A3	DATE	15 Aug 2023	
	Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2		CHECK	CC	DRAWN	KC	
	Year: 2016		JOB No.	LC23032	FIGURE No.	Appendix B	REV
	Photo No.: E002534C					-	

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Key Plan  
1:50000

**Legend**

- Project Boundary (YL/2021/04) 
- Sites (Potentially Contaminated) within Assessment Area 



YL/2021/04  
Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
Year: 2022  
Photo No.: E146788C

SCALE	1:2500@A3	DATE	15 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix B
		REV	-

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**APPENDIX C  
CORRESPONDENCES FROM THE EPD  
AND FSD**

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Our ref.: LC23032/corr/out/230506

**Environmental Protection Department**  
**Environmental Compliance Division**  
**Regional Office (North)**  
**Yuen Long**

10th floor, Shatin Government Offices,  
No.1 Sheung Wo Che Road, Sha Tin, New Territories

**By E-Mail**  
**6 May 2023**

**Attn.: Miss WONG Hau Yin, Suki**

Dear Madam,

**YL/2021/04 - Site Formation and Infrastructure Works for Yuen Long South First Phase  
Development - Contract 2**  
**- Enquiry on Record of Land Contamination**

We, Cinotech Consultants Ltd., have been commissioned by CREC Joint Venture to conduct a Land Contamination Assessment to investigate the potential land contamination at Yuen Long South. The appointment letter and the Assessment Area (Sheet 60566218/C2/5020) are attached herewith for your reference.

According to the scope of the subject project, a Contamination Assessment Plan (CAP), and Contamination Assessment Report (CAR) shall be prepared for a land contamination assessment. I am writing to enquire if there are any past record of registered chemical waste producers and reported accidents of chemical leakage or spillage within the Assessment Area (**Sheet 60566218/C2/5020**) in support of the required land contamination assessment.

Your reply by 15<sup>th</sup> May 2023 will be much appreciated. If you need any further clarification, please contact our Ms. Karina Chan at 2157 3880 or the undersigned at 2151 2083.

Yours faithfully,



Mr. K.S Lee  
Technical Director

Encl. Appointment Letter & Sheet 60566218/C2/5020

c.c. CREC Joint Venture

Mr. Kelvin Cheung

(by e-mail)






WORKS ORDER

<b>Contract No.:</b>	YL/2021/04
<b>Contract Title:</b>	Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2

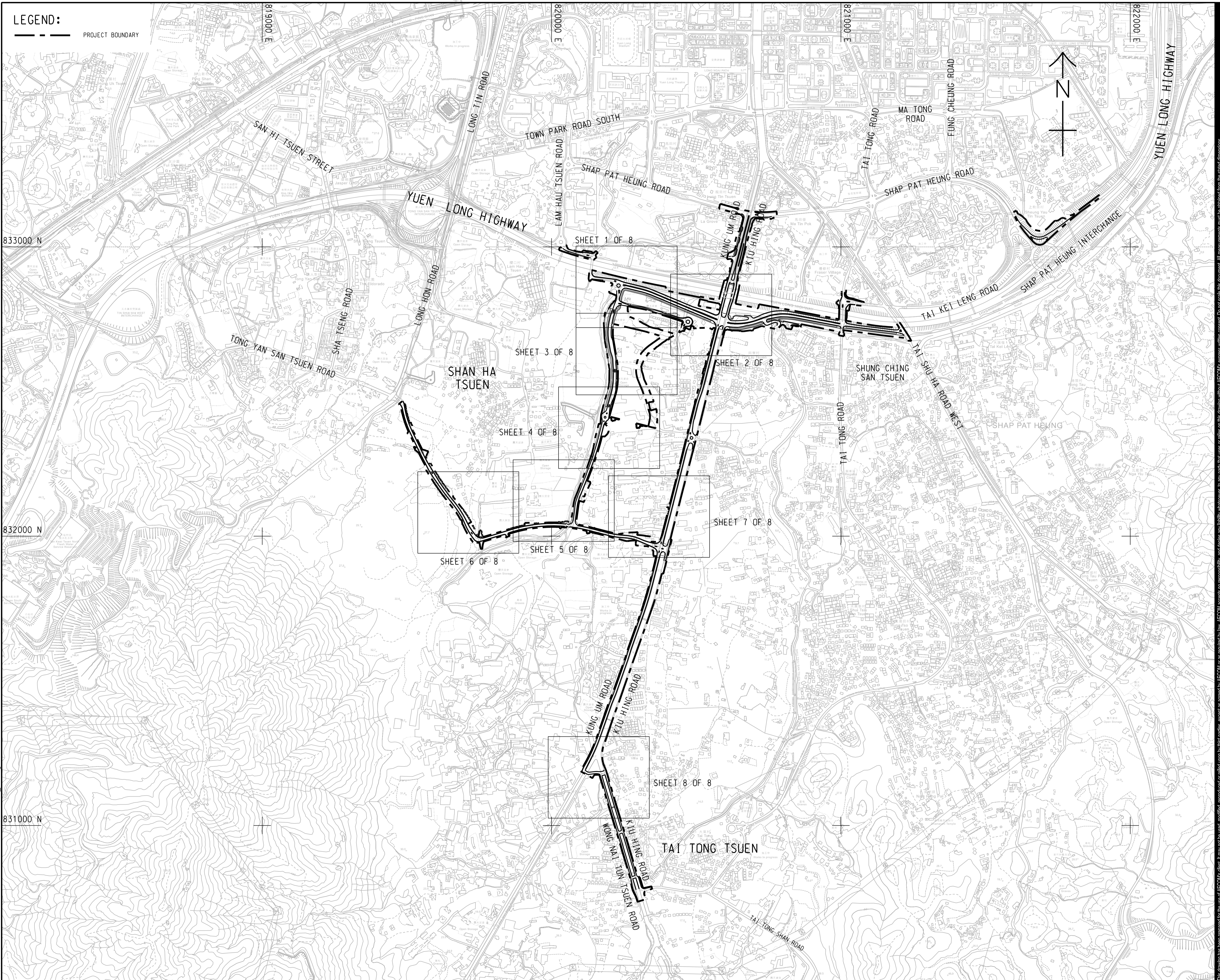
<b>To:</b>	CINOTECH CONSULTANTS LIMITED	<b>Works Order No.:</b>	SC1013
<b>Address:</b>	FLAT/RM 10, 17/F, TECHNOLOGY PARK, 18 ON LAI ST, SHATIN, NT	<b>Date of Issue:</b>	27-Apr-23
<b>Attention:</b>	MS. KARINA CHAN		
<b>Description of Works:</b>	ASSESSMENT OF LAND CONTAMINATION		
<b>Location:</b>	CONSTRUCTION SITE		

Item	Description	Quantity	Unit
1	Prepare and submit the Supplementary Contamination Assessment Plan (SCAP) to the satisfaction of the <i>Project Manager</i> / Environmental Protection Department. (Carry out Site Walkover for the preparing the SCAP)	1	Item
2	Site Supervision for sampling works (Include meeting)	1	Item

<b>Complete Date Required:</b>	Determine on site
<b>Agreed &amp; Accepted By:</b> For and on behalf of Cinotech Consultants Limited   Date: 27 <sup>th</sup> Apr 2023 	<b>Ordered By:</b>  Authorized Representative Project Manager  Date: 2 May 2023
<b>Remarks:</b> 1. The attach General Conditions of Works Order shall be referred.	

Project Management Initials: *AWSY* Designer: ALWH Checked: AWSY Approved: IHWL  
 ISO A1 594mm x 841mm

2022/6/9  
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**LEGEND:**  
 --- PROJECT BOUNDARY



**PROJECT**  
 項目

**YUEN LONG SOUTH DEVELOPMENT**

**CONTRACT TITLE:**  
 SITE FORMATION AND INFRASTRUCTURE WORKS FOR YUEN LONG SOUTH FIRST PHASE DEVELOPMENT - CONTRACT 2

**CLIENT**  
 業主



**CONSULTANT**  
 工程顧問公司

AECOM Asia Company Ltd.  
 www.aecom.com

**SUB-CONSULTANTS**  
 分判工程顧問公司

**ISSUE/REVISION**  
 修訂

I/R	DATE	DESCRIPTION	CHK.
修訂	日期	內容描述	校核
-	JUN. 22	TENDER DRAWING	AWSY

**STATUS**  
 階段

**SCALE**  
 比例

A1 1 : 6000

**DIMENSION UNIT**  
 尺寸單位

METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號

60566218

**CONTRACT NO.**  
 合約編號

YL/2021/04

**SHEET TITLE**  
 圖紙名稱

POTENTIAL LAND CONTAMINATION PLAN - KEY PLAN

**SHEET NUMBER**  
 圖紙編號

60566218/C2/5020

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**Subject:** Re: YL202104-Site Formation and Infrastructure Works for Yuen Long South First Phase Development-Contract 2\_Enquiry for Land Con Assessment  
**From:** hauyinwong@epd.gov.hk  
**Date:** 10/05/2023, 10:16  
**To:** "Karina Chan" <karina.chan@cinotech.com.hk>

Dear Ms. CHAN,

YL/2021/04 - Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
- Enquiry on Record of Land Contamination

I refer to your email dated 6 May 2023 about the captioned. Our reply is as below:

1.

(a) For the registration of Chemical Waste Producers, a registry is available at our Territory Control Office at Wan Chai. Please contact our Mr. Gordon KWAN, Senior Environmental Protection Inspector, at Tel: 2835 1027 for details;

(b) This Regional Office has no record of reported accidents of chemical leakage/spillage within the assessment area as specified in your email attachment in the past five years. You may also need to check with other parties / departments for such information as appropriate.

Please contact me at 2158 5823 should you have any question.

Best Regards,  
Suki Wong  
Regional Office (North)  
Environmental Protection Department

From: "Karina Chan" <karina.chan@cinotech.com.hk>  
To: "hauyinwong@epd.gov.hk" <hauyinwong@epd.gov.hk>  
Cc: "Kelvin Cheung" <kelvin.cheung@creciv-yls.com>  
Date: 06/05/2023 14:03  
Subject: YL202104-Site Formation and Infrastructure Works for Yuen Long South First Phase Development-Contract 2\_Enquiry for Land Con Assessment

---

Dear Miss Wong,

I am writing to enquire if there are any past record of registered chemical waste producers and reported accidents of chemical leakage or spillage at Yuen Long South, in support of a land contamination assessment. Please find attached herewith the formal enquiry letter and location of the Assessment Area for your reference.

Thanks & Regards,  
*Karina*

-----

Karina Chan  
Cinotech Consultants Limited

Direct line: 2157 3880[attachment "EPD\_kc230506\_Enquiry on Chemical Spills Records\_All.pdf" deleted by Hau Yin WONG/EPD/HKSARG]

Our ref.: LC23032/corr/out/230506

Fire Services Department  
Fire Services Headquarters Command  
Management Group (MG)  
9th Floor, Fire Services Headquarters Building  
1 Hong Chong Road, Tsim Sha Tsui East, Kowloon

**By E-Mail**  
6 May 2023

**Attn.: Mr. NG Wing-chit, Edwin**

Dear Sir,

**YL/2021/04 - Site Formation and Infrastructure Works for Yuen Long South First Phase  
Development - Contract 2  
- Enquiry on Record of Land Contamination**

We, Cinotech Consultants Ltd., have been commissioned by CREC Joint Venture to conduct a Land Contamination Assessment to investigate the potential land contamination at Yuen Long South. The appointment letter and the Assessment Area (**Sheet 60566218/C2/5020**) are attached herewith for your reference.

According to the scope of the subject project, a Contamination Assessment Plan (CAP), and Contamination Assessment Report (CAR) shall be prepared for a land contamination assessment. I am writing to enquire if there are any past record of dangerous goods license and reported accidents of dangerous goods leakage or spillage within the Land Contamination Assessment Area (**Sheet 60566218/C2/5020**) in support of the required land contamination assessment.

Your reply by 15<sup>th</sup> May 2023 will be much appreciated. If you need any further clarification, please contact our Ms. Karina Chan at 2157 3880 or the undersigned at 2151 2083.

Yours faithfully,



Mr. K.S Lee  
Technical Director

Encl. Appointment Letter & Sheet 60566218/C2/5020

c.c. CREC Joint Venture

Mr. Kelvin Cheung

(by e-mail)






WORKS ORDER

<b>Contract No.:</b>	YL/2021/04
<b>Contract Title:</b>	Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2

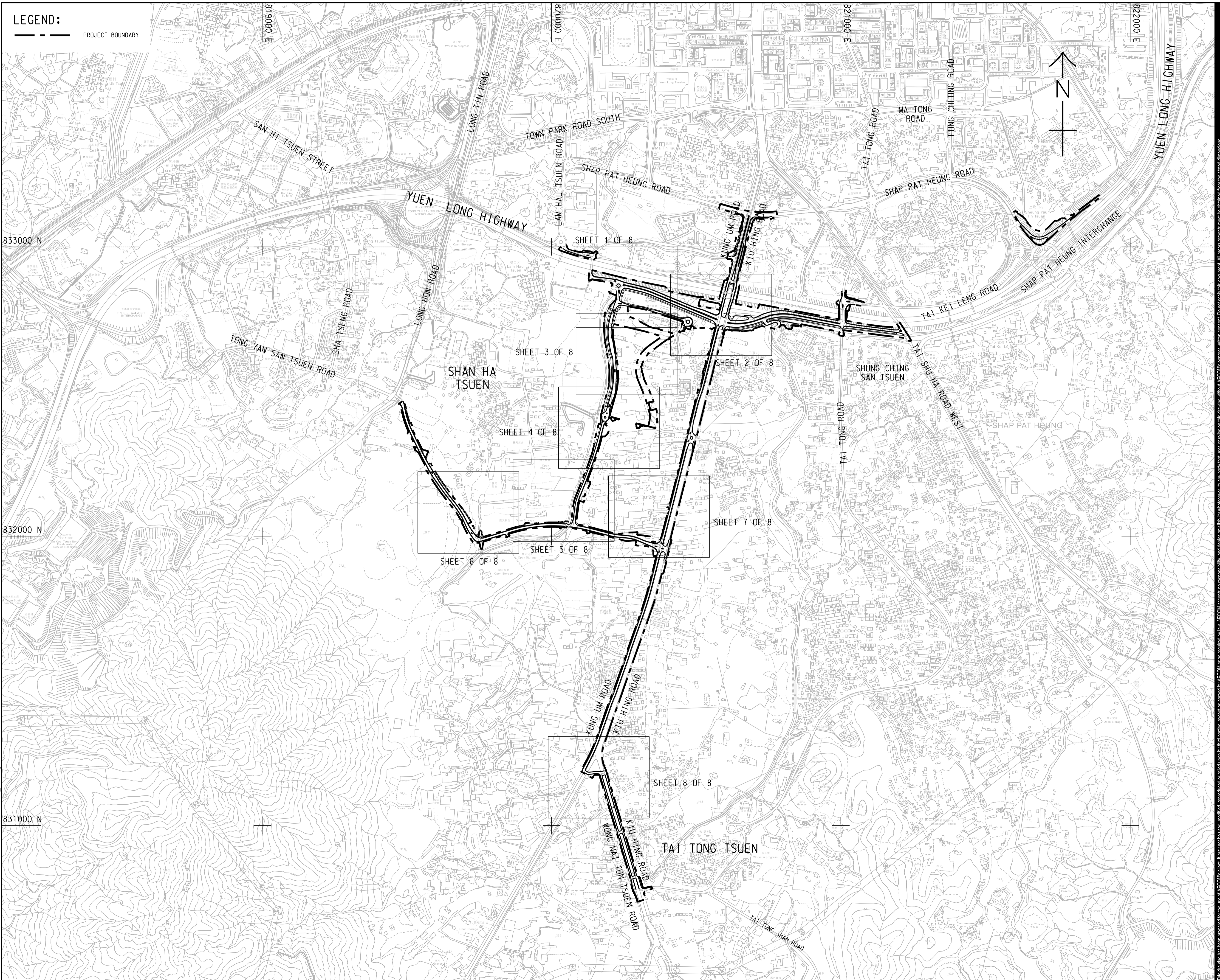
<b>To:</b>	CINOTECH CONSULTANTS LIMITED	<b>Works Order No.:</b>	SC1013
<b>Address:</b>	FLAT/RM 10, 17/F, TECHNOLOGY PARK, 18 ON LAI ST, SHATIN, NT	<b>Date of Issue:</b>	27-Apr-23
<b>Attention:</b>	MS. KARINA CHAN		
<b>Description of Works:</b>	ASSESSMENT OF LAND CONTAMINATION		
<b>Location:</b>	CONSTRUCTION SITE		

Item	Description	Quantity	Unit
1	Prepare and submit the Supplementary Contamination Assessment Plan (SCAP) to the satisfaction of the <i>Project Manager</i> / Environmental Protection Department. (Carry out Site Walkover for the preparing the SCAP)	1	Item
2	Site Supervision for sampling works (Include meeting)	1	Item

<b>Complete Date Required:</b>	Determine on site
<b>Agreed &amp; Accepted By:</b> For and on behalf of Cinotech Consultants Limited   Date: 27 <sup>th</sup> Apr 2023 	<b>Ordered By:</b>  Authorized Representative Project Manager  Date: 2 May 2023
<b>Remarks:</b> 1. The attach General Conditions of Works Order shall be referred.	

Project Management Initials: *AWSY* Designer: ALWH Checked: AWSY Approved: IHWL  
 ISO A1 594mm x 841mm

Plot File by: L1ANJ2 2022/6/9  
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**LEGEND:**  
 - - - - - PROJECT BOUNDARY



**PROJECT**  
 項目  
**YUEN LONG SOUTH DEVELOPMENT**

**CONTRACT TITLE:**  
 合約編號  
**SITE FORMATION AND INFRASTRUCTURE WORKS FOR YUEN LONG SOUTH FIRST PHASE DEVELOPMENT - CONTRACT 2**

**CLIENT**  
 業主  
 **土木工程拓展署**  
 Civil Engineering and Development Department

**CONSULTANT**  
 工程顧問公司  
 AECOM Asia Company Ltd.  
 www.aecom.com

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 分判工程顧問公司

**ISSUE/REVISION**  
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 METRES

**KEY PLAN**  
 索引圖

**PROJECT NO.**  
 項目編號  
 60566218

**CONTRACT NO.**  
 合約編號  
 YL/2021/04

**SHEET TITLE**  
 圖紙名稱  
**POTENTIAL LAND CONTAMINATION PLAN - KEY PLAN**

**SHEET NUMBER**  
 圖紙編號  
 60566218/C2/5020

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消防處

香港九龍尖沙咀東部康莊道 1 號  
消防處總部大廈



**FIRE SERVICES DEPARTMENT**  
**FIRE SERVICES HEADQUARTERS BUILDING,**  
No.1 Hong Chong Road,  
Tsim Sha Tsui East, Kowloon,  
Hong Kong.

本處檔號 **OUR REF.** : (4) in FSD GR 6-5/4 R Pt. 47  
來函檔號 **YOUR REF.** : LC23032/corr/out/230506  
電子郵件 **E-mail** : hkfsdenq@hkfsd.gov.hk  
圖文傳真 **FAX NO.** : 2739 5879  
電話 **TEL NO.** : 2733 7741

5 June 2023

CINOTECH Consultants Limited  
Room 1710, 17/F, Technology Park,  
18 On Lai Street, Shatin, N.T.  
**(Attn: Mr. K S LEE, Technical Director)**

Dear Mr. LEE,

**YL/2021/04 – Site Formation and Infrastructure Works for Yuen Long  
South First Phase Development – Contract 2  
Request for Information of Dangerous Goods & Incident Records**

I refer to your letter of 6.5.2023 regarding the captioned request and reply below in response to your questions:-

1. No Dangerous Goods Licence was issued in respect of the captioned address.
2. A total of twenty-two incident records were found at the subject location. Please refer to **Appendix A** for details.

If you have further questions, please feel free to contact the undersigned.

Yours sincerely,

(NG Wing-chit)  
for Director of Fire Services

**YL/2021/04 – Site Formation and Infrastructure Works for  
Yuen Long South First Phase Development – Contract 2  
Request for Information of Dangerous Goods & Incident Records**

<b>No.</b>	<b>Date</b>	<b>Type of Incident</b>	<b>Address</b>
1.	9.5.2020	Vegetation Fire	Lamppost AD3965, near Kiu Hing Road
2.	19.7.2020	Vegetation Fire	Tai Shu Ha West
3.	29.8.2020	Traffic Accident	Tai Shu Ha East, Lamppost H2588
4.	14.9.2020	Rubbish Fire	Tai Shu Ha East
5.	13.11.2020	No.1 Fire Alarm	Tai Shu Ha West
6.	1.12.2020	Vegetation Fire	Tai Shu Ha West
7.	31.1.2021	Vegetation Fire	Kiu Hing Road, Shap Pat Heung Road, near Lamppost BD1436
8.	24.5.2021	Vegetation Fire	Tai Shu Ha West
9.	11.7.2021	Rubbish Fire	Tai Shu Ha West
10.	20.8.2021	Vegetation Fire	Tai Shu Ha West
11.	18.9.2021	Traffic Accident	Lamppost FB1056, near Shap Pat Heung Interchange
12.	25.11.2021	Rubbish Fire	Fenced open ground Tin Liu Tsuen
13.	26.11.2021	Rubbish Fire	Lamppost AD3965, near Kiu Hing Road
14.	10.1.2022	Rubbish Fire	Lamppost BD0389, near Tai Tong Road
15.	27.5.2022	Fuel Leakage	Lamppost AD7849, near Tai Tong Road
16.	13.6.2022	Rubbish Fire	Lamppost BD0251, near Sham Chung Road
17.	25.7.2022	Electric Fire	Lamppost CD0059, near Lam Yu Road Pavement
18.	24.9.2022	Rubbish Fire	Pat Heung Road, near Lamppost BD1434
19.	4.11.2022	Traffic Accident	Lamppost BD4365, near Kiu Hing Road
20.	8.11.2022	Traffic Accident	Lamppost BD0389, Near Tai Tong Road
21.	8.1.2023	Vegetation Fire	Lamppost BD2152, Near Kung Um Road
22.	3.3.2023	No.1 Fire Alarm	Lamppost BD0251, near Kiu Hing Road

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**APPENDIX D  
SITE WALKOVER CHECKLIST**

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**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E77)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 30 m<sup>2</sup>

What area of the site is covered by buildings (%): 10%

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	N/A	Drainage area has been identified but there is no drum storage and unloading areas.
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E98)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 2,680 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	Nullah was identified but not close to storage and unloading areas.
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	Yes	Storage site for crane parts was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation were identified but not under stressed.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	Cleaning solvents / paints were expected to be used for the cranes

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E99)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 40 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A



9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E100)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 20 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E102)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 2 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E107)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A



Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 10 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E108-1)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 10 m<sup>2</sup>

What area of the site is covered by buildings (%): 5%

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E109)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 30 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation were identified but no stressed sign.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A



**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E111)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 20 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation was identified but not under stress.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E113)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 10 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation were identified with no stressed sign.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E114)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 1m<sup>2</sup>

What area of the site is covered by buildings (%): 0%

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation were identified with no stressed sign.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A



9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E115m)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: \_\_\_\_\_ 10 m<sup>2</sup>

What area of the site is covered by buildings (%): \_\_\_\_\_ 5%

Please list all current and previous owners/occupiers if possible.

Unknown \_\_\_\_\_

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation were identified with no stressed sign.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E119)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 90 m<sup>2</sup>

What area of the site is covered by buildings (%): 80%

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E120)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A



Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 30 m<sup>2</sup>

What area of the site is covered by buildings (%): 0%

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Abandoned plantation were identified.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E121)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 557 m<sup>2</sup>

What area of the site is covered by buildings (%): 60%

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	No	No secondary containment was identified in chemical storage areas.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	Yes	Vehicle tyres and used lubricant were identified.
5.	Is there a storage site for the wastes?	Yes	Storage site for vehicle tyres and used lubricant was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	Yes	Fuels, lubricating oils and used chemicals were identified.

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E136)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 240 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. ~~Yes~~/No

Are there any other parties on site as tenants or sub-tenants? ~~Yes~~/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	Yes	Concrete bund walls and floors were identified in chemical storage area.
2.	What are the conditions of the bund walls and floors?	Good	No cracks were identified in concrete bunds walls and floors.
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	Yes	Chemical waste storage area was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A



**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E137)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 619 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	No	No secondary containment was identified in chemical storage areas.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	Yes	Chemical waste were identified.
5.	Is there a storage site for the wastes?	Yes	Chemical waste storage area was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	Yes	Anti-rust coolant (Alcohol/water mix) were identified.

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E138)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 5 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. ~~Yes~~/No

Are there any other parties on site as tenants or sub-tenants? ~~Yes~~/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	No	N/A
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	No	N/A
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E269)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity Y  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 50 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	N/A
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A



9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**Site Walkover Checklist (Questionnaire)**

**GENERAL SITE DETAILS**

Site Owner: Anonymous

Property Address: N/A (Site ID: E477)

*Person Conducting the Questionnaire*

Name: N/A

Position: N/A

*Authorized Owner/Client Representative (If Applicable)*

Name: N/A

Position: N/A

Telephone: N/A

**SITE ACTIVITIES**

Briefly describe activities carried out on site, including types of products/chemicals/materials handled. **Obtain a flow schematic if possible.**

Number of employees:

Full-time: N/A

Part-time: N/A

Temporary/Seasonal: N/A

Maximum no. of people on site at any time: N/A

Typical hours of operation: N/A

Number of shifts: N/A

Days per week: N/A

Weeks per year: N/A

Scheduled plant shut-down: N/A

Detail the main sources of energy at the site:

Gas N/A  
 Electricity N/A  
 Coal N/A  
 Oil N/A  
 Other N/A

**SITE DESCRIPTION**

This section is intended to gather information on site setting and environmental receptors on, adjacent or close to the site.

What is the total site area: 1,070 m<sup>2</sup>

What area of the site is covered by buildings (%): N/A (No buildings are within the Site)

Please list all current and previous owners/occupiers if possible.

Unknown

Is a site plan (with indication of the site boundary) available? If yes, please attach. Yes/No

Are there any other parties on site as tenants or sub-tenants? Yes/No

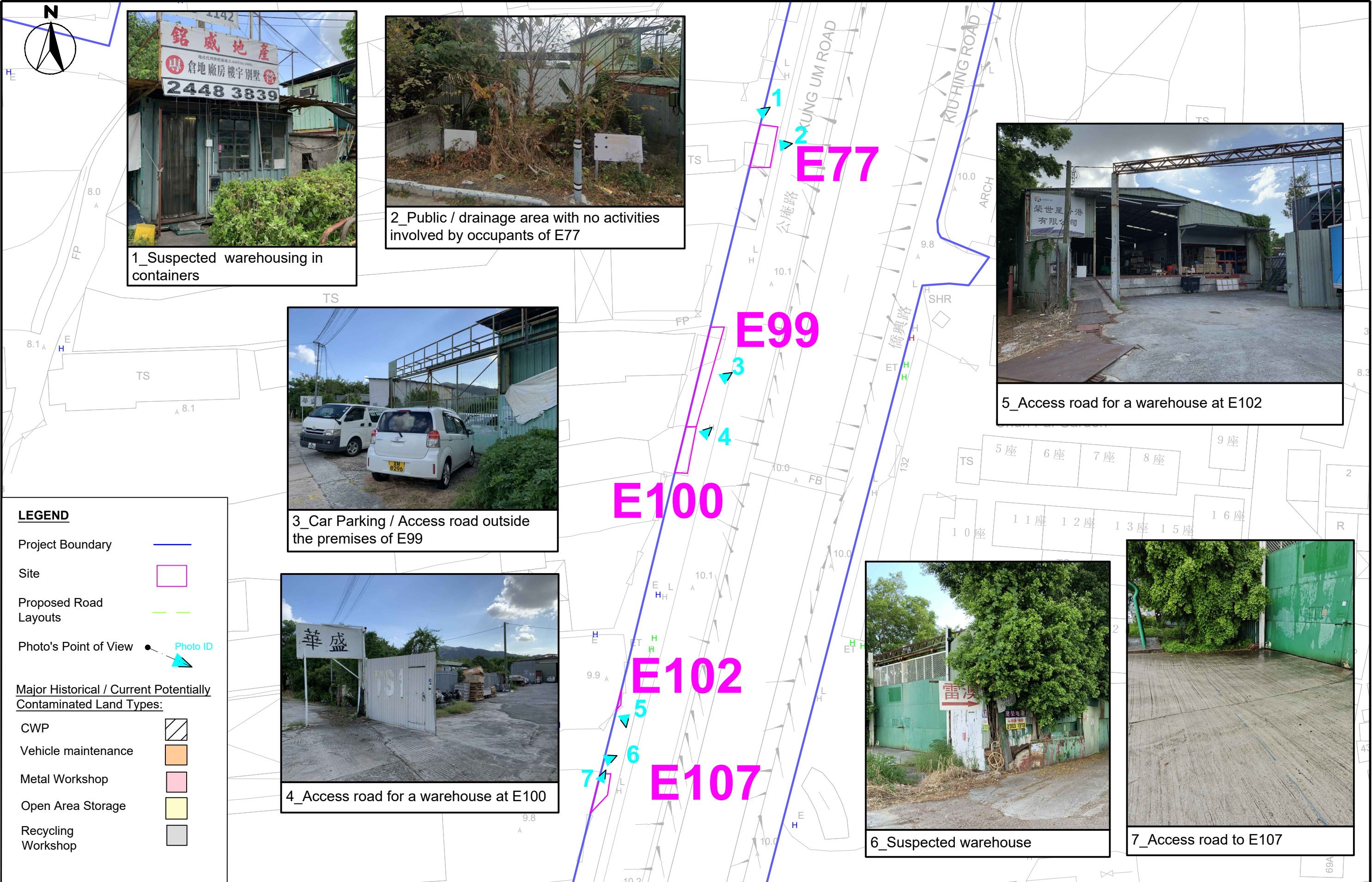
If yes, identify those parties: \_\_\_\_\_

**OBSERVATIONS / OTHERS**

1.	Are chemical storage areas provided with secondary containment (i.e. bund walls and floors)?	N/A	No chemical storage area was identified.
2.	What are the conditions of the bund walls and floors?	N/A	N/A
3.	Are any surface water drains located near to drum storage and unloading areas?	No	N/A
4.	Are any solid or liquid waste (other than wastewater) generated at the site? (If yes, please provide details.)	No	N/A
5.	Is there a storage site for the wastes?	N/A	No storage site was identified.
6.	Is there an on-site landfill?	No	N/A
7.	Were any stressed vegetation noted on site during the site reconnaissance? (If yes, please indicate location and approximate size.)	No	Vegetation were identified with stressed sign.
8.	Were any stained surfaces noted on-site during the site reconnaissance? (If yes, please provide details.)	No	N/A

9.	Are there any potential off-site sources of contamination?	No	N/A
10.	Does the site have any equipment (e.g. Transformers) which might contain polychlorinated biphenyls (PCBs)?	No	N/A
11.	Are there any sumps, effluent pits, interceptors or lagoons on site?	No	N/A
12.	Any noticeable odours during site walkover?	No	N/A
13.	Are any of the following chemicals used on site: fuels, lubricating oils, hydraulic fluids, cleaning solvents, used chemical solutions, acids, anti-corrosive paints, thinners, coal, ash, oily tanks and bilge sludge, metal wastes, wood preservatives and polyurethane foam?	No	N/A

**APPENDIX E  
REPRESENTATIVE PHOTOS OF  
CURRENT SITE WALKOVER**



1\_Suspected warehousing in containers



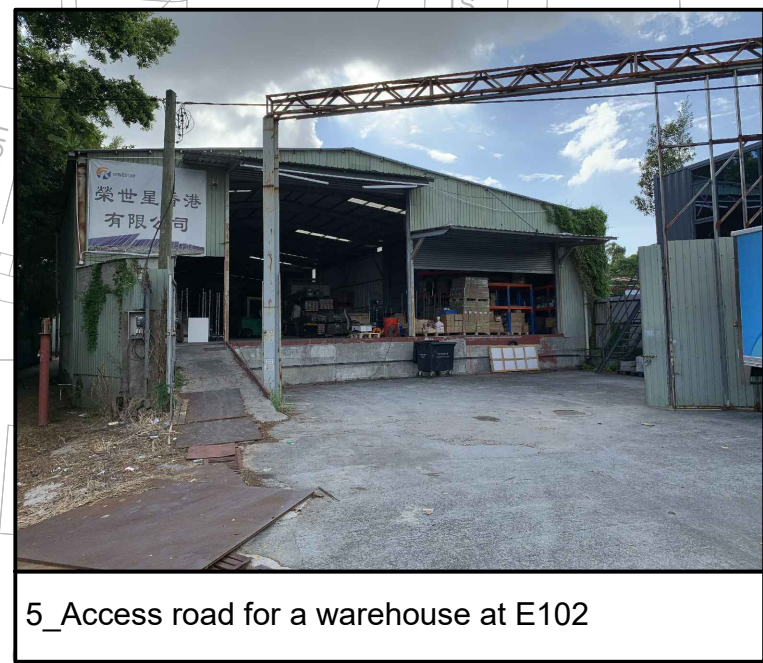
2\_Public / drainage area with no activities involved by occupants of E77



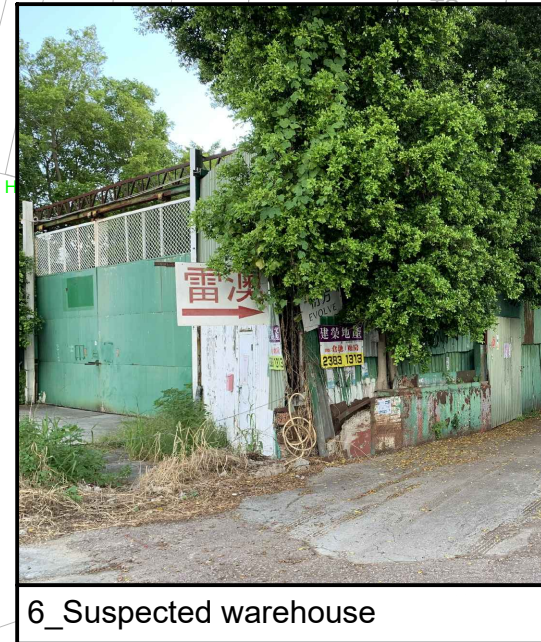
3\_Car Parking / Access road outside the premises of E99



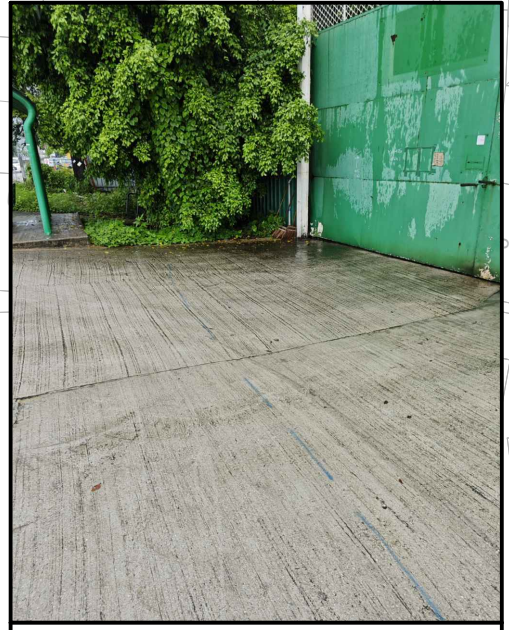
4\_Access road for a warehouse at E100



5\_Access road for a warehouse at E102



6\_Suspected warehouse



7\_Access road to E107

**LEGEND**

Project Boundary

Site

Proposed Road Layouts

Photo's Point of View Photo ID

Major Historical / Current Potentially Contaminated Land Types:

CWP

Vehicle maintenance

Metal Workshop

Open Area Storage

Recycling Workshop

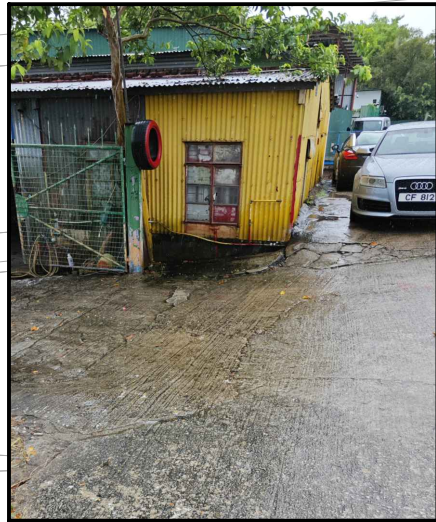


YL/2021/04  
 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Photo Record of Site Walkover (Sites E77, E99, E100, E102 & E107)**

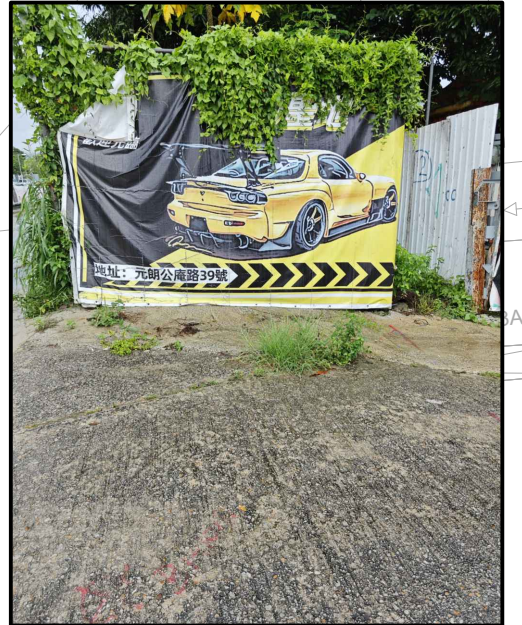
SCALE	1:600@A3	DATE	15 Sept 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix E1
		REV	-



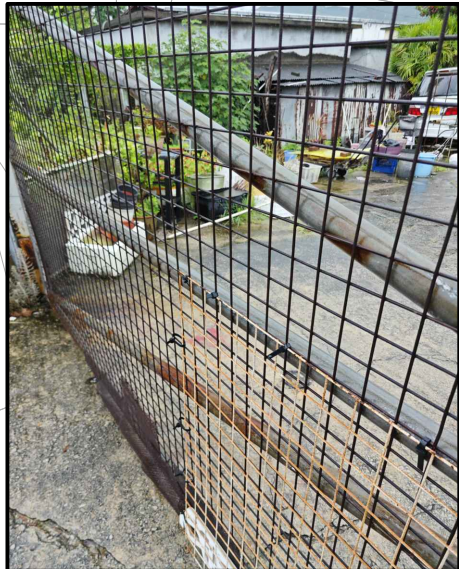
1\_Car parking outside the premises at E108-1



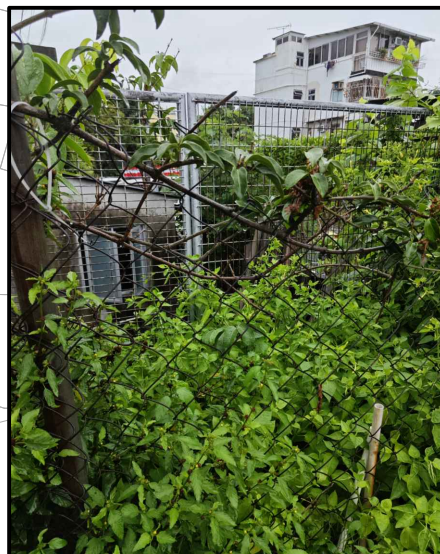
2\_Car parking outside the premises at E108-1



3\_Landscaping area



5\_Gardening area within E111



6\_Landscaping area outside the premises of E111



4\_Landscaping area

**LEGEND**

- Project Boundary
  - Site
  - Proposed Road Layouts
  - Photo's Point of View Photo ID
- Major Historical / Current Potentially Contaminated Land Types:**
- CWP
  - Vehicle maintenance
  - Metal Workshop
  - Open Area Storage
  - Recycling Workshop



SCALE	1:600@A3	DATE	10 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix E2
		REV	-



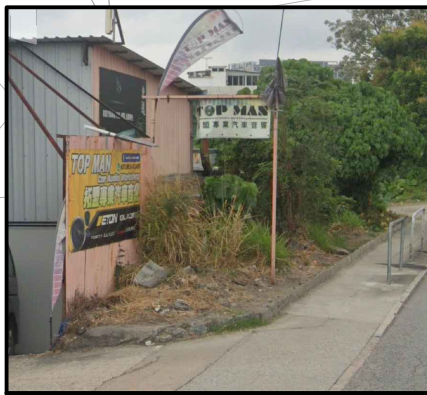
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1\_Access road / landscaping area outside the premises of E113



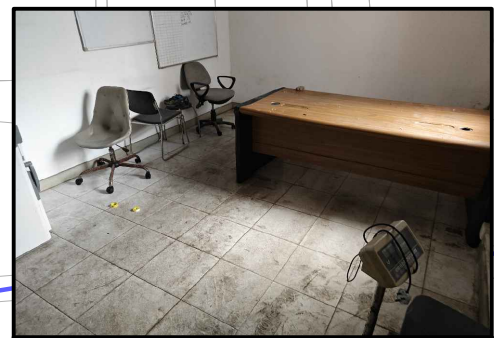
2\_Landscaping area outside the premises of E114



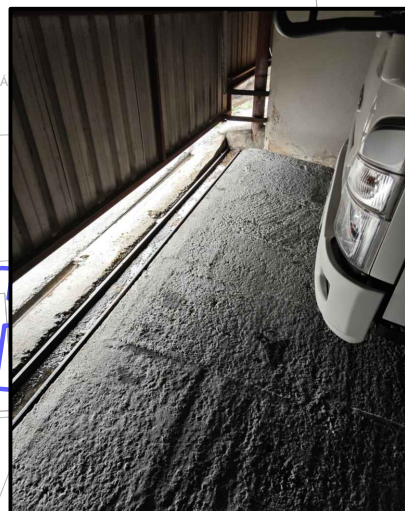
3\_Landscaping area/access road outside the premises of E115m



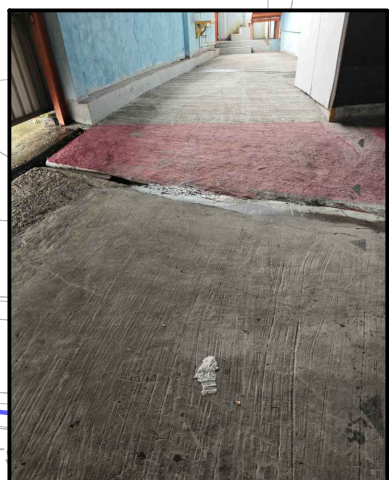
8\_General view of E121



4\_Office within E115m



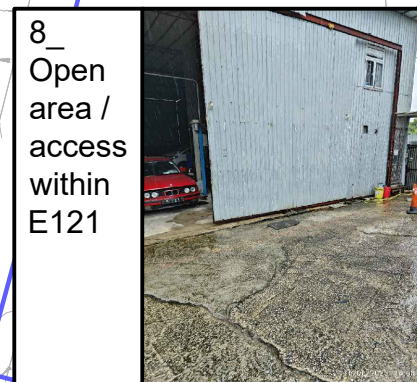
5\_Car parking area / access inside premises of E119



6\_Access inside the premises of E119



12\_Abandoned plantation was found at E120



8\_Open area / access within E121

泥路 Track

**LEGEND**

- Project Boundary
- Site
- Proposed Road Layouts
- Photo's Point of View Photo ID

**Major Historical / Current Potentially Contaminated Land Types:**

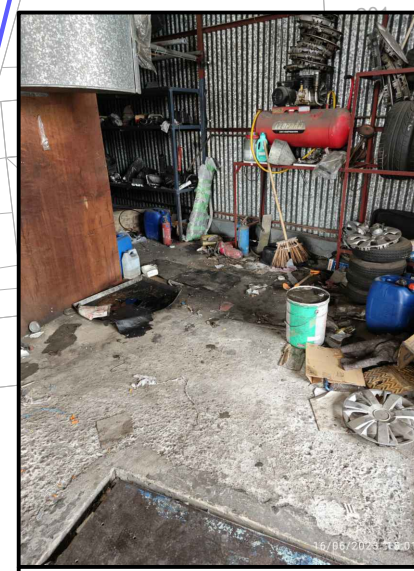
- CWP
- Vehicle maintenance
- Metal Workshop
- Open Area Storage
- Recycling Workshop



7\_Temporary structure for warehousing at E119

E120

E121



10\_Signs of vehicle maintenance activities & chemicals used



11\_Storage of vehicle tyres & used lubricants

YL/2021/04

Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2

**Photo Record of Site Walkover (Sites E113, E114, E115m, E119, E120 & E121)**

SCALE	1:600@A3	DATE	15 Sept 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix E3
		REV	-

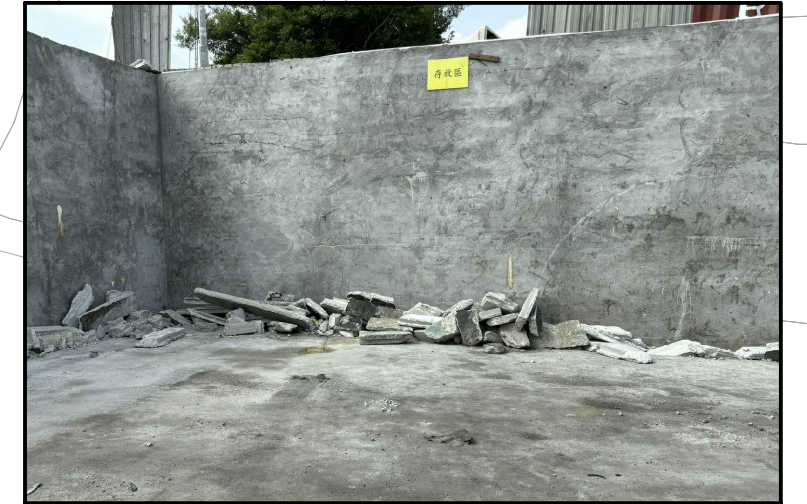




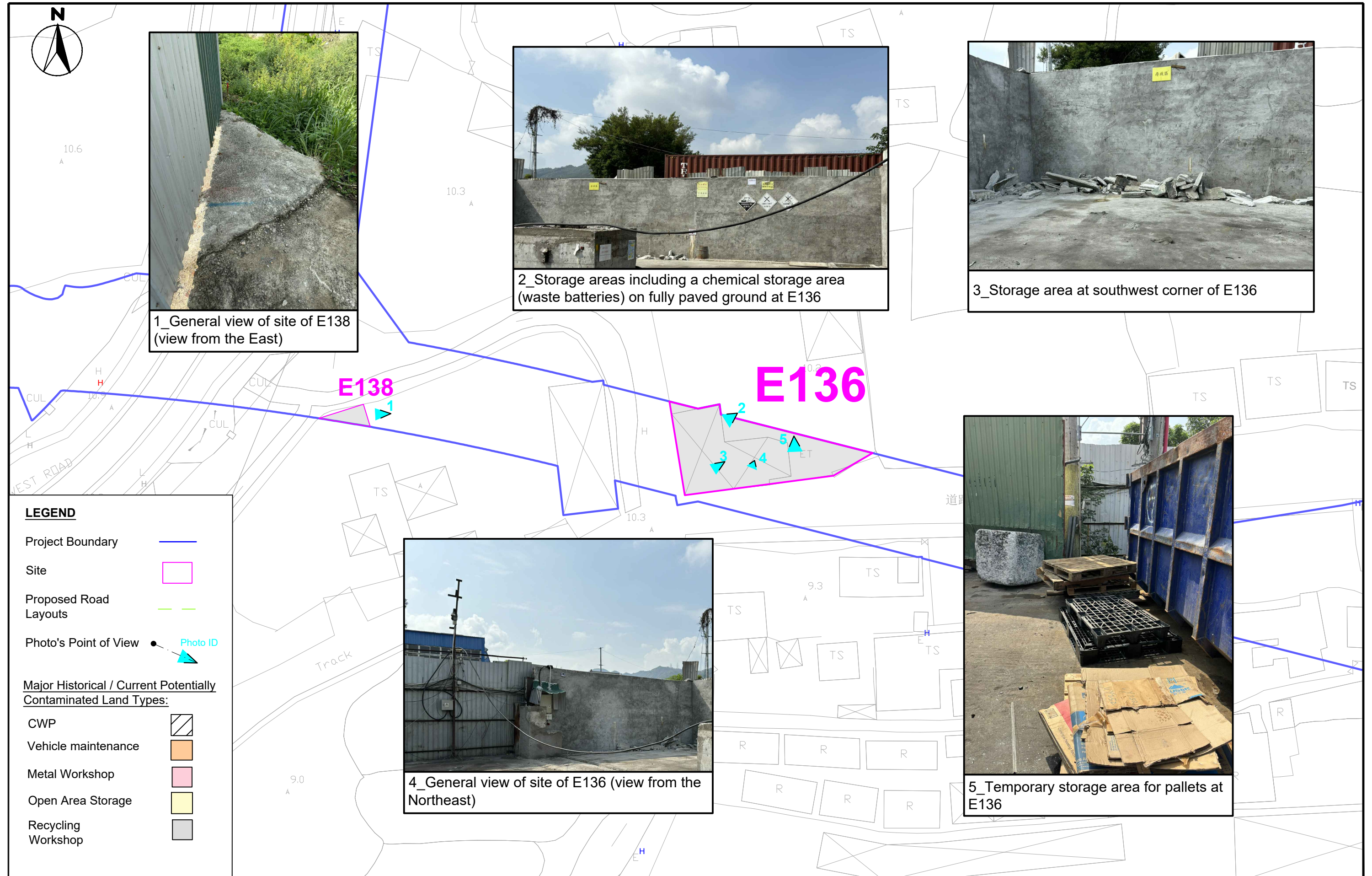
1\_General view of site of E138 (view from the East)



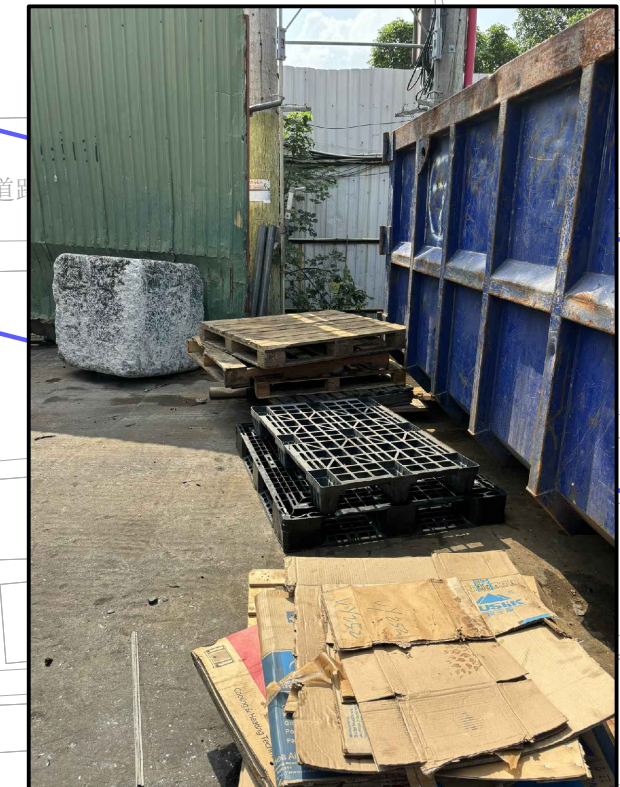
2\_Storage areas including a chemical storage area (waste batteries) on fully paved ground at E136



3\_Storage area at southwest corner of E136

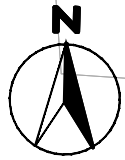


4\_General view of site of E136 (view from the Northeast)



5\_Temporary storage area for pallets at E136

SCALE	1:600@A3	DATE	10 Nov 2023
CHECK	CC	DRAWN	EH
JOB No.	LC23032	FIGURE No.	Appendix E4
		REV	-



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Open S



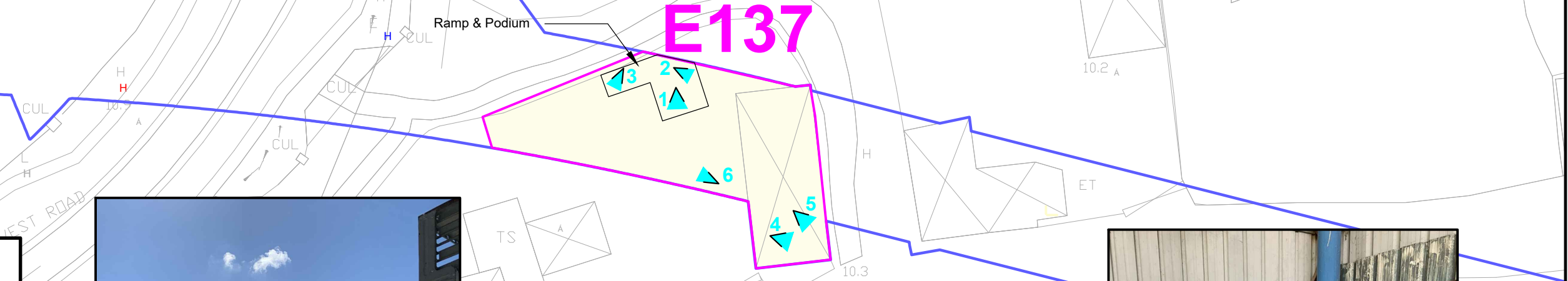
1\_General view of site (view from the North)



2\_Eastern part of site with fully paved ground



3\_Western part of site with fully paved ground



**LEGEND**

- Project Boundary
  - Site
  - Proposed Road Layouts
  - Photo's Point of View  Photo ID
- Major Historical / Current Potentially Contaminated Land Types:**
- CWP
  - Vehicle maintenance
  - Metal Workshop
  - Open Area Storage
  - Recycling Workshop



6\_Cracks on superficial layer of ground



5\_Some chemicals e.g. anti-rust lubricants have been found



4\_Chemical waste storage area

SCALE	1:600@A3	DATE	21 Aug 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix E5
		REV	-



1\_Public access road / drainage area outside the premises of E269



2\_Southern part of E477 after Site clearance



3\_Northern part of E477 after Site clearance



4\_Vegetation (View of southern part of Site prior to Site clearance)

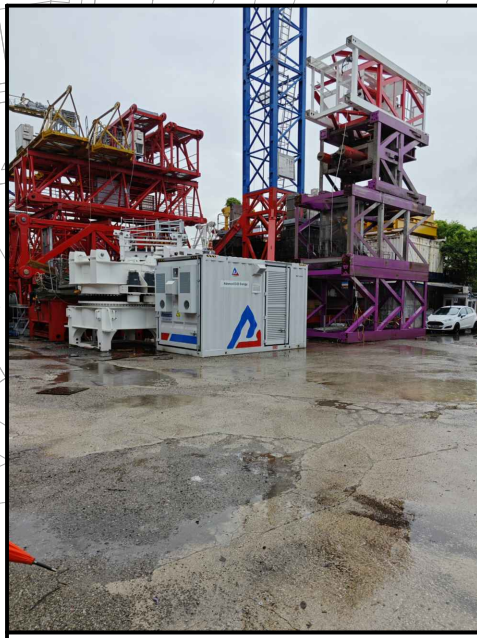
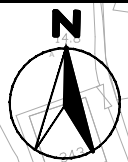
**LEGEND**

- Project Boundary: Blue line
- Site: Pink outline
- Proposed Road Layouts: Green dashed line
- Photo's Point of View: Black dot with arrow and 'Photo ID'

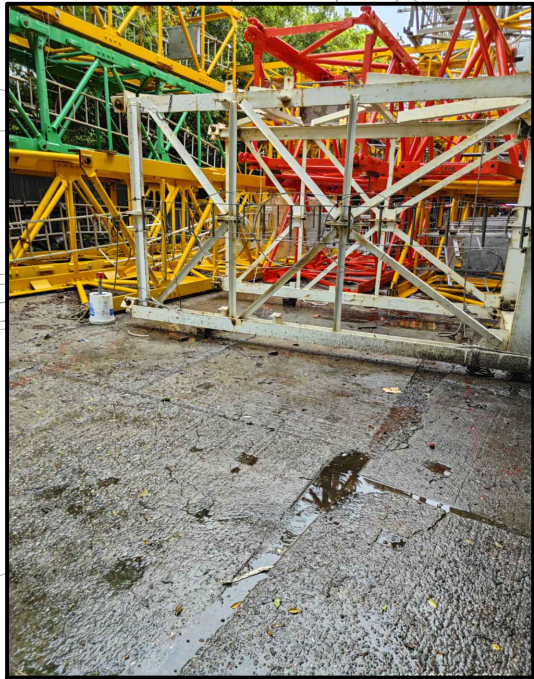
**Major Historical / Current Potentially Contaminated Land Types:**

- CWP: Diagonal hatched box
- Vehicle maintenance: Orange box
- Metal Workshop: Pink box
- Open Area Storage: Yellow box
- Recycling Workshop: Grey box

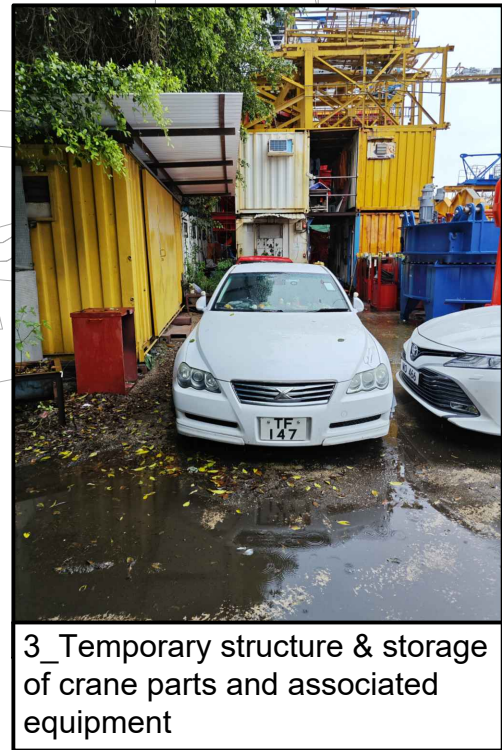
	YL/2021/04				
	Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2				
	<b>Photo Record of Site Walkover (Sites E269 &amp; E477)</b>				
	SCALE	1:600@A3	DATE	10 Aug 2023	
CHECK	CC	DRAWN	KC		
JOB No.	LC23032	FIGURE No.	Appendix E6	REV	-



1\_E98 & area in its vicinity provided assembling & finishing of cranes



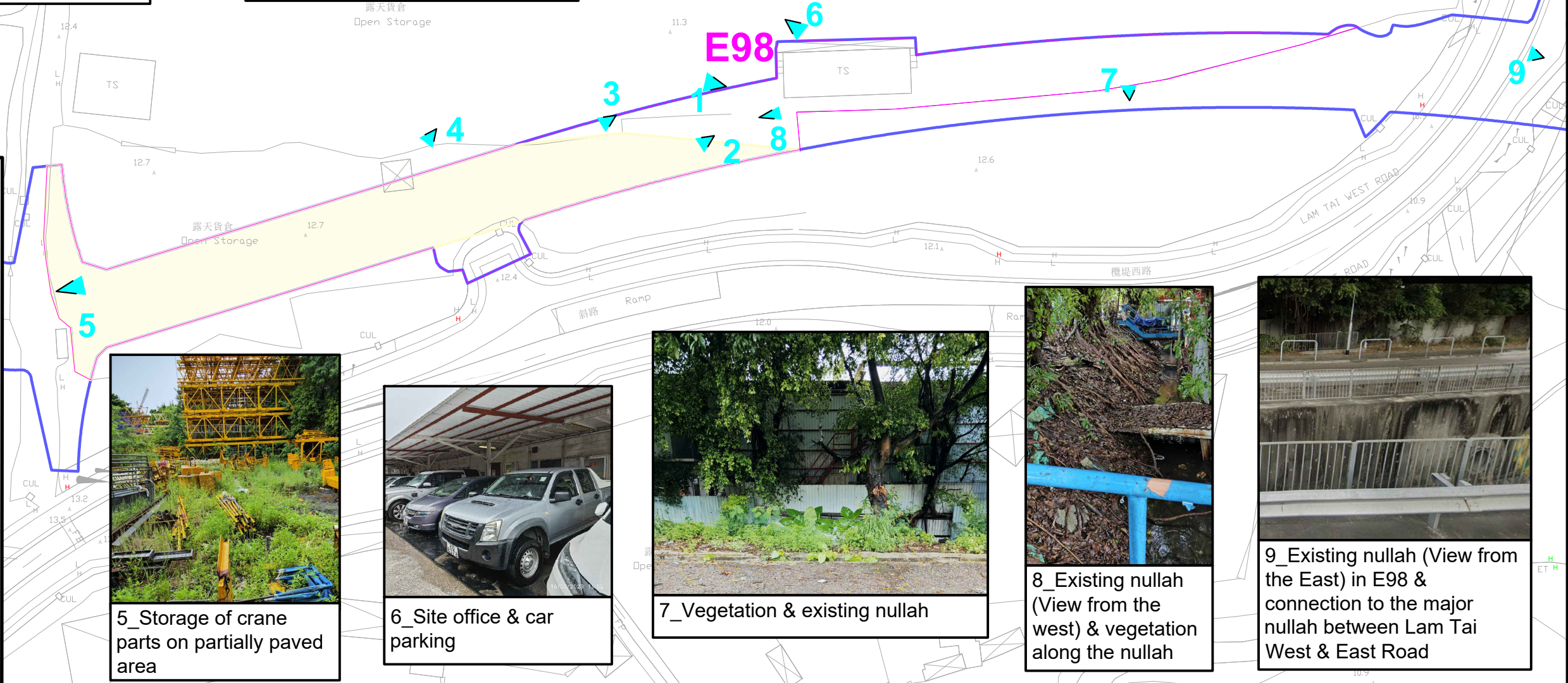
2\_Storage of crane parts for finishing works



3\_Temporary structure & storage of crane parts and associated equipment



4\_Storage of crane parts



**LEGEND**

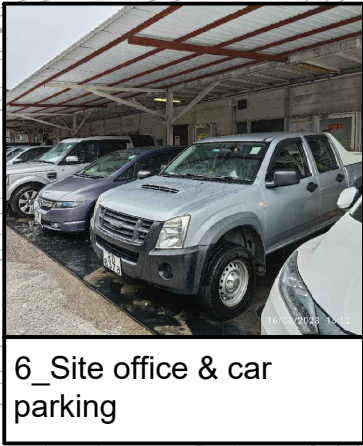
- Project Boundary: Blue line
- Site: Pink outline
- Proposed Road Layouts: Green dashed line
- Photo's Point of View: Blue arrow with Photo ID

**Major Historical / Current Potentially Contaminated Land Types:**

- CWP: Diagonal hatched box
- Vehicle maintenance: Orange box
- Metal Workshop: Pink box
- Open Area Storage: Yellow box
- Recycling Workshop: Grey box



5\_Storage of crane parts on partially paved area



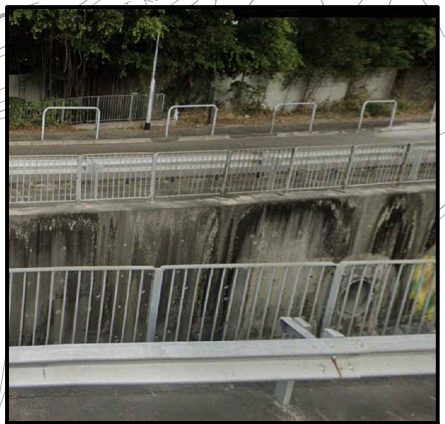
6\_Site office & car parking



7\_Vegetation & existing nullah



8\_Existing nullah (View from the west) & vegetation along the nullah



9\_Existing nullah (View from the East) in E98 & connection to the major nullah between Lam Tai West & East Road

SCALE	1:1000@A3	DATE	19 September 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix E7
		REV	-

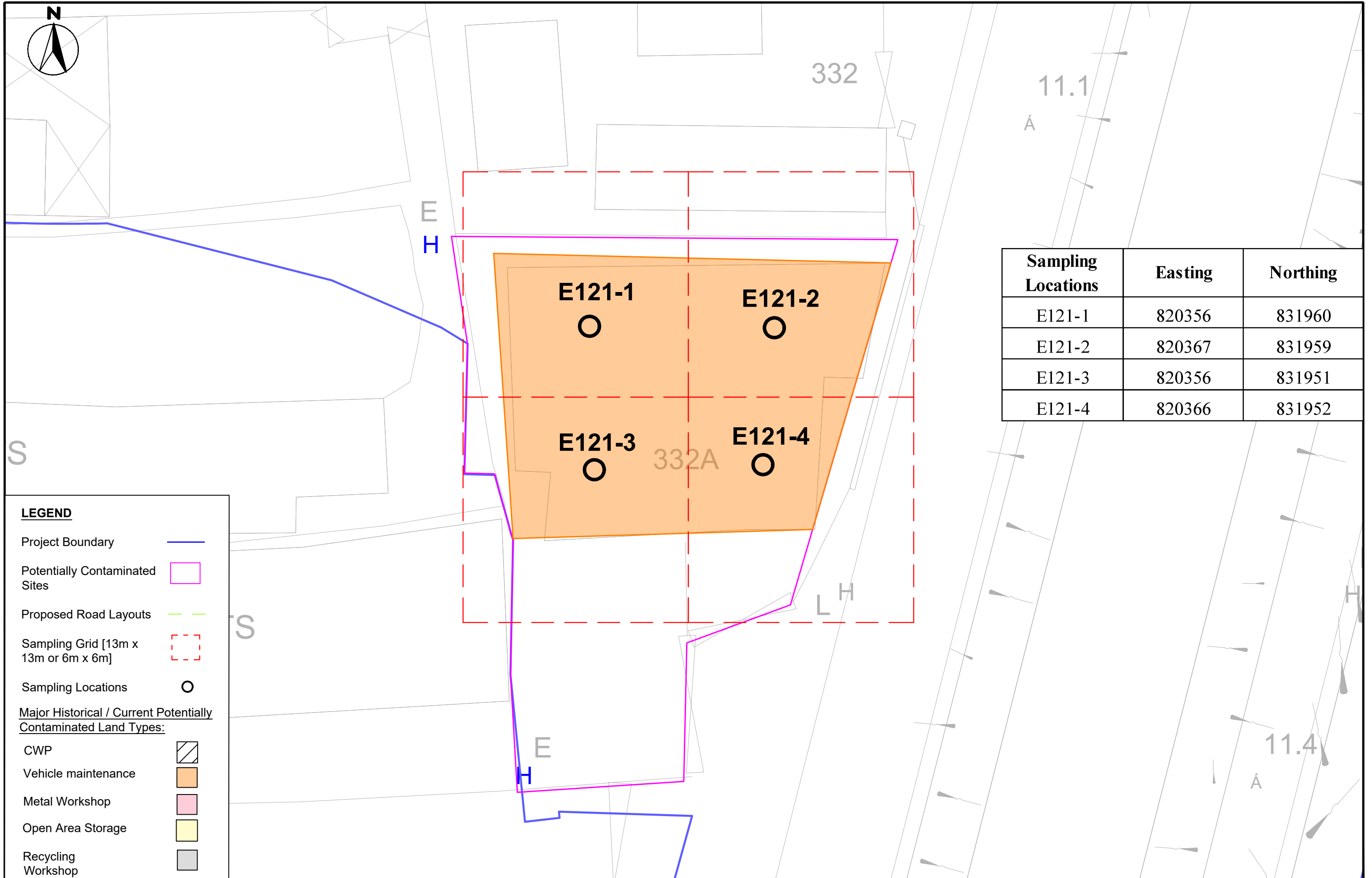
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**APPENDIX F**  
**SAMPLING PLAN FOR SI WORKS**

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Sampling Locations	Easting	Northing
E121-1	820356	831960
E121-2	820367	831959
E121-3	820356	831951
E121-4	820366	831952

**LEGEND**

- Project Boundary —
- Potentially Contaminated Sites
- Proposed Road Layouts - - -
- Sampling Grid [13m x 13m or 6m x 6m]
- Sampling Locations
- Major Historical / Current Potentially Contaminated Land Types:
- CWP
- Vehicle maintenance
- Metal Workshop
- Open Area Storage
- Recycling Workshop



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**Sampling Plan (Site E121)**

SCALE	1:200@A3	DATE	14 August 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix F1
		REV	-



Sampling Locations	Easting	Northing
E136-1	820145.5915	832024.4347
E136-2	820146.2718	832017.4414
E136-3	820156.6221	832019.9667
E136-4	820166.9238	832018.2670

# E136

**E136-1**



**E136-3**



**E136-2**



**E136-4**



**LEGEND**

- Project Boundary —
- Potentially Contaminated Sites
- Proposed Road Layouts - - -
- Sampling Grid [13m x 13m]
- Sampling Locations
- Major Historical / Current Potentially Contaminated Land Types:
- CWP
- Vehicle maintenance
- Metal Workshop
- Open Area Storage
- Recycling Workshop

10.3

A

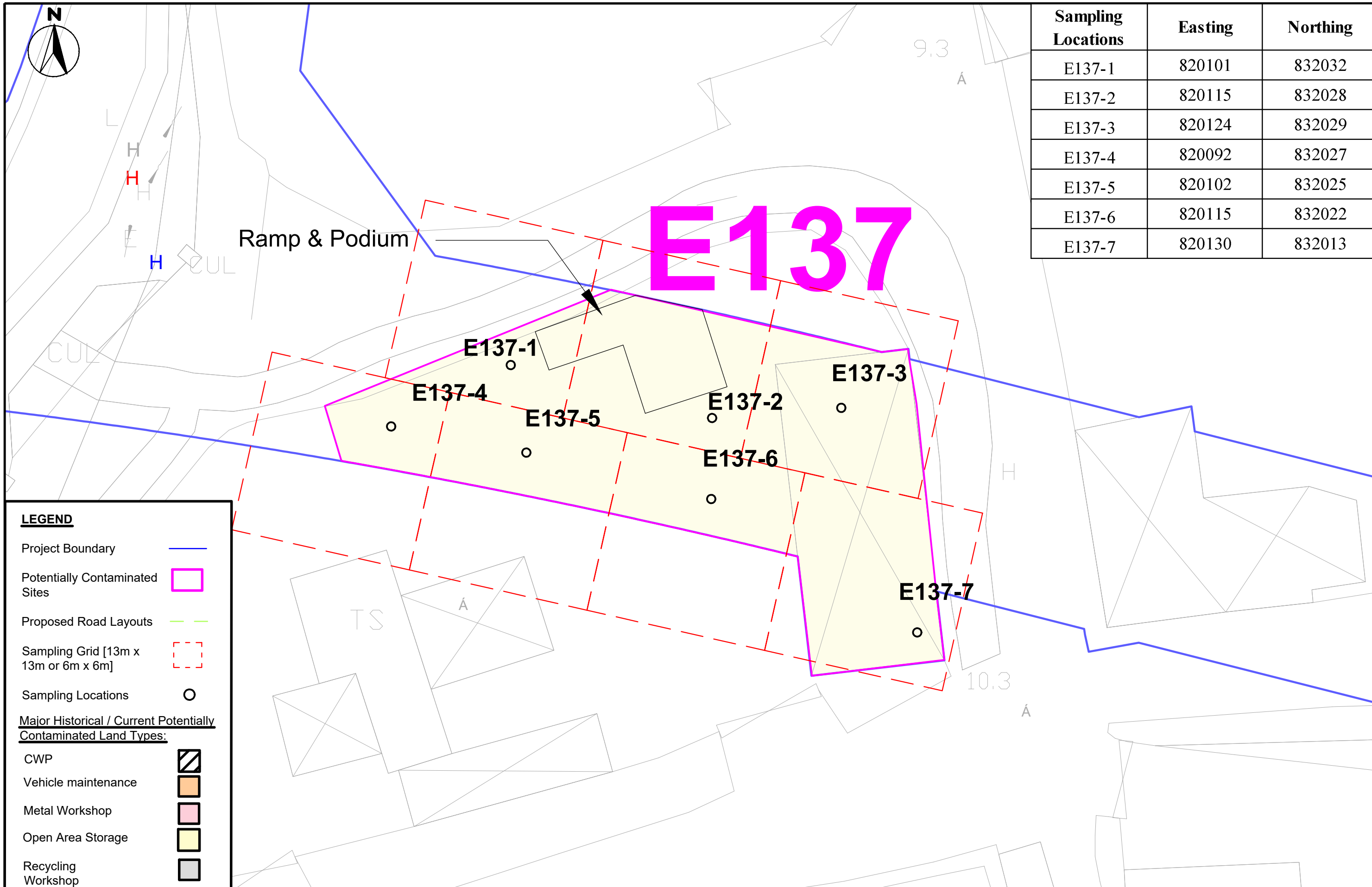
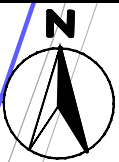
YL/2021/04

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**Sampling Plan (Site E136)**



SCALE	1:1000@A3	DATE	10 November 2023
CHECK	CC	DRAWN	EH
JOB No.	LC23032	FIGURE No.	Appendix F2
		REV	-



Sampling Locations	Easting	Northing
E137-1	820101	832032
E137-2	820115	832028
E137-3	820124	832029
E137-4	820092	832027
E137-5	820102	832025
E137-6	820115	832022
E137-7	820130	832013

**LEGEND**

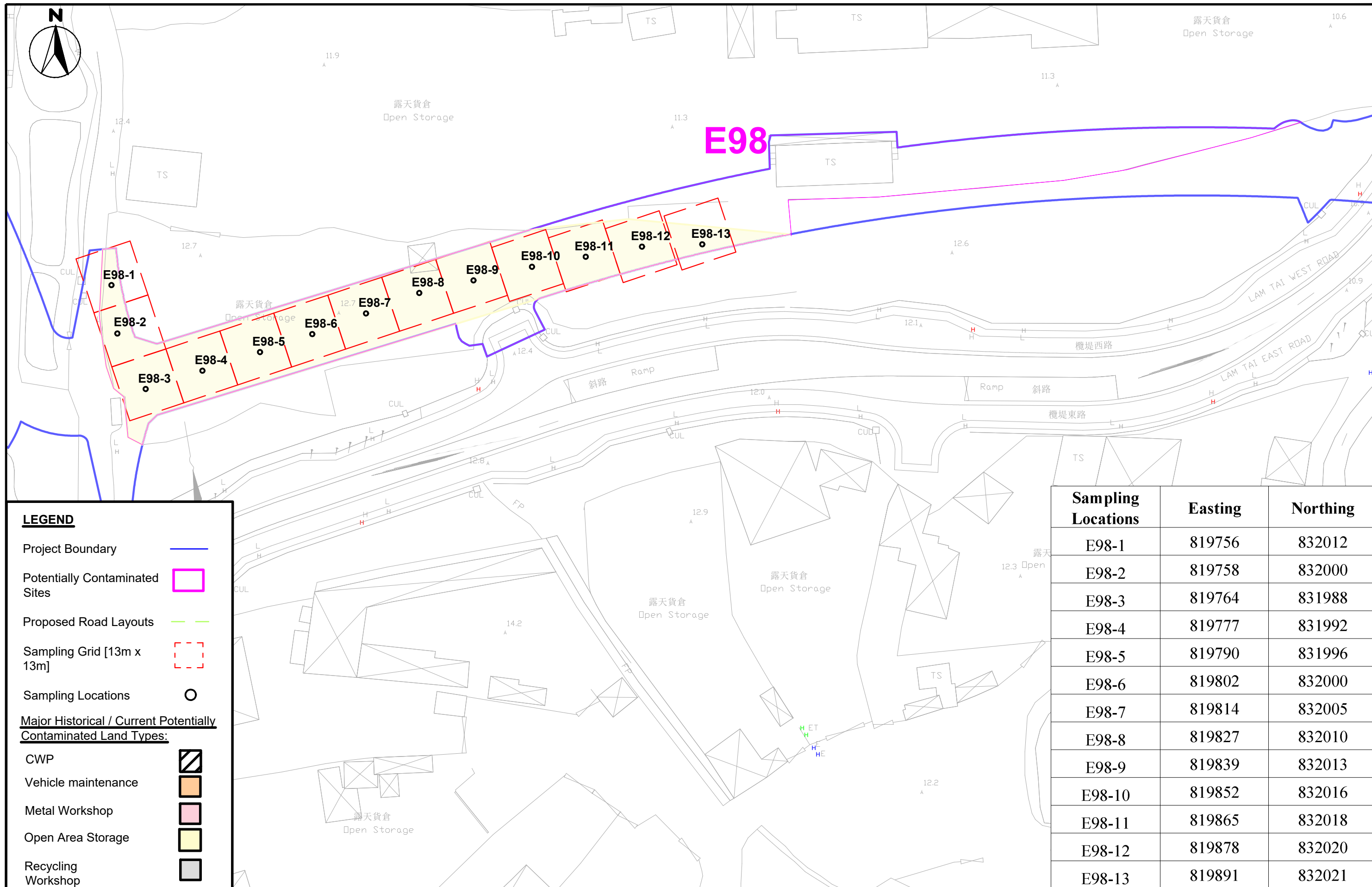
- Project Boundary —
- Potentially Contaminated Sites
- Proposed Road Layouts - - -
- Sampling Grid [13m x 13m or 6m x 6m]
- Sampling Locations
- Major Historical / Current Potentially Contaminated Land Types:
- CWP
- Vehicle maintenance
- Metal Workshop
- Open Area Storage
- Recycling Workshop



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**Sampling Plan (Site E137)**

SCALE	1:1000@A3	DATE	16 November 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix F3
		REV	-





Sampling Locations	Easting	Northing
E98-1	819756	832012
E98-2	819758	832000
E98-3	819764	831988
E98-4	819777	831992
E98-5	819790	831996
E98-6	819802	832000
E98-7	819814	832005
E98-8	819827	832010
E98-9	819839	832013
E98-10	819852	832016
E98-11	819865	832018
E98-12	819878	832020
E98-13	819891	832021

**LEGEND**

- Project Boundary —
- Potentially Contaminated Sites
- Proposed Road Layouts - - -
- Sampling Grid [13m x 13m]
- Sampling Locations

**Major Historical / Current Potentially Contaminated Land Types:**

- CWP
- Vehicle maintenance
- Metal Workshop
- Open Area Storage
- Recycling Workshop

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 Site Formation and Infrastructure Works for Yuen Long South First Phase Development - Contract 2  
**Sampling Plan (Site E98)**

SCALE	1:1000@A3	DATE	16 November 2023
CHECK	CC	DRAWN	KC
JOB No.	LC23032	FIGURE No.	Appendix F4
		REV	-



**APPENDIX G**  
**SCHEMATIC DRAWING OF**  
**GROUNDWATER MONITORING WELL**

Schematic Drawing of Groundwater Monitoring Well

