

## Landscape and Visual Mitigation Plan

Provision of ET Services for Sai O Trunk Sewer Sewage Pumping Station |

0185/21/ED/0222h 08 | 27 March 2024 Formal Submission **Light Time Investments Limited** 





FUGRO TECHNICAL SERVICES LIMITED 19/F, Fugro House – KCC2 1 Kwai On Road, Kwai Chung New Territories, Hong Kong

 Date
 05 April 2024

 Our Ref.
 MCL/ED/0117/2024/C

The EIA Ordinance Register Office, Environmental Protection Department, 27/F, Southorn Centre, 130 Hennessy Road, Wan Chai, Hong Kong

BY Courier & E-MAIL

Attn: Mr. TSANG TW, David

Dear Sir,

#### Sai O Trunk Sewer Sewage Pumping Station

#### Environmental Permit: EP-597/2021 Submission of Landscape and Visual Mitigation Plan (0185/21/ED/0222h)

Pursuant to EP-597/2021 Condition 2.10, we hereby submit 3 hard copies and 1 e-copy of the Landscape and Visual Mitigation Plan (0185/21/ED/0222h) for your approval. This Plan has been certified by ETL and verified by IEC accordingly.

Thank you for your kind attention, should you require further information, please do not hesitate to contact our Calvin Leung at 3565 4441 or our Jhomar Tillo at 9442 2421.

Yours faithfully, for and on behalf of FUGRO TECHNICAL SERVICES LIMITED

Caloin Les

Calvin Leung <sup>3</sup> Environmental Team Leader

c.c. AECOM Mr. CK Man (By email) Ramboll Mr. Y.H Hui (By email) SGJV Mr. Ray Lo / Mr. Eddie Tse (By email)

Encl.



Ref.: SHKSOSPSEM00\_0\_0106L.24

3 April 2024

By Fax (2827 0485)

Sun Hung Kai Properties Ltd. 42/F., Sun Hung Kai Centre 30 Harbour Road, Wan Chai, Hong Kong

Attention: Mr. Sunny Cheung

Dear Sir,

#### Re: Sai O Trunk Sewer Sewage Pumping Station Environmental Permit No. EP-597/2021 Landscape and Visual Mitigation Plan (0185/21/ED/0222h 08)

Reference is made to the Environmental Team's submission of the Landscape and Visual Mitigation Plan (0185/21/ED/0222h 08) certified by the ET Leader and provided to us via e-mail on 3 April 2024.

We are pleased to inform you that we have no further comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 2.10 of EP-597/2021 for the captioned project.

Thank you very much for your attention and please feel free to contact the undersigned should you require further information.

Yours sincerely, For and on behalf of Ramboll Hong Kong Ltd.

Y H Hui Independent Environmental Checker

AECOM

Fugro

SGJV

c.c.

Ms. Janice Tam / Mr. CK Man Mr. Calvin Leung Mr. Eddie Tse (By Fax: 3894 5801) (By Fax: 2450 6138) (By Fax: 3894 5801)

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#### **Client Information**

Client	Light Time Investments Limited				
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Client Contact	Mr. Sunny Cheung				

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### **Project Team**

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JT	Jhomar Tillo	Ecologist	Luchille
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## **Executive Summary**

Fugro Technical Services Limited (FTS) was commissioned by Light Time Investments Limited to prepare the Landscape and Visual Mitigation Plan (LVMP) for the Sai O Trunk Sewer Sewage Pumping Station (the Project) in compliance with Environmental Permit No. EP-597/2021.

Based on the latest information, there are no major changes in the status and condition of the Project site that may alter the character elements of the Landscape Resources and Landscape Character Areas nor there exists or any planned development that may lead to additional Visually Sensitive Receivers. Hence, the potential impacts identified in the approved EIA Report (AEIAR-230/2021) are still relevant and applicable.

The initially recommended mitigation measures in the EIA are still relevant and applicable except for CM1-Preservation of Trees which will no longer be implemented since all existing trees within the Project site will be removed. These trees, other than the undesirable species, will be likewise compensated as a mitigation measure (CM2-Compensatory Planting). Consequently, a total of 55 compensatory trees will be planted adjacent to the proposed TX Room and Switch Room while some trees and shrubs will be planted near the Proposed SPS.

To minimise any potential landscape and visual impact as much as possible, landscape and visual mitigation measures during construction phase are proposed i.e., CM2-Compensatory Planting, CM3-Control of Night-time Lighting Glare, CM4- Erection of Decorative Screen Hoarding, CM5- Management of Construction Activities and Facilities and CM6- Reinstatement of Temporarily Disturbed Landscape Areas.

Meanwhile, the operational phase mitigation measures that will be adopted include OM1-Tree and Shrub Planting to soften the proposed SPS, OM2- Aesthetically pleasing design of the SPS, OM3- Provision of Green Roof and OM4- Provision of Vertical Greening.

With the strict implementation of the recommended mitigation measures, no unacceptable residual landscape and visual impacts from the Project is anticipated.



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## 1. INTRODUCTION

#### 1.1 Project Background

- 1.1.1 To cope with the sewerage needs of both existing and future developments, a new sewage pumping station with a capacity of about 20,600 m<sup>3</sup> per day, located at north of Sai O near Nai Chung (SPS) (hereafter referred to as the "Project") was proposed. The Project is a part of the Public Works Programme Item 4125DS "Tolo Harbour Sewerage of Unsewered Areas, Stage II Investigation, Design and Construction" which originates from the findings of the Study "Review of North District and Tolo Harbour Sewerage Master Plan" completed in 2002.
- **1.1.2** The Project is a designated project under Item F.3 (b), Part 1 Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) *a sewage pumping station with an installed capacity of more than 2 000 m<sup>3</sup> per day and a boundary of which is less than 150 m from an existing or planned (i) residential area; (ii) place of worship; and (iii) educational institution.*
- 1.1.3 In accordance with the requirements of Section 5(1)(a) of the EIAO, an Environmental Impact Assessment Study Brief (No.ESB-281/2014) with a Project Profile (No. PP-517/2014) were submitted. An Environmental Impact Assessment (EIA) Study was carried out for the Project by AECOM Asia Co. Ltd in March 2021. An Environmental Impact Assessment Report (hereafter referred to as the "approved EIA Report") (Register No. AEIAR-230/2021) and an Environmental Monitoring and Audit (EM&A) Manual (hereafter referred to as the "approved EM&A Manual") were approved without conditions by the Environmental Protection Department (EPD) on 4 June 2021. An Environmental Permit (EP) (EP-597/2021) was issued on 28 September 2021. These documents are available in the EIAO Register.

#### 1.2 Scope of the Project

- **1.2.1** The Project is to construct and operate the proposed Sai O Trunk Sewer Sewage Pumping which will include the following components:
  - Loading/unloading bay
  - Inlet chamber
  - Coarse screen channel
  - Distribution chamber
  - Wet wells
  - Valve chamber
  - Emergency storage tank
  - Deodorizing unit
  - Switch room
  - Transformer room



1.2.2 The location of the Project site is shown in Appendix A.

#### 1.3 Purpose, Scope, and Structure of the Landscape and Visual Mitigation Plan

- 1.3.1 This Landscape and Visual Mitigation Plan (LVMP) is prepared in fulfilment of Condition 2.10 of the EP "The Permit Holder shall, no later than one month before the commencement of the landscape and visual mitigation works for the Project, submit 3 hard copies and 1 electronic copy of landscape and visual mitigation plan (LVMP) to the Director for approval. The LVMP shall show the design details, implementation schedule, maintenance and management schedules, and drawings in the scale of 1:1,000 or other appropriate scale of the landscape and visual mitigation measures of the Project. The implementation schedule shall be in table form to clearly list out the mitigation measures to be implemented, and the implementation party, location, timing, and environmental performance required for implementation of the mitigation measures. All landscape and visual mitigation measures shall be properly implemented and maintained for the Project in accordance with the approved LVMP. Before submission to the Director, the LVMP shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendations, including those described in the approved EIA Report (Register No. AEIAR-230/2021). The Permit Holder shall make available additional copies to the Director upon request".
- **1.3.2** Fugro Technical Services Limited (FTS) was commissioned by Light Time Investments Limited to prepare the LVMP for the Project.
- **1.3.3** The LVMP is prepared to describe the proposed mitigation measures to be adopted by the Project to minimize the potential landscape and visual impacts of the Project, which include the following:
  - adoption of construction methods to minimize both landscape and visual impacts, particularly in sensitive locations;
  - protection and retention of existing vegetation where possible; and
  - reinstatement of disturbed areas and compensatory planting.
- **1.3.4** Succeeding this introductory section, the remainder of the LVMP is arranged as follows:
  - Section 2 describes environmental legislations, standards and guidelines related to landscape design;
  - Section 3 describes the recommended landscape and visual mitigation measures;
  - Section 4 describes tree preservation and treatment proposal;
  - Section 5 describes management and maintenance for landscape works;
  - Section 6 details the implementation programme; and
  - Section 7 summarizes the findings and recommends the way forward of the project.



## 2. LEGISLATIONS, STANDARDS, AND GUIDELINES

- **2.1** This LVMP was prepared and shall be undertaken in accordance with the guidelines, standards, documents, and government ordinances and regulations as described below:
  - Environmental Impact Assessment Ordinance (Cap.499 S.16) and the Technical Memorandum on EIA Process (EIAO-TM), particularly Annexes 10 and 18;
  - Environmental Impact Assessment Ordinance Guidance Note No. 8 / 2010;
  - Town Planning Ordinance (Cap. 131);
  - Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586);
  - Hong Kong Planning Standards and Guidelines Chapters 4, 10 and 11;
  - Agriculture, Fisheries and Conservation Department (AFCD) Nature Conservation Practice Note No. 2 - Measurement of Diameter at Breast Height (DBH);
  - AFCD Nature Conservation Practice Note No. 3 The Use of Plant Names;
  - DEVB TCW No. 5 / 2020 Registration of Old and Valuable Trees (OVT), and Guidelines for their Preservation;
  - ETWB TCW No. 8 / 2005 Aesthetic Design of Ancillary Buildings in Engineering Projects;
  - DEVB TCW No. 2 / 2012 Allocation of Space for Quality Greening on Roads;
  - DEVB TCW No. 3 / 2012 Site Coverage of Greenery for Government Building Projects;
  - DEVB TCW No. 6 / 2015 Maintenance of Vegetation and Hard Landscape Features;
  - DEVB TCW No. 4 / 2020 Tree Preservation;
  - Geotechnical Engineering Office (GEO) Publication No. 1/2011 Technical Guidelines on Landscape Treatment and Bio-Engineering for Man-Made Slopes and Retaining Walls;
  - Guidelines on Tree Transplanting (September 2014) issued by Greening, Landscape and Tree Management (GLTM) Section of Development Bureau (DevB);
  - Guidelines on Tree Preservation during Development (April 2015) issued by GLTM Section of DevB; and
  - Study on Landscape Value Mapping of Hong Kong.
  - Draft Outline Zoning Plan (OZP) Ma On Shan OZP No. S/MOS/23 (gazetted on 16.10.2020) and approved Sha Tin OZP No. S/ST/34 (gazetted on 8.6.2018).

## 3. LANDSCAPE AND VISUAL MITIGATION MEASURES

As identified during the EIA and reviewed in the preparation of this LVMP, potential landscape and visual impacts are anticipated in the construction and operation of the Project. Nevertheless, there would not be any potential blockage of view during construction and operation of the Project. Notwithstanding, measures described in Section 10.8 of the approved EIA Report and Section 9.3 of the approved EM&A Manual endeavoured to alleviate potential adverse landscape and visual impacts that may arise from the Project. Some details of the measures, for instance, the tree & shrub planting, green roof planting and vertical greening, etc. are shown in the Landscape Plan (**Appendix B.1**) and the succeeding subsections. Moreover, the proposed engineering works have been designed to minimise any potential landscape and visual impact as much as possible.

#### 3.1 Landscape and Visual Mitigation Measures for Construction Phase

#### 3.1.1 Preservation of Trees (CM1)

3.1.1.1 Appendix 10.2 of the approved EIA Report proposed 21 trees to be retained (5 nos. of *Macaranga tanarius* var. *tomentosa* and 16 nos. of *Leucaena leucocephala*). Contrary to the initially recommended treatment for the existing trees in the approved EIA Report, the approved Tree Preservation and Removal Proposal (TPRP) recommended for the removal of all trees including those initially proposed to be retained (**Table 3.1**). With reference to DEVB TC(W) No.4/2020, all *L. leucocephala* trees (16 nos.) initially recommended to be retained will now be removed as part of arboricultural maintenance. Meanwhile, the 5 nos. of *M. tanarius* var. *tomentosa* initially recommended as retain will likewise be removed as these are in direct conflict with the Project layout and other provisional works. These trees will not be transplanted as they are in poor condition with unrecoverable health problem and the chance of survival after transplantation is low. Consequently, Preservation of Trees (CM1) will no longer be applicable in the current proposal as no trees will be retained and will be provided with protection.

Maintenance Works	Total Nos. of Trees Surveyed	Trees to be Retained	Trees to be Transplanted	Trees to be Felled (including dead Trees)
Approved EIA report	86	21	0	65
Approved TPRP	55	0	0	55

Table 3.1: Summary of Tree Recommendation in the Approved EIA Report and Approved TPRP

- 3.1.1.2 The area where these additional trees to be felled are located, occupies only a small portion of the overall Shrubland and Mixed Woodland (LR-04) and Nai Chung Rural Coastal Plain Landscape (LCA-04). Based on the Landscape Impact Assessment (Section 10.6 of the approved EIA Report), the landscape impacts on LR-04 and LCA-04 during construction phase could be moderate considering the intermediate magnitude of change and their medium sensitivity.
- 3.1.1.3 Even with the removal of the 5 nos. of *M. tanarius* var. *tomentosa* trees, the landscape impact on LR-04 and LCA-04 during construction phase is still moderate as Heavy Standard Trees



(HST) and Standard Trees (ST) will be planted to compensate the trees that will be removed. Moreover, the structural integrity and stability of these additional trees to be removed are compromised as these are already in poor form, health, and structural condition which may pose a potential hazard in the long term. Hence, these will also be removed and would be compensated with trees that are better in condition. Consequently, the overall amenity of the affected relevant landscape resources and landscape character area will be improved.

3.1.1.4 In terms of visual impacts, Residents in Staff & Students of Hong Kong Baptist Theological Seminary (VSR01b) and in Symphony Bay (VSR02) has high receptor sensitivity during construction phase. Nevertheless, as detailed in Table 10.6 of the approved EIA Report, VSR01b and VSR02 have available alternative views with viewing distance from the construction area approximately 20 m and 180 m, respectively. Although additional trees will be felled, the visual impacts during construction phase are still moderate as these trees will be consequently replaced with HST (e.g., *Liquidambar formosana, Sterculia lanceolata* and *Tabebuia chrysantha* species) and ST (e.g., *Ficus benjamina*) that are 3 m to 5 m in height, *free of pests, fungi and disease, has sturdy straight stem, and with either a well-balanced branching head or a well-defined straight and upright leader with branches growing out from the stem with reasonable symmetry* (General Specification for Civil Engineering (2020 Edition) - Section 3 Landscape Softworks and Establishment Works issued by CEDD).

#### 3.1.2 Compensatory Tree Planting (CM2)

3.1.2.1 Albeit CM1 will no longer be applicable, the landscape impacts can be still moderated through Compensatory Tree Planting (CM2). All trees that will be felled will consequently be compensated. However, *L. leucocephala* trees recommended for removal will be excluded in the compensatory planting as this is an undesirable species and compensation is not necessary (DEVB TC(W) No. 4/2020). The compensatory planting plan as recommended in the approved TPRP and detailed in **Section 4** must be strictly implemented.

#### 3.1.3 Control of Night-time Lighting Glare (CM3)

3.1.3.1 Night-time lighting glare from construction works should be controlled to minimise potential glare impact to adjacent VSRs during the construction phase. As confirmed by the Contractor, no night works have been / will be carried out for the Project, and no flood lights have been / will be installed. It can avoid potential glare nuisance to nearby VSRs. Nevertheless, light blinkers are attached on surrounding construction barriers to indicate the Project site and pedestrian access (**Appendix B.2.4**). These light blinkers are commonly used in construction sites all over Hong Kong and are not found to cause uncomfortable eye feeling (**Appendix B.2.2**).

#### 3.1.4 Erection of Decorative Screen Hoarding (CM4)



3.1.4.1 Visually 'impermeable' decorative screen hoarding was erected along areas of the works boundary particularly on publicly accessible routes and/or is close to VSRs to block undesirable views of construction works and activities (**Appendix B.2.4**). The hoarding installed is non-reflective and is compatible with the surrounding environment settings (**Appendix B.2.3**).

#### 3.1.5 Management of Construction Activities and Facilities (CM5)

3.1.5.1 The facilities and activities at works sites and areas, which include resting area, temporary storage areas, temporary works etc. were carefully allocated to preserve existing landscape and minimise any potential adverse landscape and visual impacts. The location of temporary storage areas (**Appendix B.2.4**) was ideally situated farther from easily accessible areas to avoid unappealing views to passing and surrounding VSRs. Site inspections are also undertaken by the ET at least once every two weeks throughout the construction period to ensure that construction activities and facilities are properly managed and good site practices are strictly implemented to reduce visual impact on nearby VSRs.

#### 3.1.6 Reinstatement of Temporarily Disturbed Landscape Areas (CM6)

3.1.6.1 All hard and soft landscape areas disturbed temporarily during construction due to temporary excavations, temporary works sites and works areas shall be reinstated into equal or better quality, to restore and/or improve landscape and visual amenity.



#### 3.2 Landscape and Visual Mitigation Measures for Operational Phase

#### 3.2.1 Tree and Shrub Planting to Soften the Proposed SPS (OM1)

- 3.2.1.1 Aside from the compensatory trees that will be planted to replace the trees that were felled, tree and shrub planting shall also be undertaken to soften the edges of the proposed SPS and enhance the landscape and visual amenity within the Project site. Standards and requirements for OM1 shall be referred to DEVB TCW No.3/2012 Site Coverage of Greenery for Government Building Projects.
- 3.2.1.2 A total of 17 species for shrub planting will be distributed within the Project site. For climbers, *Ficus pumila* and *Parthenocissus dalzielii* will be planted. One grass species, *Paspalum variegatum*, shall also be planted for groundcover. The number and species that will be planted on specific planting areas surrounding the Project site are reflected in **Appendix B.3.4**.

#### 3.2.2 Aesthetically Pleasing Design of the SPS (OM2)

- 3.2.2.1 The basic principles provided in the Guidelines on Aesthetic Design of Pumping Station Buildings by DSD (2006) were followed in planning the design of the proposed SPS. To enhance the landscape and visual amenity of the Project and to avoid undesirable image of the structure, the form, textures, finishes and colours, the proposed SPS should not be prominently contrasting with the existing surroundings. Light earthy tone colours (e.g., shades of green, shades of grey, shades of brown and off-white) may be employed where technically feasible. Moreover, to avoid glare and improve visual amenity, non-reflective and natural building materials such as stone and timber, should be preferably adopted for the proposed SPS, where technically practical. Furthermore, *where appropriate, all exterior elements such as facade, doors, sills, canopy, windows and louvres shall be proportionate to each other.*
- 3.2.2.2 Appendix B.3.1 presents the layout plan of the SPS. This plan may be subject to change depending on the comments and approval of relevant authorities. As refer to the Elevation 3 of the layout plan for transformer room and switch room, the extent of the façade has been changed due to the addition of new water meter cabinet (WMC). Moreover, the revised scheme showing two tall trees have been moved in front of the WMC for the south elevation of the transformer room block, can be referred to Appendix B.3.2. In addition, the agreed meeting minutes highlighting the agreement from HKBTS on the revised scheme has been sought, is presented in Appendix I.
- 3.2.2.3 To likewise avoid glare impacts that may arise during operational phase of the proposed SPS, the lighting design have been carefully planned and assessed. Lightings shall be mounted on fixed locations and oriented in a downward direction away from the VSRs (**Appendix B.3.3**). Best practices on external lighting installations and light nuisance control measures stipulated in the Guidelines on Industry Best Practices for External Lighting Installations shall be considered to control lighting glare.

#### 3.2.3 Provision of Green Roof (OM3)



3.2.3.1 With reference to Skyrise Greening of the Greening, Landscape & Tree Management Section, Development Bureau, roof greening will be provided to alleviate the potential adverse visual impacts to nearby VSRs viewing from an elevated vantage point. Three species will be planted for roof greening i.e., *Buxus bodinieri* (2090 nos.) *Tibouchina semidecandra* (590 nos.) and *Rhaphiolepis indica* (1270 nos.). How these species are distributed in green roof planting areas are reflected in **Appendix B.3.4** while the height, spread and spacing for planting are detailed in the Composition Planting Schedule in **Appendix B.3.5**.

#### 3.2.4 Provision of Vertical Greening (OM4)

3.2.4.1 During the operational phase of the Project, the major aboveground structure would be a one storey building with a height of approximately 9 m. Self-climbing species i.e., *Ficus pumila* (225 nos.) and *Parthenocissus dalzielii* (272 nos.) will be planted on metal fence wall to soften the proposed SPS and enhance its landscape and visual appeal. *F. pumila* is a native evergreen species that can tolerate wind, salt spray, drought, pollution, and shade; and has medium irrigation and fertilising demands but less pruning demand. Meanwhile, *P. dalzielii* is an exotic deciduous species that is tolerant to wind and requires high irrigation, medium fertilisation but less pruning. The distribution of both species on vertical walls are reflected in **Appendix B.3.4**.

## 4. TREE PRESERVATION AND TREATMENT PROPOSAL

#### 4.1 Tree Survey

- 4.1.1 A broad brush tree survey was conducted within the Project area during the EIA. Based on the findings of the survey, there are 86 numbers (nos.) of trees within the Project boundary. A total of five species were recorded (i.e. *Eucalyptus urophylla, Leucaena leucocephala, Macaranga tanarius* var. *tomentosa, Cinnamomum burmannii* and *Bridelia tomentosa*) which are generally of mature size. Among the observed trees, *Eucalyptus urophylla* and *Leucaena leucocephala are the dominant tree species.* None of these recorded trees, however, are listed in the LCSD's Register of Old and Valuable or are eligible for listing under the criteria stipulated in the DEVB TC(W) No. 5/2020 Registration and Preservation of Old and Valuable Trees. Moreover, none of these recorded trees are listed in the "Rare and Precious Plants of Hong Kong" issued by Hong Kong Herbarium covering the species listed under the Forests and Countryside Ordinance (Cap. 96) and the Protection of Endangered Species of Animals and Plants Ordinance (Cap. 586).
- **4.1.2** Relative to the findings of the approved TPRP (approval memo attached in **Appendix G**), all *L. leucocephala* trees (31 nos.) recorded in the approved EIA report will no longer be reflected. According to Sections 8(e) and 25(a) of DEVB TC(W) No. 4/2020, this is an undesirable species as it is an invasive, exotic and self-seeding and *a TPRP is not necessary for the removal of common undesirable species characterised by their aggressive and invasive growing habits and ability to prevent natural succession of native species. All <i>L. leucocephala* within the Project area will be removed as part of arboricultural maintenance. Consequently, only 55 trees from the previously 86 surveyed trees in the EIA are considered for the preparation of the LVMP.



**4.1.3** The locations of these 55 nos. of trees which will be affected by the construction works are presented in the Tree Survey Plan (**Appendix C**) and the corresponding tree assessment schedule is presented in **Appendix D**.

#### 4.2 Tree Treatment

- **4.2.1** The potential impact of the proposed Project works on the recorded trees within the Project area will mainly result from vegetation clearing. As aforementioned, *L. leucocephala* will be removed as part of arboricultural maintenance.
- **4.2.2** Additionally, as confirmed by the Contractor, the other 55 surveyed trees within the Project boundary will be felled. According to the TPRP, these trees are to be felled based on the following reasons:
  - Dead trees were noted during the EIA broad brush tree survey, hence, recommended for removal;
  - Trees in direct conflict with the proposed layout of trunk sewer sewage pumping station and proposed EVA and planting area;
  - Trees in direct conflict with the proposed levels and the provisional works area at the proposed open space.
- **4.2.3** None of the existing trees are recommended for preservation nor transplantation. It shall be noted that one-third of these trees have tree crown larger than five meters. Additionally, hard pruning or topping is required should these trees be transplanted. Consequently, the chance of survival after transplantation will be exceptionally low should these trees be rigidly pruned. Thus, these trees are recommended to be felled.
- **4.2.4** Moreover, the rest of the trees in direct conflict with the proposed development have unrecoverable health problem and are in poor condition. These trees possess "Poor" Form and share common defects such as leaning, broken branches, codominant trunk, crack and decay trunk. These symptoms of dying back and health degeneration compromise their structural integrity / stability of these trees and present a potential hazard in the long term. Moreover, these trees have low amenity value. Consequently, these trees will not be transplanted but are recommended to be felled.
- **4.2.5** Apart from the existing trees to be felled, approximately 3,500 m<sup>2</sup> of shrubland colonised with weedy pioneer shrubs and grass will also be cleared during construction.
- **4.2.6** Table 4.1 summarizes the recommended treatment of all existing trees within the surveyed area.

Tree Management Recommendation						
Retain Transplant Fell						
0	0	55				

Table 4.1: Tree Treatment Recommendation of the Assessed Trees



**4.2.7** The Tree Recommendation Plan which presents the corresponding recommended treatment for each tree species is provided in **Appendix F**.

#### 4.3 Compensatory Tree Planting

- **4.3.1** Appendix C of DEVB TC(W) No. 4/2020 specifies the implementation of compensatory tree planting of a ratio not less than 1:1 in terms of number or aggregated DBH, as far as practicable, *but excluding trees of undesirable species*.
- **4.3.2** Thus, the 31 nos. of *L. leucocephala* trees to be removed as part of arboricultural maintenance will not be compensated. Consequently, only a minimum of 55 nos. of trees shall be planted in compliance with the planting ratio of 1:1 in terms of number to compensate for the loss of greenery due to felling of 55 nos. of existing trees.
- **4.3.3** Five compensatory tree species were initially proposed in Figure 10.9 of the EIA Report (*Bischofia javanica, Cinnamomum burmanni, Celtis sinensis, Liquidambar formosana, Sterculia lanceolata*) however, the approved TPRP for the Project proposed only four species of compensatory trees (*Ficus benjamina, Liquidambar formosana, Sterculia lanceolata* and *Tabebuia chrysantha*) (**Table 4.2**) which is also aligned with the proposed triangular sitting-out area agreed between Hong Kong Baptist Theological Seminary and the Maintenance Department (Drainage Services Department). Consequently, these four species were likewise followed in the LVMP. The minimum spacing of 4 m (center to center) shall still be provided to ensure sufficient growing space for the compensatory trees from establishment to maturity to maximize tree health and stability and avoid planting that would lead to over-congestion in the future. Additionally, to replenish the loss of greenery, shrub planting (OM1), vertical green wall (OM4) and green roof (OM3) are likewise proposed as operational phase mitigation measures.

Quantity	Botanical Name	Chinese Name	Height (m)	Spread (m)	DBH (m)	Spacing (m)
14	Ficus benjamina	垂葉榕	3	1	0.05	4
6	Liquidambar formosana	楓香	5	2	0.08	4
6	Sterculia lanceolata	假蘋婆	4	2	0.08	4
29	Tabebuia chrysantha	<b>黃</b> 花風鈴木	5	2	0.08	4

Table 4.2: Proposed Species for Compensatory Tree Planting

**4.3.4** The location and distribution of compensatory trees are presented in the Compensatory Tree Planting Plan in **Appendix B.2.1**.



## 5. MANAGEMENT AND MAINTENANCE

The responsibility of the management and maintenance for greening provision and the proposed SPS was determined in accordance with DEVB TCW No. 6/2015 – Maintenance of Vegetation and Hard Landscape Features.

#### 5.1 Vegetation

5.1.1 A 12-month establishment period will be provided for OM1, OM3 and OM4. The Softworks Contractor shall be responsible for the maintenance to soft landscape areas during this establishment period. This will ensure the proper establishment of the planted materials. General maintenance operations for the compensatory trees, shrubs planted to soften the proposed SPS (OM1), green roofing (OM3) and vertical greening (OM4) will include watering, pruning, fertilizing, fungicide/ insecticide, weeding, securing, mulching, and thinning, as appropriate. Moreover, during establishment period, proper records of establishment works like watering, grass cutting, replacement of dead plants etc. should be kept to facilitate site checking at the end of period. The soft landscape maintenance schedule is presented in **Table 5.1**.

Maintenance Works	M1	M2	М3	M4	M5	M6	M7	M8	M9	M10	M11	M12
Watering												
Pruning		D	GC									
Fertilizing	Soil test											
Fungicide / Insecticide												
Weeding												
Securing												
Thinning			EG									
Notes: M1-M12 Months during establishment period GC Groundcover EG Evergreen D Deciduous												

Table 5.1: Soft Landscape Maintenance Schedule of the 12-month establishment period



**5.1.2** Tree risk assessment will be conducted by future property manager at appropriate time for appropriate tree as instructed by the owner in accordance with the Handbook of Tree Management by DEVB.

#### 5.2 Hard Landscape Features

**5.2.1** As indicated in Section 26 of DEVB TCW No. 6/2015, "For hard landscape features located on allocated government land, the allocatee department should be responsible for their maintenance." Consequently, after certified completion of the works of the Proposed SPS, the management and maintenance responsibility during operation shall be taken up by DSD after completion of defects liability period (DLP) and/or after the defects are rectified (**Appendix H**).

Table 5.2: Proposed Management and Maintenance Departments

	Maintenance and Management Agent(s)				
	Defects Liability Period/ Establishment Period*	After Defects Liability Period/ After Establishment Period*			
<ul> <li>a) Aesthetically Pleasing Design of the SPS (OM2)</li> <li>b) Shrubs and Ground Cover planted to soften the proposed SPS (OM1)</li> <li>c) Shrubs planted for Green Roofing (OM3)</li> <li>d) Climbers planted for Vertical Greening (OM4)</li> </ul>	Contractor	DSD- Future Property Manager			
*Remarks: Establishment Period is applicable for OM1, OM3	and OM4.				



## 6. IMPLEMENTATION PROGRAMME

#### 6.1 Submission of the Landscape and Visual Mitigation Plan

**6.1.1** As required by EP-597/2021 Condition 2.10, no later than one month before the commencement of the landscape and visual mitigation works for the Project, the LVMP should be submitted to the Director of Environmental Protection for approval.

#### 6.2 Implementation of Landscape and Visual Mitigation Measures

**6.2.1** As per EP-597/2021 Condition 2.10, all landscape and visual mitigation measures shall be implemented for the Project in accordance with the LVMP.

#### 6.3 Audit Requirements

**6.3.1** According to Section 9.4.1.1 of the EM&A Manual, proposed landscape and visual mitigation measures undertaken shall be audited by the ET at least once every two weeks during the construction period.

#### 6.4 Summary

**6.4.1** Summary of the maintenance and management schedule, and landscape and visual mitigation and audit works implementation programme is presented in **Table 6.1**.



#### Table 6.1: Summary of Implementation Programme of Mitigation Measures

Environmental Protection	Location		Implementation Stages**		Funding Agency	Implementation Agent	Maintenance and	Relevant Legislation and Guidelines	Environmental Performance required for implementation of the
Measures		Des	с	0			Management Agent(s)	, j	mitigation measures
CM2 – Compensatory Tree Planting <sup>1</sup> All trees felled under the Project shall be compensated in accordance with DEVB TCW No. 4/2020 - Tree Preservation.	Majority of the compensatory trees and ground floor planting will be adjacent to the proposed TX Room and Switch Room while some trees and shrubs will be planted near the Proposed SPS.		V		Project Proponent	Contractor	N/A	- DEVB TCW No. 4/2020 and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DEVB	EIA, Annex 10 and Annex 18 of EIAO-TM; DEVB TCW No. 4/2020
CM3 – Control of Night-time Lighting Glare No night works will be undertaken. Light source at night will be from night blinkers on construction barriers.	All active construction areas		V		Project Proponent	Contractor	N/A	<ul> <li>Charter of External Lighting issued by ENB</li> <li>Guidelines on Industry Best Practices for External Lighting Installations issued by ENB.</li> </ul>	N/A
CM4 – Erection of Decorative Screen Hoarding A non-reflective decorative hoarding is installed to screen the undesirable views of construction works and activities.	Screen hoardings will be established around the whole Project site boundary.		V		Project Proponent	Contractor	N/A	N/A	N/A
CM5 – Management of Construction Activities and Facilities The facilities and activities are carefully allocated and managed to minimise any potential adverse landscape and visual impacts.	All active construction sites		V		Project Proponent	Contractor	N/A	N/A	N/A
CM6 – Reinstatement of Temporarily Disturbed Landscape Areas All hard and soft landscape areas disturbed temporarily during construction shall be reinstated.	All disturbed landscaped areas within the Project site		V		Project Proponent	Contractor	N/A	EIA, Annex 10 and Annex 18 of EIAO- TM; DEVB TCW No. 4/2020 and GEO Publication No. 1/2011	EIA, Annex 10 and Annex 18 of EIAO- TM; DEVB TCW No. 4/2020
OM1 – Tree and Shrub Planting to soften the proposed SPS Tree and shrub planting is proposed to soften the proposed SPS and enhance the landscape and visual amenity of the Project.	Sai O Trunk Sewer SPS	V		V	Project Proponent	Project Proponent	Contractor – during the Establishment Period DSD - after the Establishment Period	DEVB TCW No. 4/2020 and the latest Guidelines on Tree Preservation during Development issued by GLTM Section of DEVB DEVB TCW No.3/2012 - Site Coverage of Greenery for Government Building Projects	DEVB TCW No. 4/2020 and DEVB TCW No.3/2012
OM2 – Aesthetically pleasing design of the SPS The design of the proposed SPS in the regard of layouts, forms, materials and finishes shall be	Sai O Trunk Sewer SPS	V		V	Project Proponent	Project Proponent	Contractor – during the Defects Liability Period	Guidelines on Aesthetic Design of Pumping Station Buildings	Guidelines on Aesthetic Design of Pumping Station Buildings

<sup>1</sup> Preservation of Trees (CM1) will no longer be applicable as all trees will be felled. Consequently, all felled trees except for *L. leucocephala* will be compensated.



Environmental Protection Measures	Location	Implementation Stages**			Funding Agency	Implementation Agent	Maintenance and	Relevant Legislation and Guidelines	Environmental Performance required for implementation of the
Measures		Des	С	0			Management Agent(s)		mitigation measures
sensitively designed so as to blend in the structures to the adjacent landscape and visual context.							DSD - after the Defects Liability Period		
OM3 – Provision of Green Roof Green Roof is proposed to enhance the landscape quality of the proposed SPS and mitigate any potential adverse visual impact on adjacent VSRs.	Sai O Trunk Sewer SPS	V		V	Project Proponent	Project Proponent	Contractor – during the Establishment Period DSD - after the Establishment Period	Skyrise Greening of the Greening, Landscape & Tree Management Section	Skyrise Greening of the Greening, Landscape & Tree Management Section
OM4 – Provision of Vertical Greening Self-climbing species is proposed for planting on metal fence wall to soften the proposed SPS and enhance the landscape and visual amenity of the Project.	Sai O Trunk Sewer SPS	V		V	Project Proponent	Project Proponent	Contractor – during the Establishment Period DSD - after the Establishment Period	Skyrise Greening of the Greening, Landscape & Tree Management Section	Skyrise Greening of the Greening, Landscape & Tree Management Section

\* Agreement from the corresponding responsible maintenance party is attached in Appendix H. DSD shall assume all maintenance responsibilities for softscape after the establishment period & hard landscape features after the defects liability period and/or after the defects are rectified.

\*\* Des – Design, C – Construction, and O – Operation



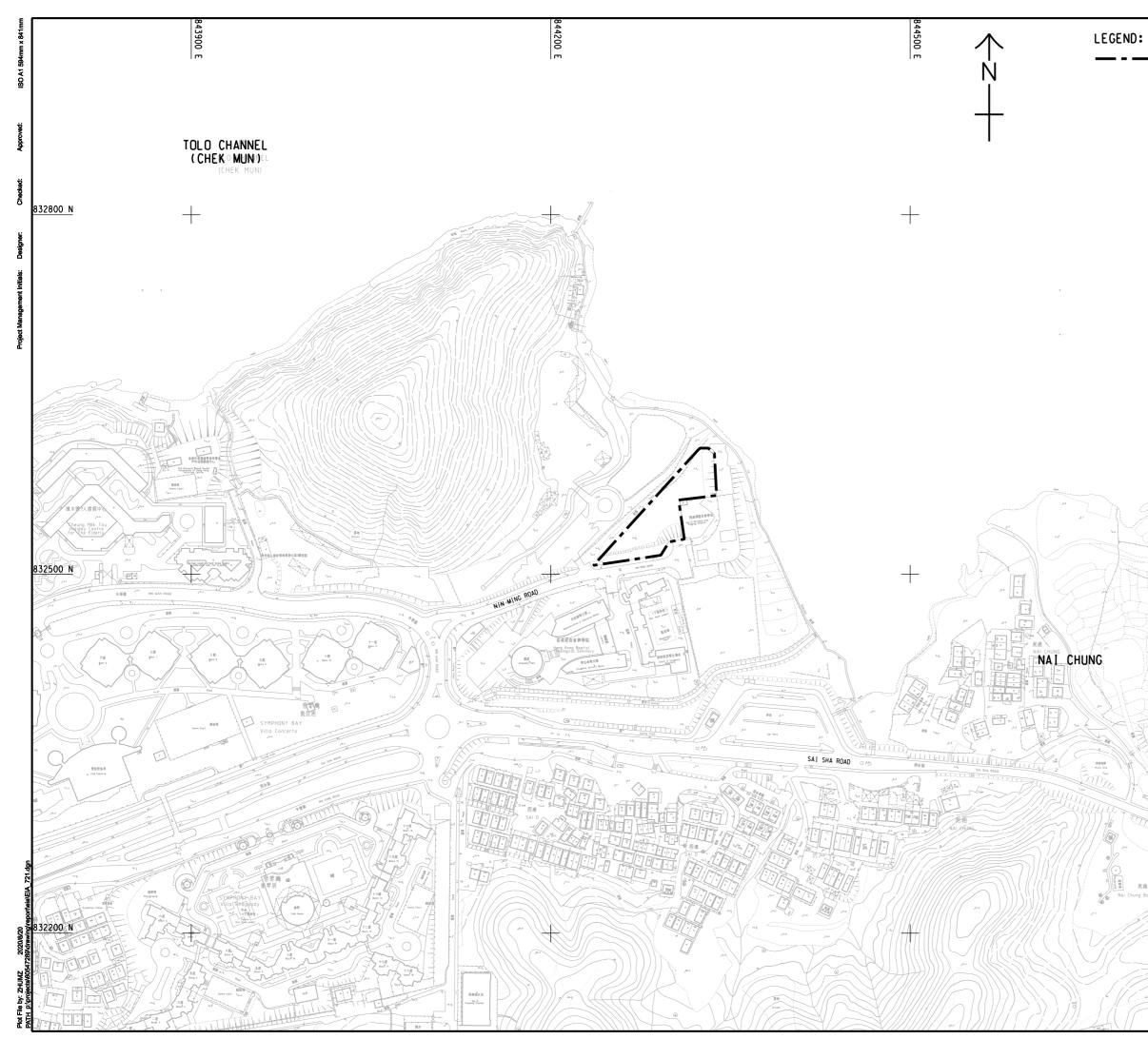
## 7. SUMMARY AND CONCLUSIONS

- 7.1 This Landscape and Visual Mitigation Plan is prepared and submitted to satisfy the requirements of EP-597/2021 Condition 2.10 and will be updated after the comments from relevant Government departments are received as well as changes of site conditions occur.
- **7.2** Among the initially recommended mitigation measures in the approved EIA Report, preservation of trees (CM1), will no longer be applicable as all existing trees are proposed to be felled. These existing trees other than undesirable species will be compensated. Consequently, 55 nos. of trees will be planted to compensate the trees to be removed.
- **7.3** The Landscape and Visual Mitigation Plan will be updated after the comments from relevant Government departments are received and updates of site conditions are observed.



## Appendix A Location of the Project





泥涌烧烤場

SITE BOUNDARY



#### PROJECT

TOLO HARBOUR SEWERAGE OF UNSEWERED AREAS STAGE 2 -INVESTIGATION, DESIGN AND CONSTRUCTION CLIENT

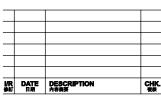


#### CONSULTANT 工程期間公司

AECOM Asia Company Ltd. www.aecom.com

#### SUB-CONSULTANTS 分列工程期間公司

#### ISSUE/REVISION



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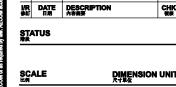


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KEY PLAN

A1 1 : 1500

A.1 LOCATION OF THE PROJECT

SHEET NUMBER

60547289/EIA/FIGURE 2.1

PROJECT NO.

SHEET TITLE 副紙名籍

60547289

CONTRACT NO.

# **Appendix B**

Landscape and Visual Mitigation Plan



#### B.1 Landscape Plan



Y10-Accagroup Project 2009/2009/201\_Sai Shal-Graphic Storage(3: Conceptual Design(Sai O SPS)/2023-12-18 LMP\_Elevation Rev/2009/201-SO-LP\_Meditation Area\_202312/18

0185/21/ED/0222h 08 | Provision of ET Services for Sai O Trunk Sewer Sewage Pumping Station

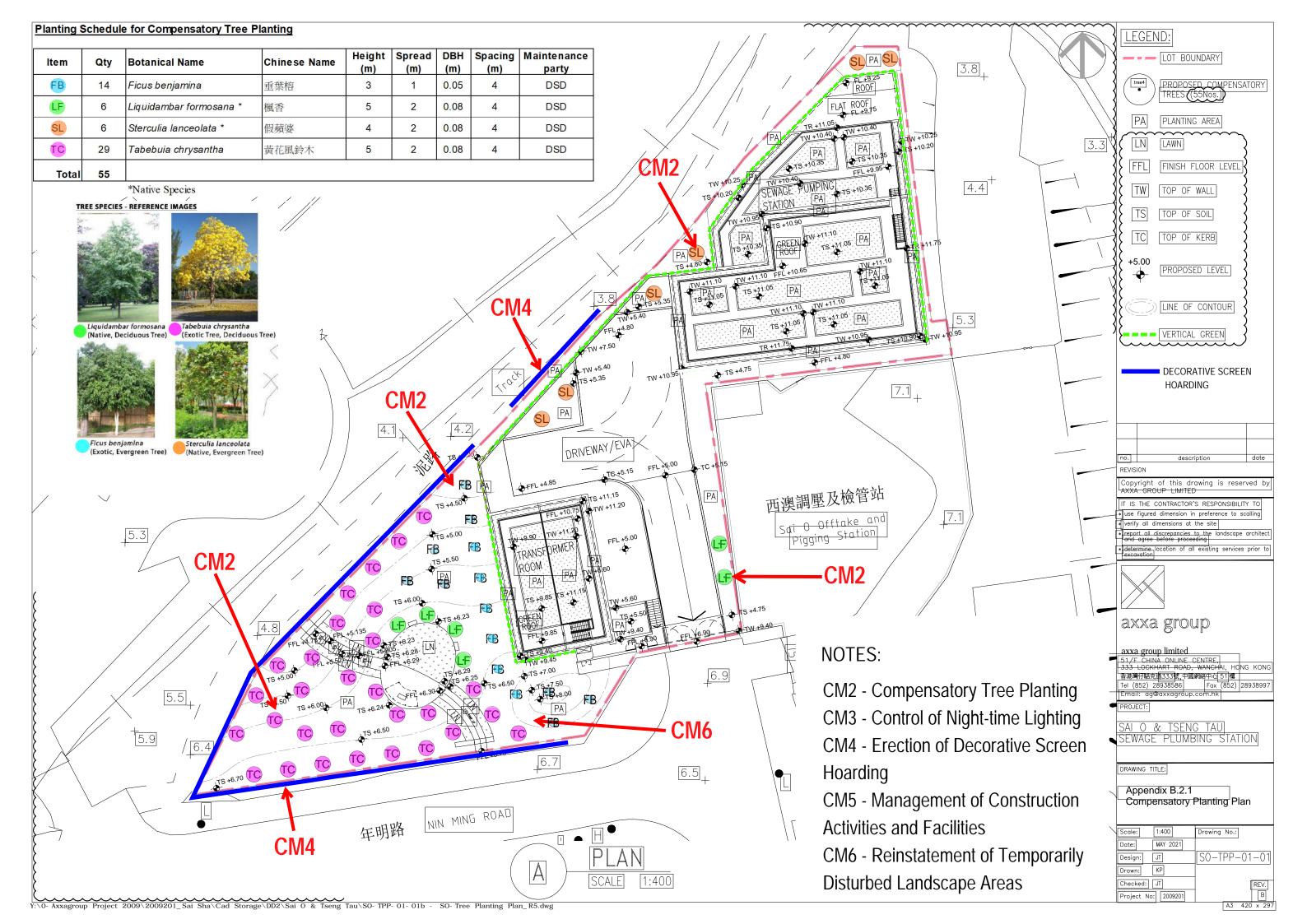


B.2 Landscape and Visual Mitigation Plan during Construction Phase



#### B.2.1 Compensatory Planting Plan





B.2.2 Light Blinkers on Construction Site Along Pedestrian Access





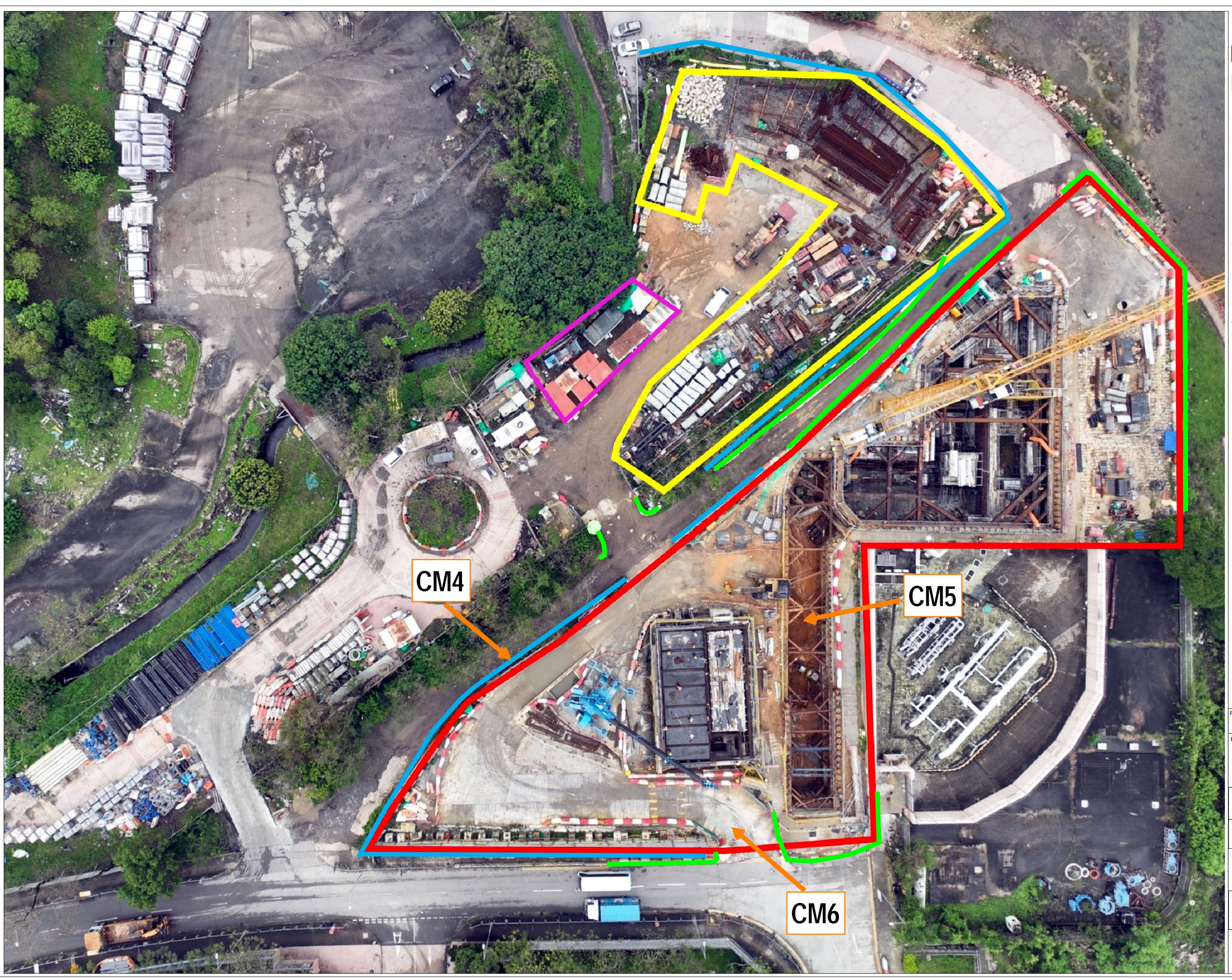


B.2.3 Decorative Screen Hoarding Installed on Construction Site



#### B.2.4 Site Allocation Plan





## Legend Site Boundary Temporary Storage Area Sub-Con Resting Area Decorative Screen Hoarding Location of Light Blinkers

## NOTES:

CM2 - Compensatory Tree PlantingCM3 - Control of Night-time LightingCM4 - Erection of Decorative ScreenHoardingCM5 - Management of Construction

Activities and Facilities CM6 - Reinstatement of Temporarily Disturbed Landscape Areas

Project No.

0185-21

### Project Title

#### PROVISION OF ET SERVICES FOR SAI O TRUNK SEWER SEWAGE PUMPING STATION

Figure title

Appendix B.2.4 Site Allocation Plan

Figure No. B.2.4 Revision

## **Gammon**

## LIGHT TIME INVESTMENTS LIMITED

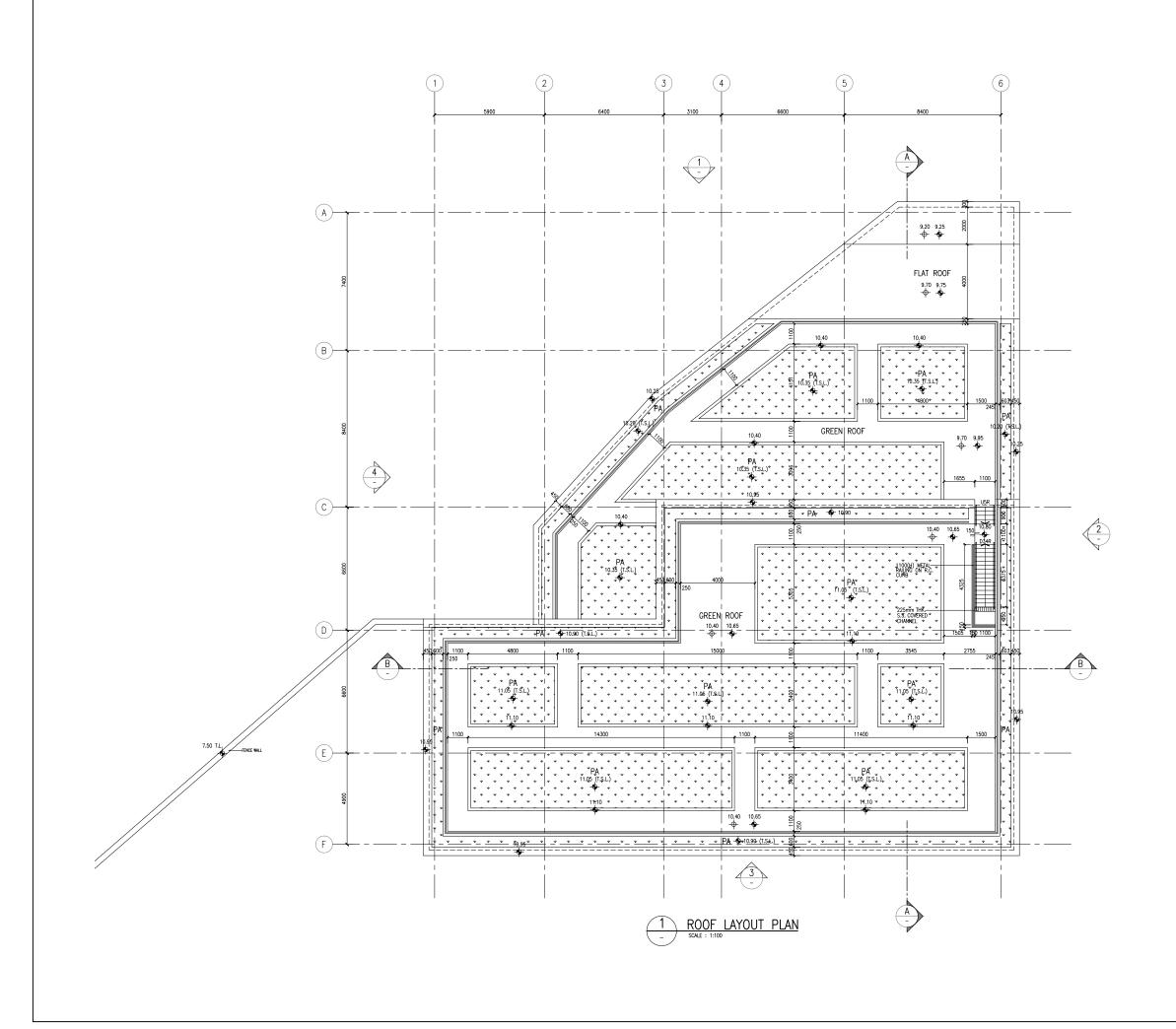
FUGRO TECHNICAL SERVICES LIMITED

B.3 Landscape and Visual Mitigation Plan during Operational Phase



#### B.3.1 General Layout Plan of the SPS





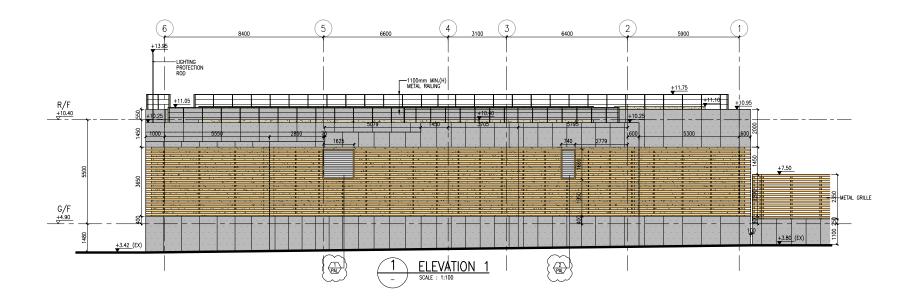
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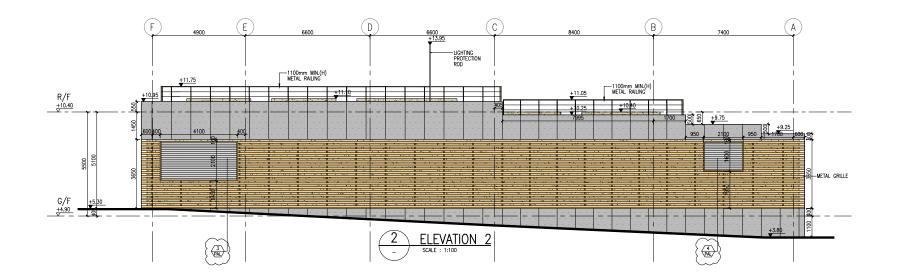


SAI O SEWAGE PUMPING STATION -	•
SEWAGE PUMPING STATION ROOF PLAN	

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PAINT FINISH IN MEDIUM GREY (PT2c)

FAIR—FACE CONCRETE TEXTURE EXTERNAL COATING SYSTEM (PT5)

BEIGE RUSTIC TEXTURED PAINT (PT6)

PAINT FOR STEELWORK IN WARM GREY (PT10)

FAIR—FACE CONCRETE TEXTURED PAINT (PLAIN SURFACE FINISH WITH RECESSED JOINT PATTERN) (PT11)

STAINLESS STEEL LOUVRE WITH BLANK OFF PANEL (LV2)

ALUMINIUM EXTRUSION WITH PVDF COATING FINISH IN WARM GREY (AL10)

ALUMINIUM CLADDING WITH PVDF COATING FINISH IN MEDIUM GREY (AL3)

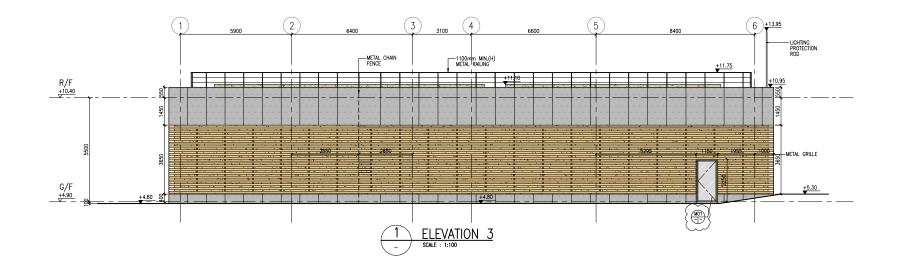
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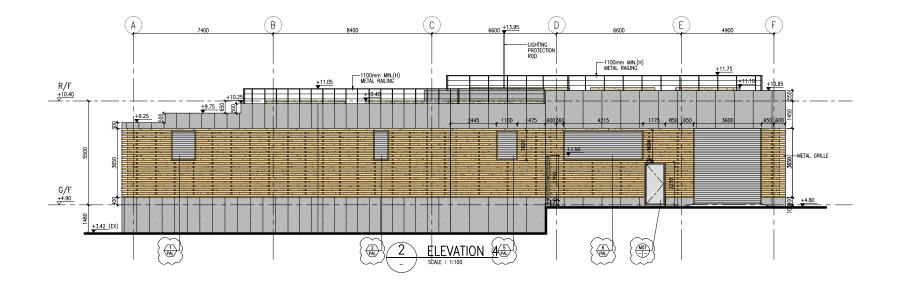
## **FUGITIVE DRAWING**



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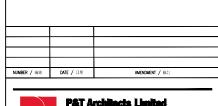
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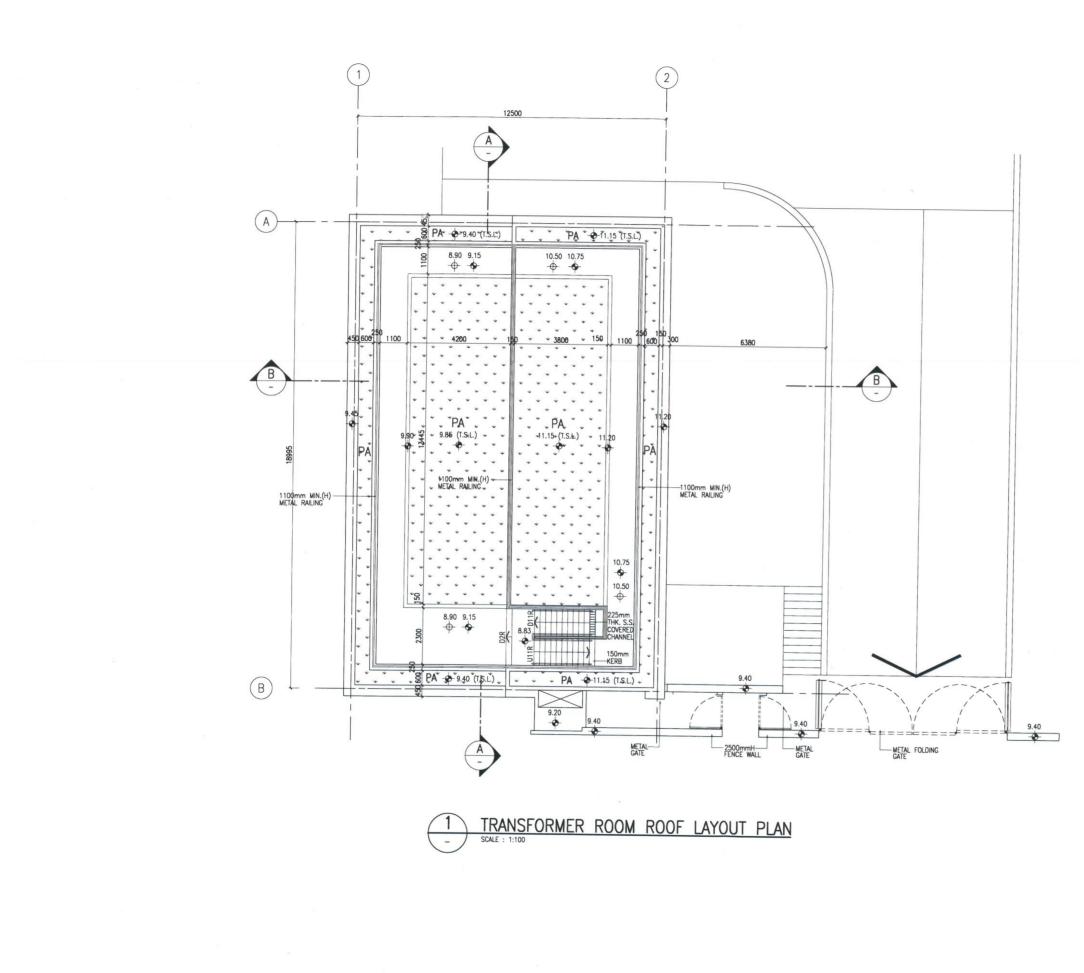
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ALUMINIUM CLADDING WITH PVDF COATING FINISH IN MEDIUM GREY (AL3)

WOOD PLASTIC COMPOSITE HOLLOW SECTION WITH SANDBLASTED FINISH IN LIGHT BROWN (WD3) (WD4)

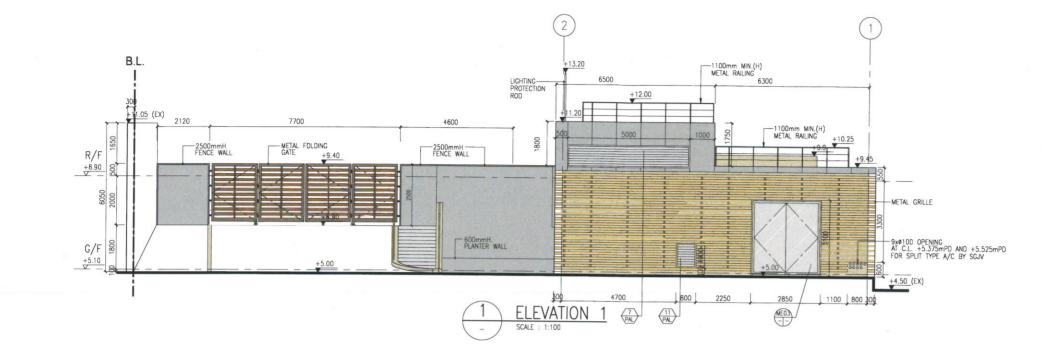


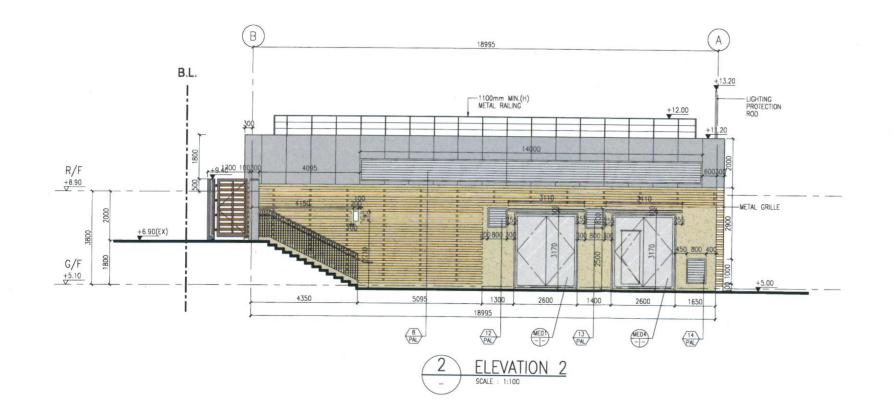
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#### LEGEND

PAINT FINISH IN MEDIUM GREY (PT2c)

FAIR-FACE CONCRETE TEXTURE COATING SYSTEM (PT5)

BEIGE RUSTIC TEXTURED PAINT (PT6)

PAINT FOR STEELWORK IN WARM GREY (PT10)

FAIR-FACE CONCRETE TEXTURED PAINT (PLAIN SURFACE FINISH WITH RECESSED JOINT PATTERN) (PT11)

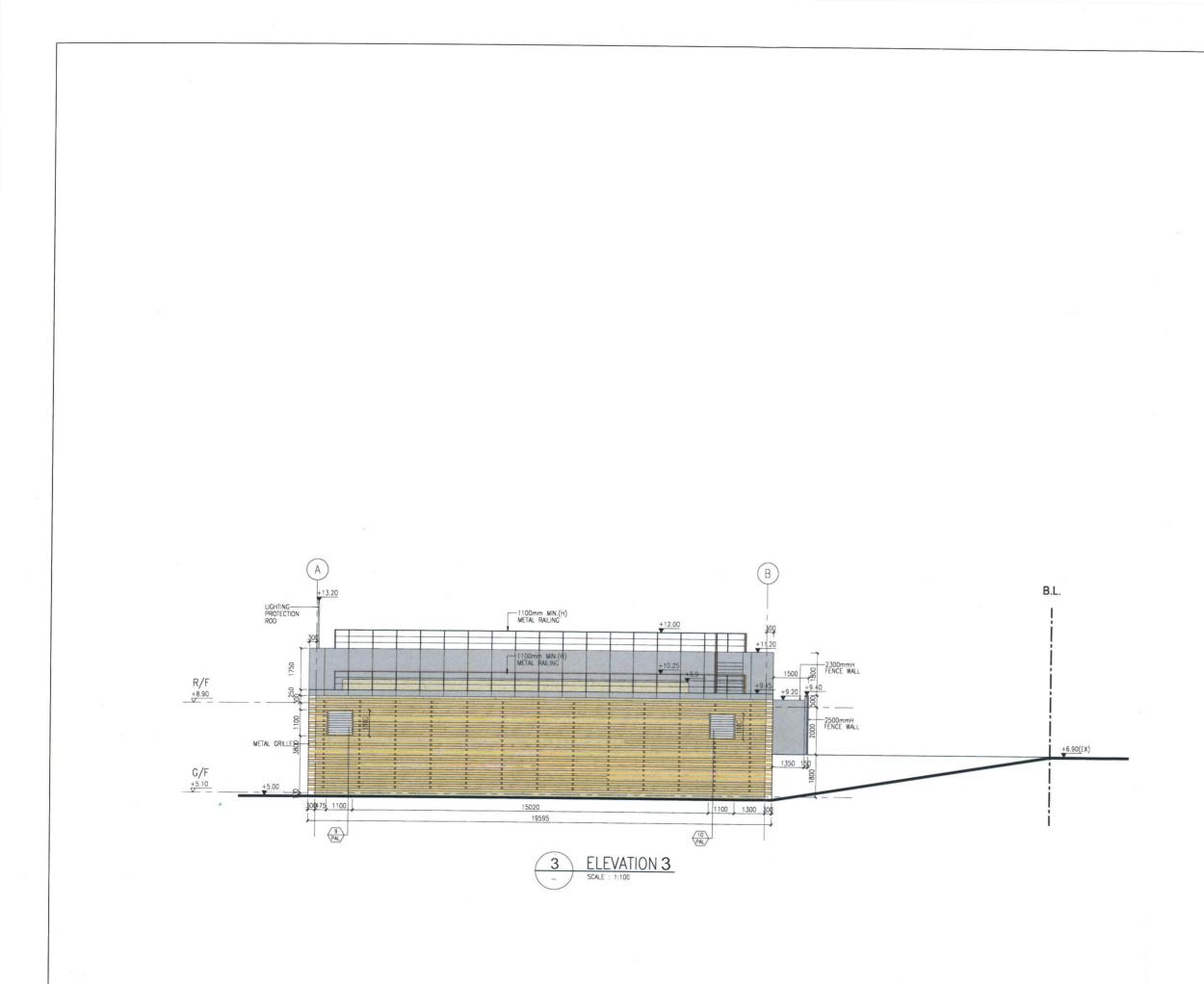
STAINLESS STEEL LOUVRE WITH BLANK OFF PANEL (LV2)

ALUMINIUM EXTRUSION WITH PVDF COATING FINISH IN WARM GREY (AL10)

ALUMINIUM CLADDING WITH PVDF COATING FINISH IN MEDIUM GREY (AL3)

WOOD PLASTIC COMPOSITE HOLLOW SECTION WITH SANDBLASTED FINISH IN LIGHT BROWN (WD3) (WD4)





#### LEGEND

 PAINT FINISH IN MEDIUM GREY (PT2c)

 FAIR-FACE CONCRETE TEXTURE

 COATING SYSTEM (PT5)

 BEIGE RUSTIC TEXTURED PAINT (PT6)

 PAINT FOR STEELWORK IN WARM GREY (PT10)

 FAIR-FACE CONCRETE TEXTURED PAINT (PLAIN SURFACE FINISH WITH RECESSED JOINT PATTERN) (PT11)

 STAINLESS STEEL LOUVRE WITH BLANK OFF PANEL (LV2)

 ALUMINIUM EXTRUSION WITH PVDF COATING FINISH IN WARM GREY (AL10)

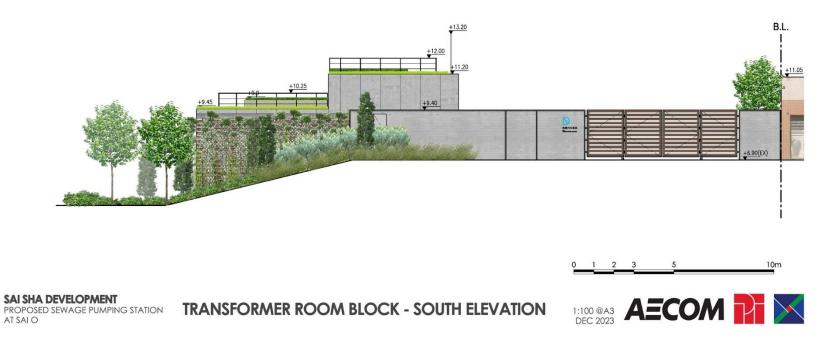
 ALUMINUM CLADDING WITH PVDF COATING FINISH IN MEDIUM GREY (AL23)

 WOOD PLASTIC COMPOSITE HOLLOW SECTION WITH SANDBLASTED FINISH IN LIGHT BROWN (WD3) (WD4)



B.3.2 South Elevation of The Transformer Room Block





V10-Axxagroup Project 2009/2009/201\_Sai ShalOraphic Storagel3. Conceptual Design/Sai O SPS/2023-12-18 LMP\_Elevation Rev/Sai O SPS\_TR\_South Elevation\_AXXA

0185/21/ED/0222h 08 | Provision of ET Services for Sai O Trunk Sewer Sewage Pumping Station



#### B.3.3 Lighting Design of the SPS



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.6 LOCATIONS	TION, RELEVANT GOVER OF EQUIPMENT SHOW	N ON THE DRAWI	NGS ARE FOR REFERE	NCE ONLY.	EXACT LOCATIONS	S SHALL BE PROPO	SED BY THE	2.26 THE FOLLOWING AB
CONTRACT SUBMISSIO	OR AFTER CO-ORDINA	TION WITH ALL RE	ELEVANT PARTIES AND	CONFIRMED	BY THE SUPERVIS	OR DURING DRAWIN	IG	2.27 SERVED LOCATIONS
BASE ON	AND QUANTITY OF EQU THE REQUIREMENTS SI	JIPMENT SHOWN ( ET DOWN IN THE	ON THE DRAWINGS ARI SPECIFICATION AND D	E THE MINIM RAWINGS AN	UM REQUIREMENT. D SUBMIT DESIGN	THE CONTRACTOR PROPOSAL FOR SU	R SHALL JPERVISOR'S	2.28 HALL BE FURTHE
APPROVAL.	SIONS SHOWN ARE IN	mm AND ALL LE	EVELS ARE IN m. UNLI	ESS OTHERW	ISE SPECIFIED.			
	ND SMALL POWER							2.29 <u>LUMINAIRE WITH SU</u> B" DENOTES THE E
OTHERWISE	MOUNTED FUSED CONN E SPECIFIED.			,		PMENT (WITHIN 2M .	APART) UNLESS	2.30 LOCATIONS OF EXIT
	JITS SHALL BE HOT DI THREADS ON GALVANI					AINT TO PREVENT	RUSTING	SHALL BE FURTHER
	YS AND TRAY FITTING							2.31 ALL EXIT SIGNS SH THAN 125mm HIG STANDARD 5266:P
.5 ALL SUPPC GALVANIZIN	DRTS, BRACKETS AND H NG.	HARDWARE SHALL	BE OF CORROSION R	ESISTANT MA	TERIAL OR PROTE	CTED AGAINST CORI	ROSION BY	SIGN SHALL FOLL
RESPONSIE	OF CABLE TRAY AND BLE TO SIZE CABLE TF	RAY AND CABLE 1	TRUNKING TO ENSURE	THAT THE C	EQUIREMENTS ONLY ABLE ARRANGEMEN	Y. THE CONTRACTOP NT ON THE CABLE	R SHALL BE TRAY AND IN	2.32 UNLESS OTHERWISE FOLLOWING INDICA
THE CABL	E TRUNKING SHALL BE	IN COMPLIANCE	WITH RELEVANT STAN	DARD.				AREA SERVED
SHALL PRO ARE MAINT	OVIDE MODIFICATIONS S	SO THAT THE EAF	RTHING CONTINUITY OF	THE CABLE	TRAY SYSTEM ANI	D SUPPORT FOR TH	HE CABLES	SWITCH ROOM
	R AND CONTROL WIRES				CE WITH THEIR RE	ESPECTIVE WIRING E	DIAGRAMS.	OUTDOOR AREA
	UM SIZE OF CABLE FO THERWISE SPECIFIED. T				SHALL BE 1.5mm	n <sup>2</sup> .		PUMP ROOM
.11 EXPANSION	JOINTS TO CABLE CO	NTAINMENT SYSTE					TS, SHALL	ROOF AREA
2.12 CABLES FO	OR EMERGENCY LIGHTIN	IG CIRCUITS AND	OTHER CIRCUITS SHAL	L NOT IN A	NY CIRCUMSTANCE	S BE DRAWN INTO	CONDUIT	
2.13 ALL FINAL	KING OF SAME COMPAR CIRCUITS FOR 13A SO		HALL BE IN RING CIR	CUIT OF PRO	TECTED BY 32A N	ICB WITH RCD UNL	ESS	3. CABLE CONTAINMEN
	E SPECIFIED.							3.1 THE FOLLOWING RE CT(XXX,YYY) CABL
				HE F&M INS	TALLATION WHICH '	SHALL FULL COMPL	Y WITH	
THE LATES	ST EDITION OF BUILDIN	IG ENERGY CODE	(BEC) ISSUED BY EM	SD.		SHALL FULL COMPL		WHÈRE XXX DENO P POW AND YYY DENOTES
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L3

EXIT

21

3

4000

4000

LED

LED

1700

IP65

IP40

## ANGING BOX SHALL BE PROVIDED FOR CHANGING MULTI-CORE CABLE TO SINGLE CORE CABLE AND VICE

RACTOR SHALL PROVIDE AND ENSURE ALL THE EXTERNAL EQUIPMENT WHICH SHALL BE WEATHERPROOF AND

ESCENT TUBE LUMINAIRES SHALL BE COMPLETED WITH HIGH FREQUENCY ELECTRONIC BALLAST THERWISE SPECIFIED.

AIRES SHALL BE SUITABLE FOR USE ON A 220V SINGLE PHASE SUPPLY +10% \_ 50Hz + 2%  $\_$ 

ARIES SHALL BE COMPLETED WITH INTEGRAL CONTROL GEAR.

WING ABBREVIATIONS ARE USED TO FILL THE LAMP TYPE COLUMN: LED LAMP

OCATIONS OF LUMINAIRES AS INDICATED ON THE SCHEDULE ARE FOR REFERENCE ONLY, EXACT LOCATION FURTHER CO-ORDINATED ON SITE.

> DENOTES WALL-MOUNTED LUMINAIRE (BATTERN TYPE FLUORESCENT LUMINAIRE W/O REFLECTOR) DENOTES PENDANT-MOUNTED LUMINAIRE

WITH SUBSCRIPT: THE EMERGENCY TYPE LUMINAIRES SHALL BE MAINTAINED TYPE VAIRE C/W 3 HOURS SELF-CONTAINED BATTERY FOR EMERGENCY LIGHTING.

OF EXIT SIGN ON THE DRAWING ARE FOR REFERENCE ONLY AND EXACT LOCATION FURTHER CO-ORDINATED ON SITE.

SIGNS SHALL BE INTERNALLY ILLUMINATED WITH ENGLISH AND CHINESE CHARACTERS OF NOT LESS 5mm HIGH. THE EXIT SIGN SHALL BE BACKED-UP BY 2-HOURS BATTERY ACCORDANCE WITH BRITISH D 5266:PART 1 IN CASE OF POWER FAILURE. THE GRAPHIC DESIGN OF THE EXIT AND DIRECTIONAL LL FOLLOW BRITISH STANDARD 5499: PART 10 AND THE RELEVANT FSD CIRCULAR LETTERS.

HERWISE SPECIFIED, THE MOUNTING LEVELS OF THE LIGHT FITTING SHALL BE BASED ON THE G INDICATIVE LEVEL.

RVED	WALL MOUNTED LEVEL
ROOM	2500mm AFFL
R AREA	2500mm AFFL
OOM	2500mm AFFL
REA	500mm AFFL

NTAINMENT SYSTEM

DWING REFERENCE SYSTEM APPLIES TO CABLE CONTAINMENT SYSTEM: Y) CABLE TRAY

XX DENOTES THE TYPE OF SERVICES WHICH INCLUDE:

DENOTES THE DIMENSIONS OF THE CABLE CONTAINMENT SYSTEM IN mm.

NTAINMENT (CABLE TRAY, TRUNKING, CABLE BRACKER / HANGER,CONDUIT, ETC) SHALL BE PROVIDED FOR THE COMPLETE ISTALLATION ROUTE. WHERE CABLE CONTAINMENT IS NOT SHOWN FOR PART (OR THE WHOLE FOR CONDUITS) OF THE CABLE HE CONTRACTOR SHALL DESIGN, SUPPLY AND INSTALL SUPPLEMENTARY CABLE CONTAINMENT (OR THE WHOLE FOR CONDUITS AT NO COST TO THE EMPLOYER AND SUBMIT FOR APPROVAL BY THE SUPERVISOR PRIOR TO INSTALLATION WORKS.

EALED CONDUIT WORKS INSIDE BLOCKWORK WALL SHALL BE INSTALLED AT THE SAME TIME WITH THE ERECTION OF THE RK WALL.SUBSEQUENT CHASING ON THE BLOCKWORK WALLS IS NOT ACCEPTABLE WITHOUT PRIOR APPROVAL BY SUPERVISOR. RACTOR SHALL DESIGN, SUPPLY AND INSTALL ALL NECESSARY CABLE CONTAINMENT SYSTEMS FOR POWER CABLES AND CABLES INSTALLATIONS.

BRACKET FOR OUTDOOR ISOLATOR AND FOR ELECTRICAL EQUIPMENT/CABLE CONTAINMENT IF REQUIRED SHALL BE

THERWISE SPECIFIED, ALL CABLE CONTAINMENT, BRACKET AND STEEL WORK SHALL BE HOT DIP ED AND TESTED IN ACCORDANCE WITH BS EN ISO 1461.GALVANISING SHALL BE CARRIED OUT AS THE IUFACTURING PROCESS. THE COATING SHALL BE CLEAN, SMOOTH AND CONTINUOUS, AND FREE FROM ACID ISTERS OR OTHER BLEMISHES. ALL DRILLING, PUNCHING, BENDING AND DE-BURRING SHALL BE ED BEFORE GALVANISING.

ISTANCE SHALL BE MEASURED ON SITE AT THE INITIAL STAGE OF SITE CONSTRUCTION. PROPOSAL OF HING NETWORKS TO ACHIEVE THE FOLLOWING VALUES OF EARTHING RESISTANCE SHALL BE SUBMITTED: NG PROTECTION SYSTEM :10 OHM, MAX.(EARTHING RESISTANCE)

RED EARTH RESISTANCE SHALL BE VERIFIED AT NO EXTRA COST, MPLETION OF THE EARTHING NETWORKS, TESTING AND COMMISSIONING TO ACHIEVE

## ARD NUMBERING SYSTEM

---- POWER: - N: NORMAL SUPPLY - E: ESSENTIAL SUPPLY OBTAINED BEFORE MAIN SWITCH ------ BUILDING - SPS: SEWAGE PUMPING STATION - DB FOR MCB/MCCB BOARD

01–09 (NUMBERING) FLOOR
 SERVICES – IRBP: IRRIGATION PUMP – SP: SUMP PUMP – MVAC: MECHANICAL VENTILATION & AIR CONDITIONING
 BUILDING – SPS: SEWAGE PUMPING STATION

4.3 THE ROUTES OF EARTHING SYSTEM CABLES/TAPES ARE SHOWN ON THE ELECTRICAL SERVICES LAYOUT. THE CONTRACTOR SHALL READ IN CONJUCTION WITH EARTHING SYSTEM SCHEMATIC FOR EXACT EARTHING REQUIREMENTS AND THE EXACT NUMBER OF CONDUCTORS REQUIRED.

- 4.4 DIMENSIONS OF EARTH TERMINAL SHALL BE MINIMUM 300mmx50mmx6mm TINNED CU BAR AND WITH ADEQUATE TERMINALS FOR CONNECTION.
- 4.5 EARTH CONNECTION FOR THOSE ROOMS WITHOUT DEDICATED EARTH TERMINAL PROVIDED SHALL BE OBTAINED FROM CIRCUIT PROTECTIVE CONDUCTOR CONNECTION AT SMALL POWER POINTS.
- 4.6 THE METALLIC SHEATHS AND THE ARMOURING OF ALL LV POWER CABLES SHALL BE SOLIDLY EARTH AT BOTH ENDS TO THE MAIN EARTH SYSTEM.
- 4.7 THE FRAMES AND ENCLOSURES OF ALL SWITCHBOARDS SHALL BE EARTHED DIRECTLY TO THE MAIN EARTH SYSTEM. THE ENCLOSURES OF ALL LIGHTING AND POWER DISTRIBUTION BOARD SHALL BE EARTHED AS PER BS7671.
- 4.8 DEDICATED CIRCUIT PROTECTIVE CONDUCTOR (CPC) SHALL BE PROVIDED FOR EACH CIRCUIT FOR FINAL CIRCUIT DISTRIBUTION. THE CPC SHALL BE SIZED IN ACCORDANCE WITH BS 7671.
- 4.9 1 NO. 25mmx3mm LSHF INSULATED COPPER TAPE SHALL BE PROVIDED FOR INTERCONNECTING ALL LIGHTNING PIT AT 600mm BELOW GROUND LEVEL.
- 4.10 THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION TO FINALIZE EARTHING TERMINALS FOR EQUIPOTENTIAL BONDING OF ALL EXTRANEOUS CONDUCTIVE PARTS. THE EXTRANEOUS CONDUCTIVE PARTS SHALL BE AS DEFINED BY THE CODE OF PRACTICE FOR THE ELECTRICITY (WIRING) REGULATIONS ISSUED BY EMSD SUCH AS HANDRAIL. METAL DOOR, METAL FALSE CEILING, VE PANEL RAISE FLOCR SYSTEM ETC. THE CONTRACTOR SHALL PROVIDE EQUIPOTENTIAL WIRING AND TERMINATE IT TO THE EARTHING TERMINAL. THE CONTRACTOR SHALL PROVIDE EQUIPOTENTIAL BONDING FOR ALL BUILDING SERVICES INSTALLATION IN COMPLY WITH THE CODE OF DEACTICE FOR THE ELECTRICITY (WIRING) PECILI ATIONS ISSUED BY EMSD. CODE OF PRACTICE FOR THE ELECTRICITY (WIRING) REGULATIONS ISSUED BY EMSD.

## **ABBREVIATIONS:**

]	AMPERE	TPN
FA	AUTOMATC FIRE DETECTION AND ALARM SYSTEM	W
FFL	ABOVE FINISHED FLOOR LEVEL	XLPE
BC	BUSBAR CHAMBER	1/C
D	BOARD	2/C
CTV	CLOSED CIRCUIT TELEVISION	3/C
	CLP POWER HONG KONG LIMITED	4/C
		LEGEND
U		
:/W	COMPLETE WITH	X Y X=TPNI Y=RATII
B	DISTRIBUTION BOARD	W
C		
P LV	DOUBLE POLE EXTRA LOW VOLTAGE	
	FROM BELOW	••
/B	FIRE RESISTANT	
R SD	FIRE SERVICES DEPARTMENT	
SU	FUSED SPUR UNIT	L <u>+</u> LP
1/L	HIGH LEVEL	
W	KILOWATT	•
/L	LOW LEVEL	۲
MCP	LOCAL MOTOR CONTROL PANEL	W
SHF	LOW SMOKE HALOGEN FREE	
V	LOW VOLTAGE	16A W
VSB	LOW VOLTAGE SWITCHBOARD	32A / W
ICB	MINIATURE CIRCUIT BREAKER	
ICCB	MOULDED CASE CIRCUIT BREAKER	F
IVAC	MECHANICAL VENTILATION & AIR CONDITIONING	F
]	NEUTRAL	— [L]—
.C.	NORMALLY CLOSE	• •
.0.	NORMALLY OPEN	DC
/0	SOCKET OUTLET	
PS	SEWAGE PUMP STATION	$\boxtimes$
W	SWITCH	#
WA	STEEL WIRE ARMOUR	Д
/A	TO ABOVE	<b>ĕ</b>
Ρ	TRIPLE POLE	

5	5 6 7			8	9		
		AP	PROX. OVERALL	DIMENSIONS (	mm)		
DESCRIPTION OF LUMINAIRE	AREA SERVED	L	W	Η	DIA	MOUNTING METHOD	REMARK
1500mm WEATHER-PROOF OF LED FITTING WITH REFLECTOR, STELL BODY WITH WHITE ENAMEL FINISH.	PLANT ROOM	1570	165	108		WALL MOUNTED (SEE NOTE 2.28, 2.29 & 2.32)	
WEATHERPROOF LED OUTDOOR LUMINAIRE WITH, HARD-WEARING WEATHER AND VANDAL RESISTANT RECTANGULAR FITTING.	EXTERNAL AREA	383	195	306		WALL MOUNTED (SEE NOTE 2.28, 2.29 & 2.32)	
WEATHERPROOF LED LUMINAIRE WITH, HARD-WEARING WEATHER AND VANDAL RESISTANT RECTANGULAR FITTING.	EXTERNAL AREA	367	132	90		WALL MOUNTED (SEE NOTE 2.28, 2.29 & 2.32)	-
EXIT SIGN, C/W 3 HOURS SELF-CONTAINED BATTERY, WHITE POWER COATING ALUMINIUM HOUSING WITH ACRYLIC COVER AND CONTROL DRIVER	ESCAPE ROUTE	610	75	215		WALL MOUNTED (SEE NOTE 2.31 & 2.32)	

'n	TRIPLE POLE AND NEUTRAL
	WEATHERPROOF
PE	CROSS-LINKED POLYETHYLENE
′C	SINGLE CORE
′C	TWO CORE
′C	THREE CORE
′C	FOUR CORE

## GEND:

Y X=TPNISPN Y=RATING	ISOLATING SWITCH 'X' DENOTE RATING 'W' DENOTE WEATHERPROOF TPN UNLESS OTHERWISE SPECIFIED MCB DISTRIBUTION BOARD LOCAL MOTOR CONTROL PANEL (LMCP)
	MCB DISTRIBUTION BOARD
	LOCAL MOTOR CONTROL PANEL (LMCP)
• •	EARTH TERMINAL
⊥_ EP	EARTH PIT
<u> </u>	LIGHTNING EARTH PIT
♦	10A SP ONE-WAY, ONE GANG LIGHTING SWITCH
igodot	10A SP ONE-WAY, ONE GANG WEATHERPROOF LIGHTING SWITCH
W	13A SOCKET OUTLET, AT 300mm AFFL UNLESS OTHERWISE SPECIFIED
A	16A WEATHERPROOF SOCKET OUTLET, INDUSTRIAL GRADE, AT 300mm AFFL UNLESS OTHERWISE SPECIFIED
A W	32A TPN WEATHERPROOF SOCKET OUTLET, INDUSTRIAL GRADE, AT 300mm AFFL UNLESS OTHERWISE SPECIFIED
F	13A SWITCHED FUSED SPUR UNIT
F	13A SWITCHED FUSED SPUR UNIT 13A SWITCHED WEATHERPROOF FUSED SPUR UNIT 25mmx3mm TINNED COPPER TAPE
· L —	25mmx3mm TINNED COPPER TAPE
DC	
	VERTICAL CABLE TRAY/LADDER
$\boxtimes$	DOWN CONDUCTOR VERTICAL CABLE TRAY/LADDER CABLE DRAW PIT 20A DOUBLE POLE SWITCH 10A SP TWO–WAY, ONE GANG LIGHTING SWITCH
ŧ	20A DOUBLE POLE SWITCH
¥	10A SP TWO-WAY, ONE GANG LIGHTING SWITCH



## PROJECT

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

## 



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ĺ/R	DATE	DESCRIPTION	СНК.

## SIAIUS

SCALE 比例

## DIMENSION UNIT 尺寸單位

A1 N.T.S.

MILLIMETRES

CONTRACT NO.

KEY PLAN 余明画

## PROJECT NO. 项目编號

60547289

## SHEET TITLE 副紙名稱

SAI O SEWAGE PUMPING STATION -ELECTRICAL SYSTEM - GENERAL NOTES, LEGEND, ABBREVIATIONS AND LUMINAIRE SCHEDULE

## SHEET NUMBER

					MCB BOARD SC						
PANEL	NO.		DB-SPS-N	01	MAIN SWITCH RATING (A)	63A TP AI SW					
LOCA	TION	G/	F SWITCH F	ROOM	FED FROM	SEWAGE PUMPING STATION LV SW SWITCHBOARD					
WA	Y	MCB RATING (A)	C/W RCB	CABLE SIZING (sq.mm)	CABLE TYPE	DESCRIPTION	REMARK				
	L1	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR SWITCH ROOM	-				
1	L2	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR SWITCH ROOM	-				
	L3	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR U22R STAIR	-				
	L1	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR TX ROOM	-				
2	L2	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR GREEN ROOF	TIMER				
	L3	10	-	-	-	SPARE	-				
	L1	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR VALVE CHAMBER	-				
3	L2	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR VALVE CHAMBER	-				
	L3	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR D62R STAIR	-				
	L1	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR PUMP ROOM	_				
4	L2	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR PUMP ROOM	_				
-	L3	10	_	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR PUMP ROOM	-				
	 L1	10	-	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR PUMP ROOM					
5	 L2	10	_	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR U34R STAIR					
Ũ	L3	10	_	2 x 2.5 sq. mm	1/C LSHF CU CABLE		TIMER				
	 	10		2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR EXTERNAL AREA	TIMER				
6	L2	10	_	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR GREEN ROOF	TIMER				
Ū	L3	10	_	2 x 2.5 sq. mm	1/C LSHF CU CABLE	LIGHTING FOR GREEN ROOF	TIMER				
	 L1	32	Y	4 x 2.5 sq. mm	1/C LSHF CU CABLE	13A S/O FOR PUMP ROOM	RING CIRCU				
7	L2	32	Y	-	1/C LSHF CU CABLE	13A S/O FOR PUMP ROOM	RING CIRCU				
1				4 x 2.5 sq. mm							
	L3	32	Y	4 x 2.5 sq. mm	1/C LSHF CU CABLE	13A S/O FOR SWITCH ROOM					
8	L1 L2 L3	20	-	1 x 6 sq. mm	4/C XLPE/SWA/LSHF CU CABLE	ISOLATOR FOR ROLLER SHUTTER	-				
9	L1 L2 L3	32	-	1 x 10 sq. mm	4/C XLPE/SWA/LSHF CU CABLE	ISOLATOR FOR LMCP-SPS-IRBP-R01	-				
10	L1 L2 L3	32	-	1 x 10 sq. mm	4/C XLPE/SWA/LSHF CU CABLE	ISOLATOR FOR LMCP-SPS-CLBP-R01	-				
11	L1 L2 L3	32	-	1 x 10 sq. mm	4/C XLPE/SWA/LSHF CU CABLE	ISOLATOR FOR LMCP-SPS-MVAC-G01	-				
12	L1 L2 L3	32	-	1 x 10 sq. mm	4/C XLPE/SWA/LSHF CU CABLE	ISOLATOR FOR LMCP-SPS-MVAC-G02	-				
	L1	20	-	2 x 4 sq. mm	1/C LSHF CU CABLE	FSU FOR VIU	-				
13	L2	20	-	2 x 4 sq. mm	1/C LSHF CU CABLE	FSU FOR VIU	-				
	L3	20	-	-	-	SPARE	-				
14	L1 L2 L3	32	-	1 x 10 sq. mm	4/C XLPE/SWA/LSHF CU CABLE	ISOLATOR FOR LMCP-SPS-MVAC-R01	-				
15	L1 L2 L3	32	-	-	_	SPARE					
	 L1	-	-	-	-	SPACE	-				
16	L2	_	_	_		SPACE	-				
	 L3		_	_		SPACE					

					MCB BOARD S	CHEDULE	
PANEL	L NO.		DB-SPS-E	01	MAIN SWITCH RATING (A)	32A TP AI SW	
LOCA	TION	G/	F SWITCH F	ROOM	FED FROM	SEWAGE PUMPING STATION LV SW SWITCHBOARD	
WA	Υ	MCB RATING (A)	C/W RCB	CABLE SIZING (sq.mm)	CABLE TYPE	DESCRIPTION	REMARK
	L1	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR SWITCH ROOM	-
1	L2	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR TX ROOM	-
	L3	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR U22R STAIR	-
	L1	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR GREEN ROOF	TIMER
2	L2	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR GREEN ROOF	TIMER
	L3	10	-	-	-	SPARE	-
	L1	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR U34R STAIR	-
3	L2	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR PUMP ROOM	-
	L3	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR PUMP ROOM	-
	L1	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR VALVE CHAMBER	-
4	L2	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	LIGHTING FOR D62R STAIR	-
	L3 10		-	-	-	SPARE	-
	L1	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
5	L2	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
	L3	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
	L1	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
6	L2	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
	L3	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
	L1	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR CCTV	-
7	L2	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	13A FSU FOR PLC CONTROLLER	-
	L3	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	13A FSU FOR PLC CONTROLLER	-
	L1	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	13A FSU FOR ELV EQUIPMENT	-
8	L2	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	13A FSU FOR ELV EQUIPMENT	-
·	L3	20	-	-	-	SPARE	-
	L1	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	FSU FOR EXIT SIGN	-
9	L2	10	-	2 x 2.5 sq. mm	1/C FR/LSHF CU CABLE	FSU FOR EXIT SIGN	-
	L3	10	-	-	-	SPARE	-
	L1	20	-	1 x 4 sq. mm	2/C FR/LSHF CU CABLE	FSU FOR AFA CONTROL PANEL	-
10	L2	20	-	-	-	SPARE	-
	L3	20	-	-	-	SPARE	-

## NOTE:

THE	LV	ELECTRICA	al Wiri	NG	DIAGRAM	OF	THE	S
PUM	PINC	G STATION	SHALL	ΒE	REFER	TO	6054	72

SEWAGE 7289/5527.



#### **PROJECT** 項目

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

#### CLIENT 業主

f



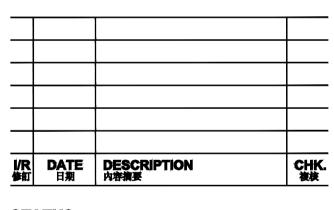
#### CONSULTANT 工程顧問公司

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#### SUB-CONSULTANTS 分判工程順間公司

#### ISSUE/REVISION <sup>後前</sup>

ies an



#### STATUS 階段

SCALE 比例

#### DIMENSION UNIT <sup>尺寸單位</sup>

A1 N.T.S.

## MILLIMETRES

CONTRACT NO. <sup>合約編號</sup>

KEY PLAN 余引画

#### PROJECT NO. <sup>项目编辑</sup>

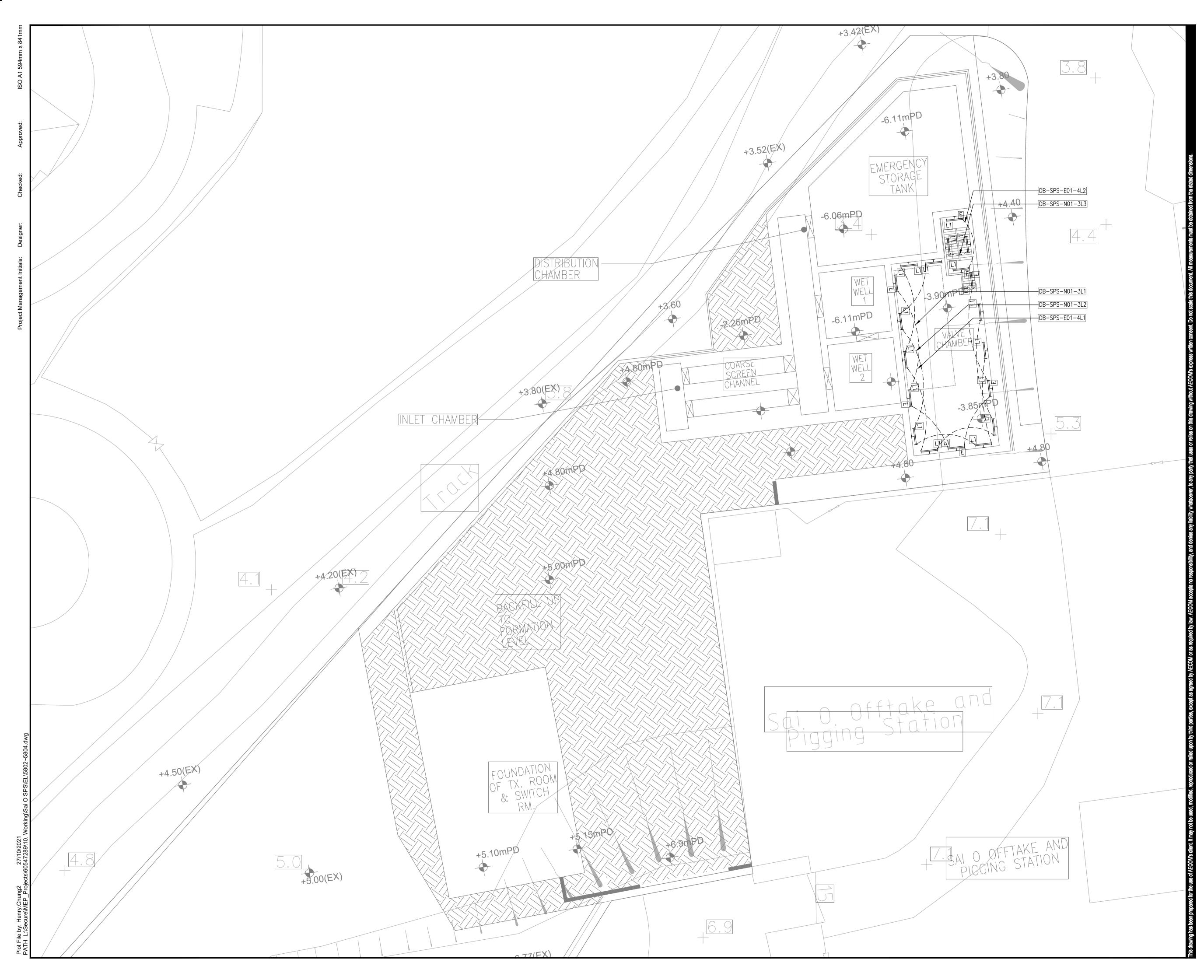
60547289

#### SHEET TITLE 画紙名稱

E

SAI O SEWAGE PUMPING STATION -ELECTRICAL INSTALLATION - MCB BOARD DETAILS

#### SHEET NUMBER 画紙編號



#### PROJECT <sub>項目</sub>

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

#### CLIENT 業主

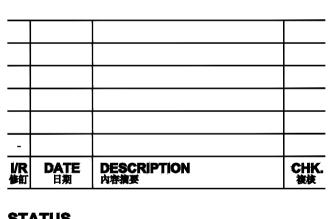


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#### ISSUE/REVISION <sup>体紅</sup>



#### STATUS <sub>階段</sub>

SCALE 比例

#### DIMENSION UNIT 尺寸單位

A1 1:150

MILLIMETRES

CONTRACT NO. <sup>合約編號</sup>

KEY PLAN 宋明画

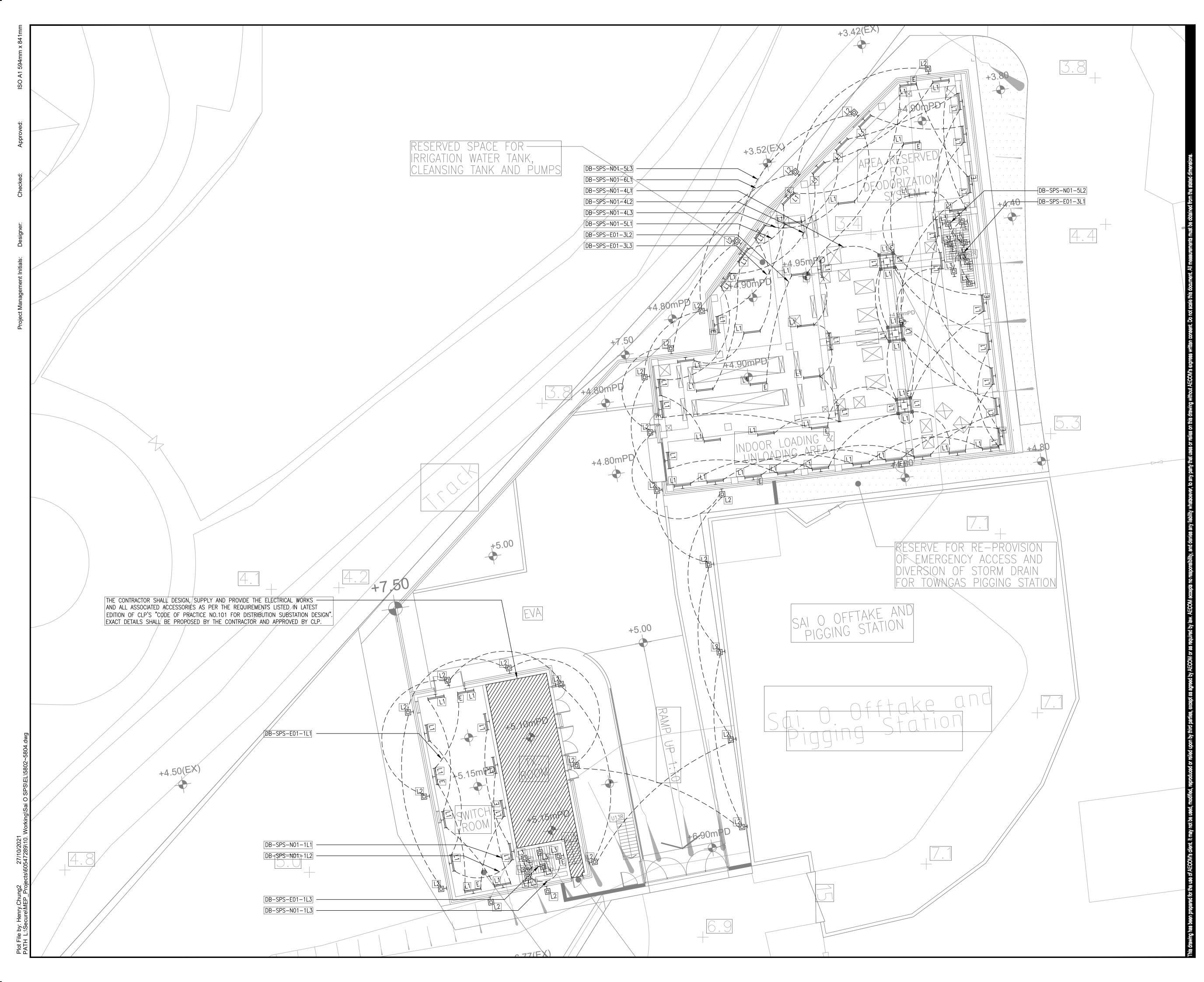
#### PROJECT NO. <sup>项目</sup>編號

60547289

#### SHEET TITLE 画紙名稱

SAI O SEWAGE PUMPING STATION -ELECTRICAL SYSTEM -LIGHTING LAYOUT PLAN -BASEMENT FLOOR

#### SHEET NUMBER 周紙編號





#### PROJECT <sub>項目</sub>

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

#### CLIENT 業主

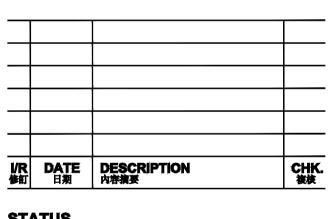


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#### ISSUE/REVISION 備紅



#### STATUS <sub>階段</sub>

SCALE <sub>比例</sub>

#### DIMENSION UNIT <sub>尺寸單位</sub>

A1 1:150

MILLIMETRES

CONTRACT NO. <sup>合约编號</sup>

KEY PLAN 宋明画

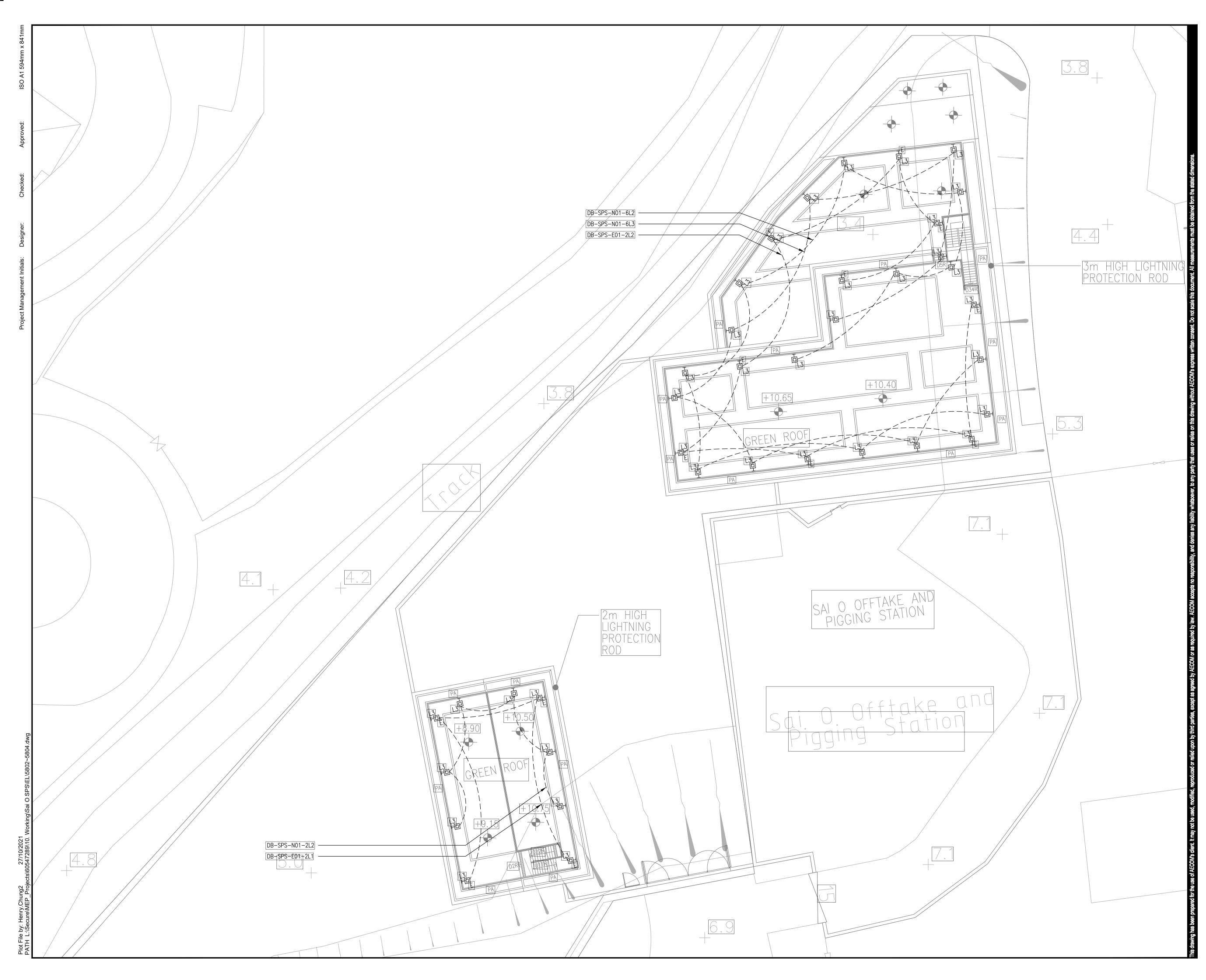
#### PROJECT NO. <sup>项目编號</sup>

60547289

#### SHEET TITLE 画紙名葉

SAI O SEWAGE PUMPING STATION -ELECTRICAL SYSTEM -LIGHTING LAYOUT PLAN -GROUND FLOOR

#### SHEET NUMBER 周紙編號



#### **PROJECT** 項目

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

#### CLIENT 業主

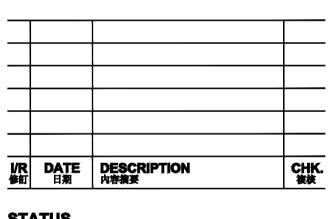


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#### ISSUE/REVISION 俳紅



#### STATUS 階段

SCALE 比例

#### DIMENSION UNIT 尺寸單位

A1 1:150

MILLIMETRES

CONTRACT NO. <sup>合約編號</sup>

KEY PLAN 宋明画

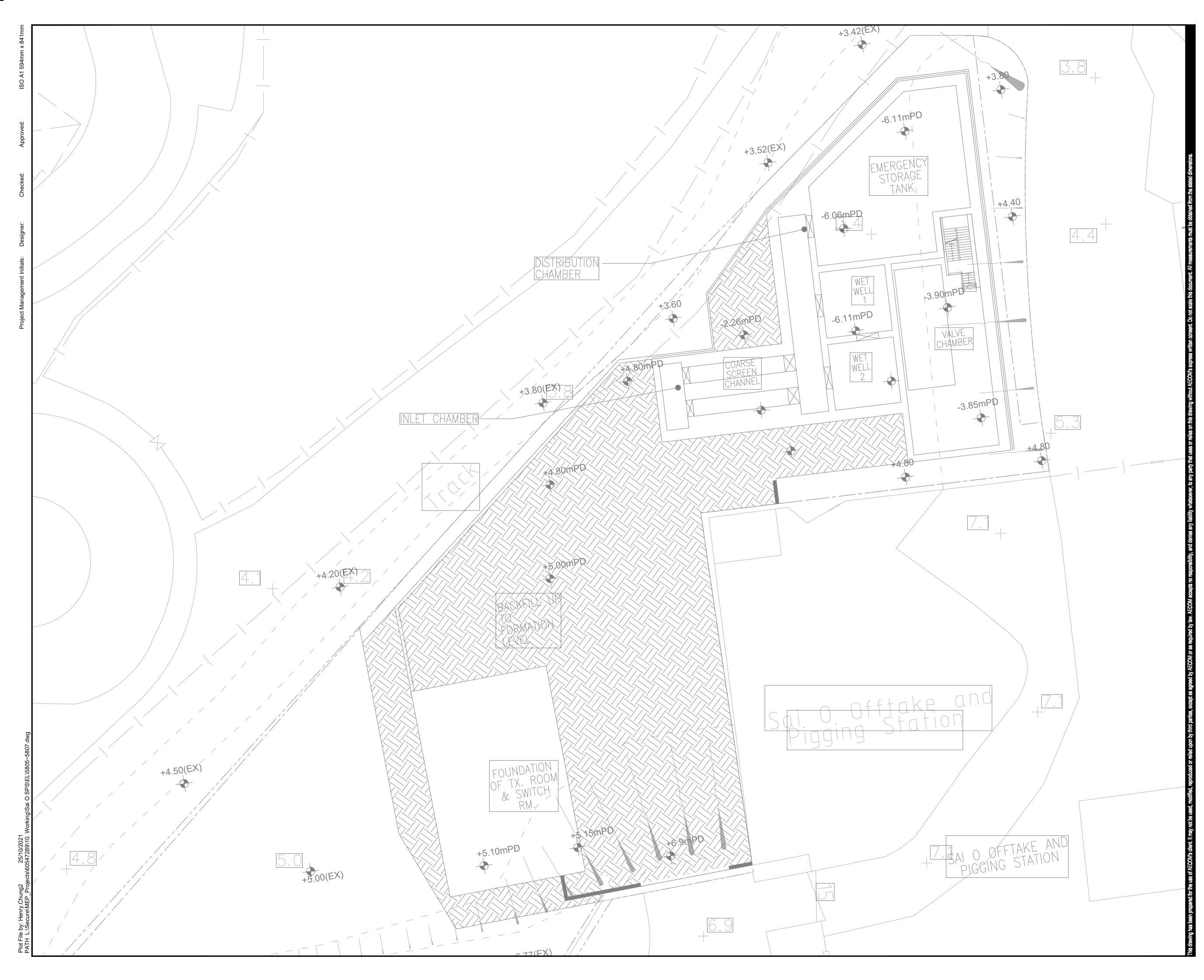
#### PROJECT NO. <sup>项目编號</sup>

60547289

#### SHEET TITLE 画紙名稱

SAI O SEWAGE PUMPING STATION -ELECTRICAL SYSTEM -LIGHTING LAYOUT PLAN -ROOF FLOOR

## SHEET NUMBER



#### PROJECT <sub>項目</sub>

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

#### CLIENT 業主

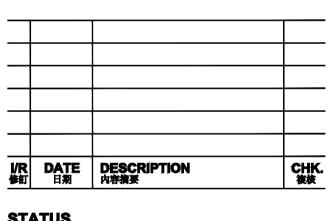


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#### ISSUE/REVISION 修訂



#### STATUS 階段

SCALE 比例

#### DIMENSION UNIT 尺寸單位

A1 1:150

MILLIMETRES

CONTRACT NO. <sup>合約編號</sup>

KEY PLAN 宋明画

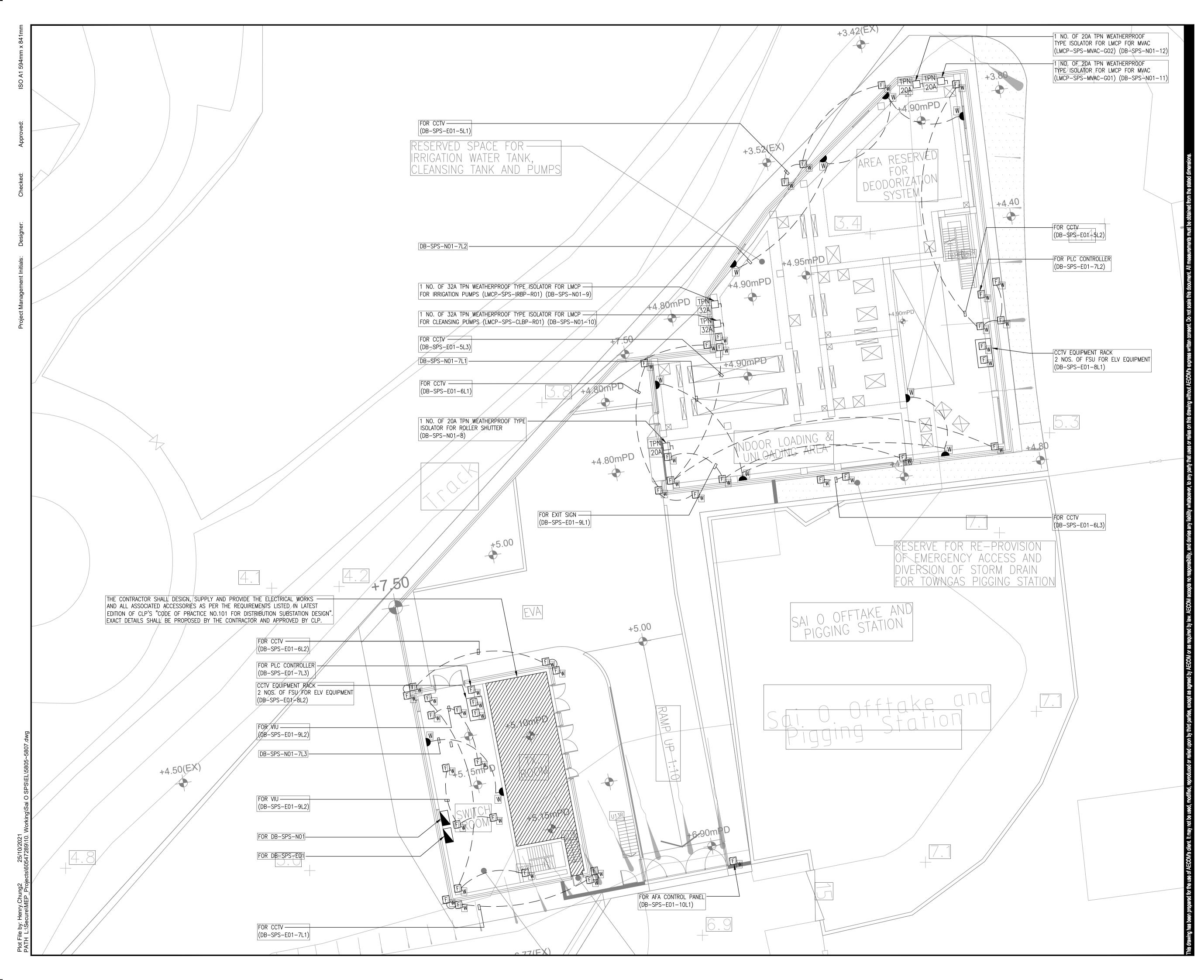
#### PROJECT NO. <sup>项目编</sup>號

60547289

#### SHEET TITLE 画紙名稱

SAI O SEWAGE PUMPING STATION -ELECTRICAL SYSTEM -ELECTRICAL LAYOUT PLAN -BASEMENT FLOOR

#### SHEET NUMBER 周紙編號



#### PROJECT <sub>項目</sub>

SAI SHA ROAD WIDENING - SAI SHA COMPREHENSIVE DEVELOPMENT SHAP SZ HEUNG, SAI KUNG NORTH, N.T.

#### CLIENT 業主

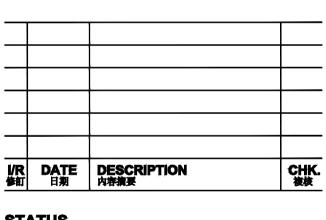


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#### STATUS 階段

SCALE 比例

#### DIMENSION UNIT <sup>尺寸單位</sup>

A1 1:150

MILLIMETRES

CONTRACT NO. 合約編號

KEY PLAN 余引画

#### PROJECT NO. <sup>項目編號</sup>

60547289

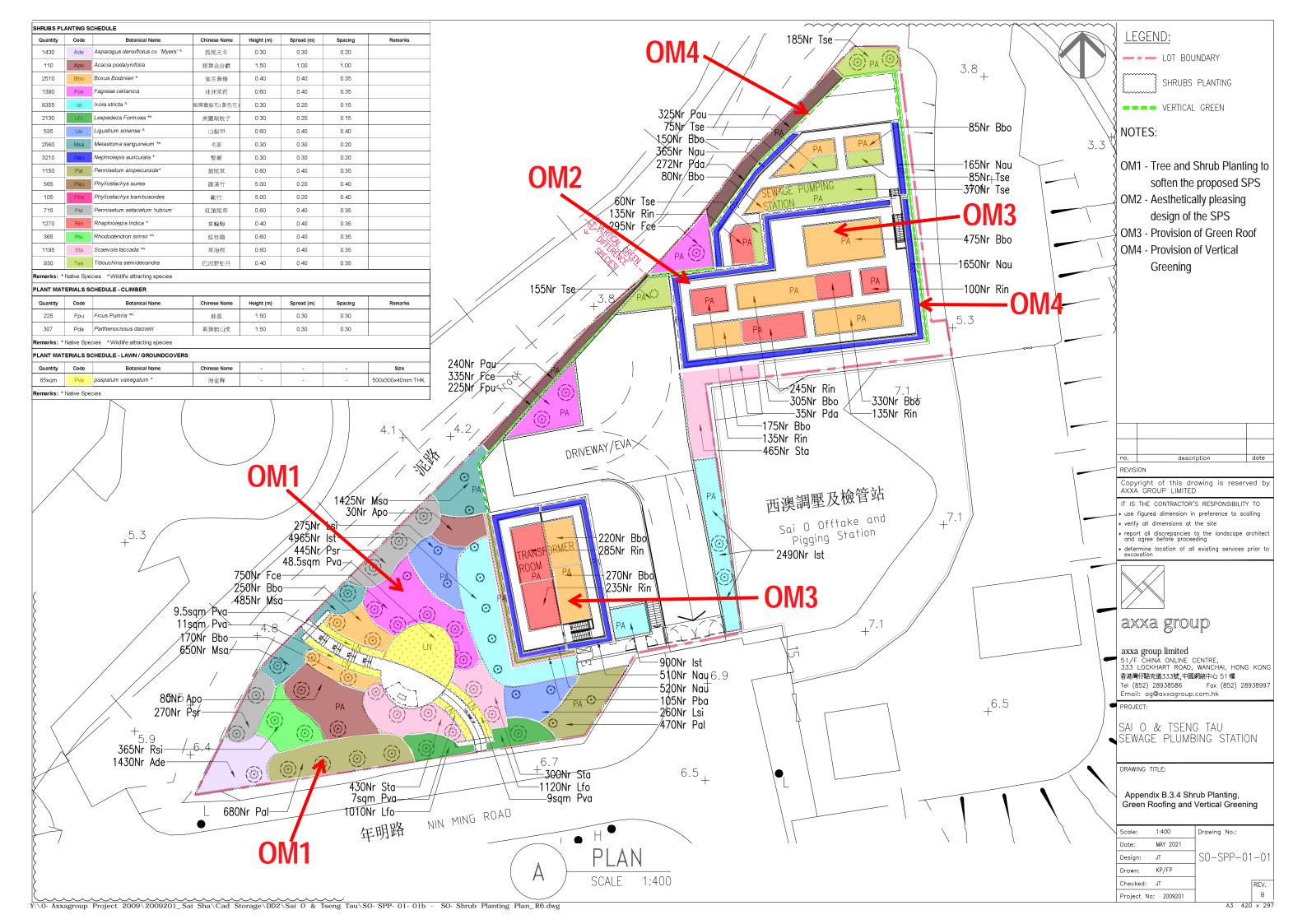
#### SHEET TITLE 副紙名稱

SAI O SEWAGE PUMPING STATION -ELECTRICAL SYSTEM -ELECTRICAL LAYOUT PLAN -GROUND FLOOR

#### SHEET NUMBER 周紙編號

#### B.3.4 Shrub Planting, Green Roofing and Vertical Greening



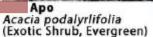


#### SHRUBS, GROUND COVER, LAWN AND CLIMBER SPECIES – REFERENCE IMAGES



Ade Asparagus densiflorus cv. 'Myers' (Native Groundcover, Evergreen)







Boxus Bodinieri (Native Shrub, Evergreen)



Psr Pennisetum setacetum rubrum' (Exotic Shrub, Evergreen)

Rsi

Rhododendron simsii



Pva Paspalum vaginatum (Native Lawn, Evergreen)



Fce Fagraea ceilanica (Exotic Shrub, Evergreen)



Ist Ixora stricta



Lespedeza formosa (Exotic Shrub, Evergreen) (Exotic Shrub, Evergreen)



Melastoma sanfuineum (Native Shrub, Evergreen)



Pal

Pennisetum alopecuroide (Native Shrub, Evergreen)







Sta

(Native Shrub, Evergreen) (Native Shrub, Evergreen)

Scaevola taccada

Nau Nephrolepis auriculata (Native Groundcover, Evergreen)



(Exotic Shrub, Evergreen)

Lsi

Ligustrum sinense

Rin Rhaphiolepis indica (Native Shrub, Evergreen)



Msa



Fpu Ficus pumila (Native Climber, Evergreen) (Exotic Climber, Evergreen)



Pau Phyllostachys aurea (Exotic, Evergreen)



Pba Phyllostachys bambusoides (Exotic, Evergreen)





#### B.3.5 Composition Planting Schedule



## SO-COMPOSITION PLANTING SCHEDULE

Quantity	Code	Botanical Name	Chinese Name	Height (m)	Spread (m)	Spacing	Remarks
1430	Ade	Asparagus densiflorus cv. 'Myers' ^	狐尾天冬	0.30	0.30	0.20	
110	Аро	Acacia podalyriifolia	銀葉金合歡	1.50	1.00	1.00	
2510	Bbo	Boxus Bodinieri *	雀舌黃楊	0.40	0.40	0.35	
1380	Fce	Fagreae ceilanica	非洲茉莉	0.60	0.40	0.35	
8355	Ist	Ixora stricta ^	細葉龍船花(黃色花)	0.30	0.20	0.15	
2130	Lfo	Lespedeza Formosa *^	美麗胡枝子	0.30	0.20	0.15	
535	Lsi	Ligustrum sinense ^	山指甲	0.60	0.40	0.40	
2560	Msa	Melastoma sanguineum *^	毛菍	0.30	0.30	0.20	
3210	Nau	Nephrolepis auriculata *	腎蕨	0.30	0.30	0.20	
1150	Pal	Pennisetum alopecuroide*	狼尾草	0.60	0.40	0.35	
565	Pau	Phyllostachys aurea	羅漢竹	5.00	0.20	0.40	
105	Pba	Phyllostachys bambusoides	岡川作力	5.00	0.20	0.40	
715	Psr	Pennisetum setacetum 'rubrum'	紅狼尾草	0.60	0.40	0.35	
1270	Rin	Rhaphiolepis Indica *	車輪梅	0.40	0.40	0.35	
365	Rsi	Rhododendron simsii *^	紅杜鵑	0.60	0.40	0.35	
1195	Sta	Scaevola taccada *^	草海桐	0.60	0.40	0.35	
930	Tse	Tibouchina semidecandra	巴西野牡丹	0.40	0.40	0.35	
emarks: *	Native Spe	cies ^Wildlife attracting species					·
LANT MAT	ERIALS S	CHEDULE - CLIMBER					
Quantity	Code	Botanical Name	Chinese Name	Height (m)	Spread (m)	Spacing	Remarks
225	Fpu	Ficus Pumila *^	薜荔	1.50	0.30	0.30	
272	Pda	Parthenocissus dalzielii	異葉爬山虎	1.50	0.30	0.30	
emarks: *	Native Spe	cies ^Wildlife attracting species					,
ANT MAT	ERIALS S	CHEDULE - LAWN / GROUNDCOVERS					
Quantity	Code	Botanical Name	Chinese Name	-	-	-	Size
85sqm	Pva	paspalum variegatum *	海雀稗	-	-	-	500x300x40mm T

#### Planting Schedule for Compensatory Tree Planting

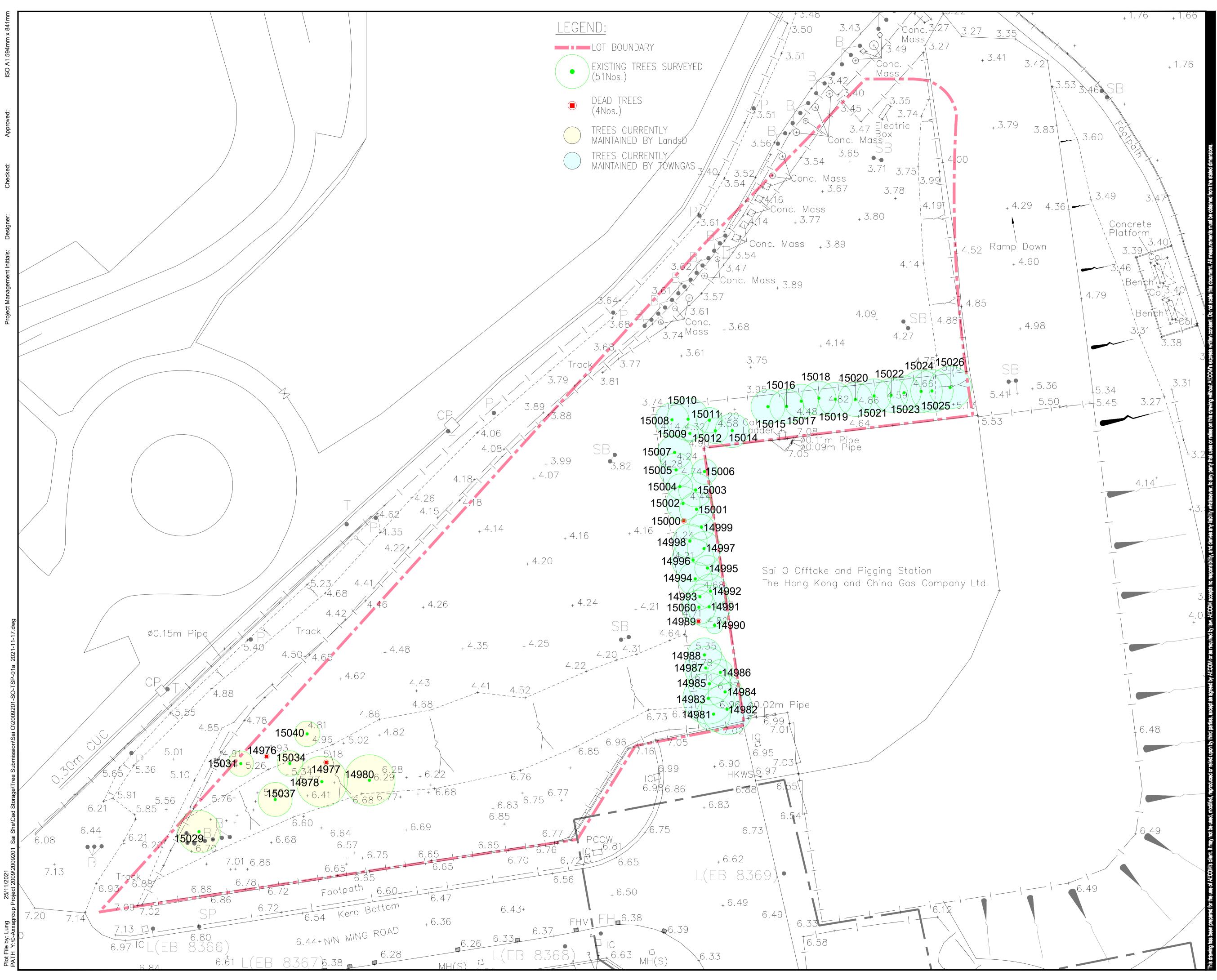
ltem	Qty	Botanical Name	Chinese Name	Height (m)	Spread (m)	DBH (m)	Spacing (m)	Maintenance party
FB	14	Ficus benjamina	垂葉榕	3	1	0.05	4	DSD
LF	6	Liquidambar formosana *	楓香	5	2	0.08	4	DSD
SL	6	Sterculia lanceolata *	假蘋婆	4	2	0.08	4	DSD
тс	29	Tabebuia chrysantha	黃花風鈴木	5	2	0.08	4	DSD
Total	55							

\*Native Species

no. description da	le
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AXXA GROUP LIMITED	
use figured dimension in preference to scalling	
verify all dimensions at the site report all discrepancies to the landscape archi and agree before proceeding	tect
determine location of all existing services prior	• to
	_
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axxa group limited	
51/F CHINA ONLINE CENTRE, 333 LOCKH <u>ART ROAD, WANCH</u> AI, HONG KO	ONG
香港灣仔駱克道333號,中國網絡中心51樓 Tel (852) 28938586     Fax (852) 28938	997
Email: ag@axxagrdup.com.hk	
PROJECT:	
<u>SALO &amp; TSENG TAU</u> Sewage plumbing station1	
SALO & ISENG TAU SEWAGE PLUMBING STATION	
SEWAGE PLUMBING STATION	
SEWAGE PLUMBING STATION	
SEWAGE PLUMBING STATION drawing title: Appendix B.3.5	
SEWAGE PLUMBING STATION drawing title: Appendix B.3.5	
SEWAGE       PLUMBING       STATION         DRAWING       TITLE:         Appendix       B.3.5         Composition       Planting         Scale:       NL         Drawing       No.:         Date:       MAY 2021	
SEWAGE       PLUMBING       STATION         DRAWING       TITLE:         Appendix B.3.5       Composition Planting       Schedule         Scale:       NL       Drawing       No.:         Date:       MAY 2021       SO-PS-01-	
SEWAGE       PLUMBING       STATION         DRAWING       TITLE:         Appendix B.3.5       Composition Planting       Schedule         Scale:       NL       Drawing       No.:         Date:       MAY       2021       Design:       JT         Drawn:       KP       SO-PS-01-	

## Appendix C Tree Survey Plan





Y:\0-Axxagroup Project 2009\2009201\_Sai Sha\Cad Storage\Tree Submission\Sai 0\2009201-S0-TSP-01a\_2021-11-17.dwg, 1:1



## PROJECT 項目

Proposed Trunk Sewage Pumping Station at Sai O, Tai Po, New Territories (Proposed Government Land Allocation No. TP516)

## CLIENT 業主



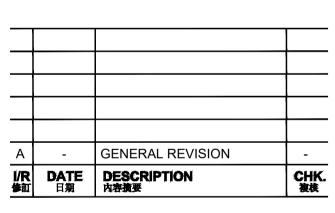
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## ISSUE/REVISION 備訂



## STATUS 階段

## CONSTRUCTION

DIMENSION UNIT <sub>尺寸單位</sub>

SCALE 比例

A1 1:200 A3 1:400

KEY PLAN 索引圖



## CONTRACT NO.

PROJECT NO. 項目編號 60547289

SHEET TITLE 画紙名稱

APPENDIX C - TREE SURVEY PLAN

## SHEET NUMBER 周紙編號

2009201-SO-TSP-01a

METRES

## **Appendix D** Tree Assessment Schedule



#### Tree Assessment Schedule

Project: Sai O Trunk Sewer Sewage Pumping Station

Surveyed by: Mr. Wilson CHIN (CA, no. HK-0797A)

Date of Tree Survey: 2 May 2020

	Species		М	easurem	ents	Amenity Value	Form	Health Condition	Structural Condition	s	uitability for Transplanting	Conservation	Recommendation	Maintenance to Provide C TP	omments on	Additional
Tree No.	Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)	( <u>H</u> igh/ <u>M</u> edium/ <u>L</u> ow)	( <u>G</u> o	ood/ <u>A</u> verage	e/ <u>P</u> oor)	( <u>H</u> igh/ <u>M</u> edium/ <u>L</u> ow)	Remarks	Status ( <u>Y</u> es/ <u>N</u> o)	(Retain/ Transplant/ Remove)	Before	After	Remarks*
14976	Dead tree	死樹	-	-	-	-	-	-	-	-	Dead tree	-	Remove	LandsD	NIL	F
14977	Dead tree	死樹	-	-	-	-	-	-	-	-	Dead tree	-	Remove	LandsD	NIL	F
14978	Macaranga tanarius var. tomentosa	血桐	6	120	6	L	Ρ	Р	Р	L	Leaning	No	Remove	LandsD	NIL	A, C, D, E, G, H
14980	Macaranga tanarius var. tomentosa	血桐	5	100	6	L	Ρ	Р	Р	L	Leaning / exposed root	No	Remove	LandsD	NIL	A, C, D, E, G, H
14981	Eucalyptus urophylla	尾葉桉	8	190	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
14982	Eucalyptus urophylla	尾葉桉	15	270	6	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14983	Eucalyptus urophylla	尾葉桉	15	270	6	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14984	Eucalyptus urophylla	尾葉桉	14	170	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
14985	Eucalyptus urophylla	尾葉桉	13	160	5	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14986	Eucalyptus urophylla	尾葉桉	11	160	3	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
14987	Eucalyptus urophylla	尾葉桉	15	230	5	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14988	Eucalyptus urophylla	尾葉桉	15	210	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, В, Н
14989	Eucalyptus urophylla (Dead)	尾葉桉 (死樹)	-	-	-	-	-	-	-	-	Dead tree	-	Remove	Towngas	NIL	F
14990	Eucalyptus urophylla	尾葉桉	13	160	2	L	А	А	А	L		No	Remove	Towngas	NIL	A, H
14991	Eucalyptus urophylla	尾葉桉	14	240	5	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14992	Eucalyptus urophylla	尾葉桉	14	200	4	L	А	А	А	L		No	Remove	Towngas	NIL	A, H
14993	Eucalyptus urophylla	尾葉桉	5	100	3	L	Ρ	Р	Р	L	Dead branch	No	Remove	Towngas	NIL	A, C, D, E, G, H
14994	Eucalyptus urophylla	尾葉桉	13	160	4	L	А	А	А	L	Cross branches	No	Remove	Towngas	NIL	А, Н
14995	Eucalyptus urophylla	尾葉桉	12	160	3	L	А	А	А	L		No	Remove	Towngas	NIL	A, H

	Species		м	easureme	ents	Amenity Value	Form	Health Condition	Structural Condition	s	uitability for Transplanting	Conservation	Recommendation	Maintenance to Provide C TP	omments on	Additional
Tree No.	Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)	( <u>H</u> igh/ <u>M</u> edium/ <u>L</u> ow)	( <u>G</u>	ood/ <u>A</u> verage	e/ <u>P</u> oor)	( <u>H</u> igh/ <u>M</u> edium/ <u>L</u> ow)	Remarks	Status ( <u>Y</u> es/ <u>N</u> o)	(Retain/ Transplant/ Remove)	Before	After	Remarks*
14996	Eucalyptus urophylla	尾葉桉	16	230	5	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14997	Eucalyptus urophylla	尾葉桉	16	190	4	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
14998	Eucalyptus urophylla	尾葉桉	8	110	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
14999	Eucalyptus urophylla	尾葉桉	11	190	3	L	Ρ	Р	Р	L	Broken branch	No	Remove	Towngas	NIL	A, C, D, E, G, H
15000	Eucalyptus urophylla (Dead)	尾葉桉 (死樹)	-	-	-	-	-	-	-	-	Dead tree	-	Remove	Towngas	NIL	F
15001	Eucalyptus urophylla	尾葉桉	11	130	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
15002	Eucalyptus urophylla	尾葉桉	16	200	4	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15003	Eucalyptus urophylla	尾葉桉	16	180	4	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15004	Eucalyptus urophylla	尾葉桉	13	140	3	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
15005	Eucalyptus urophylla	尾葉桉	14	180	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, Н
15006	Cinnamomum burmannii	陰香	5	95	3	L	Α	А	Α	L		No	Remove	Towngas	NIL	A, H
15007	Eucalyptus urophylla	尾葉桉	15	220	4	L	А	А	А	L		No	Remove	Towngas	NIL	А, В, Н
15008	Eucalyptus urophylla	尾葉桉	15	280	4	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15009	Eucalyptus urophylla	尾葉桉	14	150	2	L	А	А	А	L		No	Remove	Towngas	NIL	A, H
15010	Eucalyptus urophylla	尾葉桉	16	310	5	L	Α	А	Α	L	Included bark	No	Remove	Towngas	NIL	A, B, G, H
15011	Eucalyptus urophylla	尾葉桉	8	170	3	L	Α	А	А	L	Leaning	No	Remove	Towngas	NIL	A, H
15012	Eucalyptus urophylla	尾葉桉	15	170	3	L	Α	А	Α	L		No	Remove	Towngas	NIL	A, B, H
15014	Eucalyptus urophylla	尾葉桉	15	210	4	L	Α	А	Α	L		No	Remove	Towngas	NIL	A, B, H
15015	Eucalyptus urophylla	尾葉桉	15	320	4	L	Р	Р	Р	L	Broken branch / crack	No	Remove	Towngas	NIL	A, B, C, D, E, G, H
15016	Eucalyptus urophylla	尾葉桉	20	300	7	L	А	A	А	L	Cross branches / included bark	No	Remove	Towngas	NIL	A, B, G, H
15017	Eucalyptus urophylla	尾葉桉	21	270	9	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15018	Eucalyptus urophylla	尾葉桉	21	240	5	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H

	Species		M	easureme	ents	Amenity Value	Form	Health Condition	Structural Condition	s	uitability for Transplanting	Conservation	Recommendation	Maintenance to Provide C TP	omments on	Additional
Tree No.	Scientific Name	Chinese Name	Height (m)	DBH (mm)	Crown Spread (m)	( <u>H</u> igh/ <u>M</u> edium/ <u>L</u> ow)	( <u>G</u> c	ood/ <u>A</u> verage	/ <u>P</u> oor)	( <u>H</u> igh/ <u>M</u> edium/ <u>L</u> ow)	Remarks	Status ( <u>Y</u> es/ <u>N</u> o)	(Retain/ Transplant/ Remove)	Before	After	Remarks*
15019	Eucalyptus urophylla	尾葉桉	16	150	4	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15020	Eucalyptus urophylla	尾葉桉	21	220	9	L	А	А	А	L	Included bark	No	Remove	Towngas	NIL	A, B, G, H
15021	Eucalyptus urophylla	尾葉桉	20	260	7	L	А	А	А	L	Included bark	No	Remove	Towngas	NIL	A, B, G, H
15022	Eucalyptus urophylla	尾葉桉	21	210	6	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15023	Eucalyptus urophylla	尾葉桉	21	220	7	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15024	Eucalyptus urophylla	尾葉桉	20	240	6	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15025	Eucalyptus urophylla	尾葉桉	17	230	5	L	А	А	А	L		No	Remove	Towngas	NIL	A, B, G, H
15026	Eucalyptus urophylla	尾葉桉	16	310	6	L	А	А	А	L	Broken branch	No	Remove	Towngas	NIL	A, B, G, H
15029	Macaranga tanarius var. tomentosa	血桐	6	120	5	L	Ρ	Р	Р	L	Covered by climber / leaning	No	Remove	LandsD	NIL	A, C, D, E, G, H
15031	Macaranga tanarius var. tomentosa	血桐	9	100	3	L	Ρ	Р	Р	L	Leaning	No	Remove	LandsD	NIL	A, C, D, E, G, H
15034	Macaranga tanarius var. tomentosa	血桐	4	120	3	L	Ρ	Р	Р	L	Exposed root / included bark / multi-trunks	No	Remove	LandsD	NIL	A, C, D, E, G, H
15037	Macaranga tanarius var. tomentosa	血桐	7	95	4	L	Ρ	Р	Р	L		No	Remove	LandsD	NIL	A, C, D, E, G, H
15040	Macaranga tanarius var. tomentosa	血桐	6	130	3	L	Ρ	Р	Р	L	Leaning	No	Remove	LandsD	NIL	A, C, D, E, G, H
15060	Bridelia tomentosa	土蜜樹	5	100	4	L	А	А	А	L	Included bark	No	Remove	Towngas	NIL	А, Н

*Addition	nal Remarks (Justification):
А	Affected by proposed works, impossible to retain in-situ
В	Large Szie Tree
С	Poor Form (e.g. Canopy lopsided & unbalanced, tree trunk leaning dangerously, tree trunk crooked, with hazard-beam bending)
D	Poor Health (e.g. tree severely stressed, diseased, insect-pest infected, thin foliage density cover, dieback of canopy)
E	Poor Structure (e.g. tree trunk decayed, with decayed hollow cavity, dangerous biburcation codominant stems with included-bark likely to spilt apart)
F	The survival rate is low for transplant as the root spread is large for this type of tree.
G	Species not tolerant to transplantation
Н	Ubiquitous species, easily replacable by new compensatory paInting of better quality
I	Undesirable weed speceis

Summary	<u>QTY</u>
Total no. of surveyed trees	55
Trees Proposed to be Retained	0
Trees Proposed to be Transplanted	0
Trees Proposed to be Felled	55

## Appendix E Photos of Surveyed Trees







14977

Proposed Sai O Sewage Pumping Station

R-Retain T-Transplant F-Fell D-Dead Tree

Tree Photographic Record





14980



14981

Proposed Sai O Sewage Pumping Station Tree Photographic Record





14983



14984



14985

Proposed Sai O Sewage Pumping Station Tree Photographic Record





14987



14988



14989

Proposed Sai O Sewage Pumping Station Tree Photographic Record

14990 14991





F

R-Retain T-Transplant F-Fell D-Dead Tree

F





14995



14996



14997

Proposed Sai O Sewage Pumping Station Tree Photographic Record





14999

Proposed Sai O Sewage Pumping Station

R-Retain T-Transplant F-Fell D-Dead Tree

Tree Photographic Record





15000



15001

Proposed Sai O Sewage Pumping Station

Tree Photographic Record





15003



15004



15005

Proposed Sai O Sewage Pumping Station

Tree Photographic Record





15007



15008

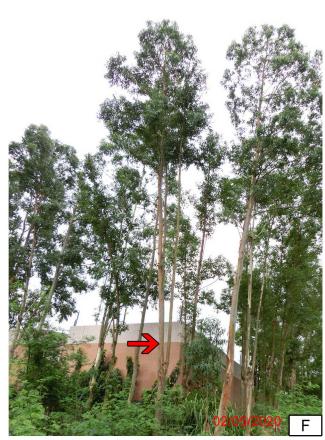


15009

Proposed Sai O Sewage Pumping Station

R-Retain T-Transplant F-Fell D-Dead Tree

Tree Photographic Record





15011



15012

Proposed Sai O Sewage Pumping Station

Tree Photographic Record



15015



15016



Proposed Sai O Sewage Pumping Station Tree Photographic Record





15019



15020



15021

Proposed Sai O Sewage Pumping Station

Tree Photographic Record





15023



15024



15025

Proposed Sai O Sewage Pumping Station Tree Photographic Record





15029



15031



15034

Proposed Sai O Sewage Pumping Station

R-Retain T-Transplant F-Fell D-Dead Tree

Tree Photographic Record





15040



15060

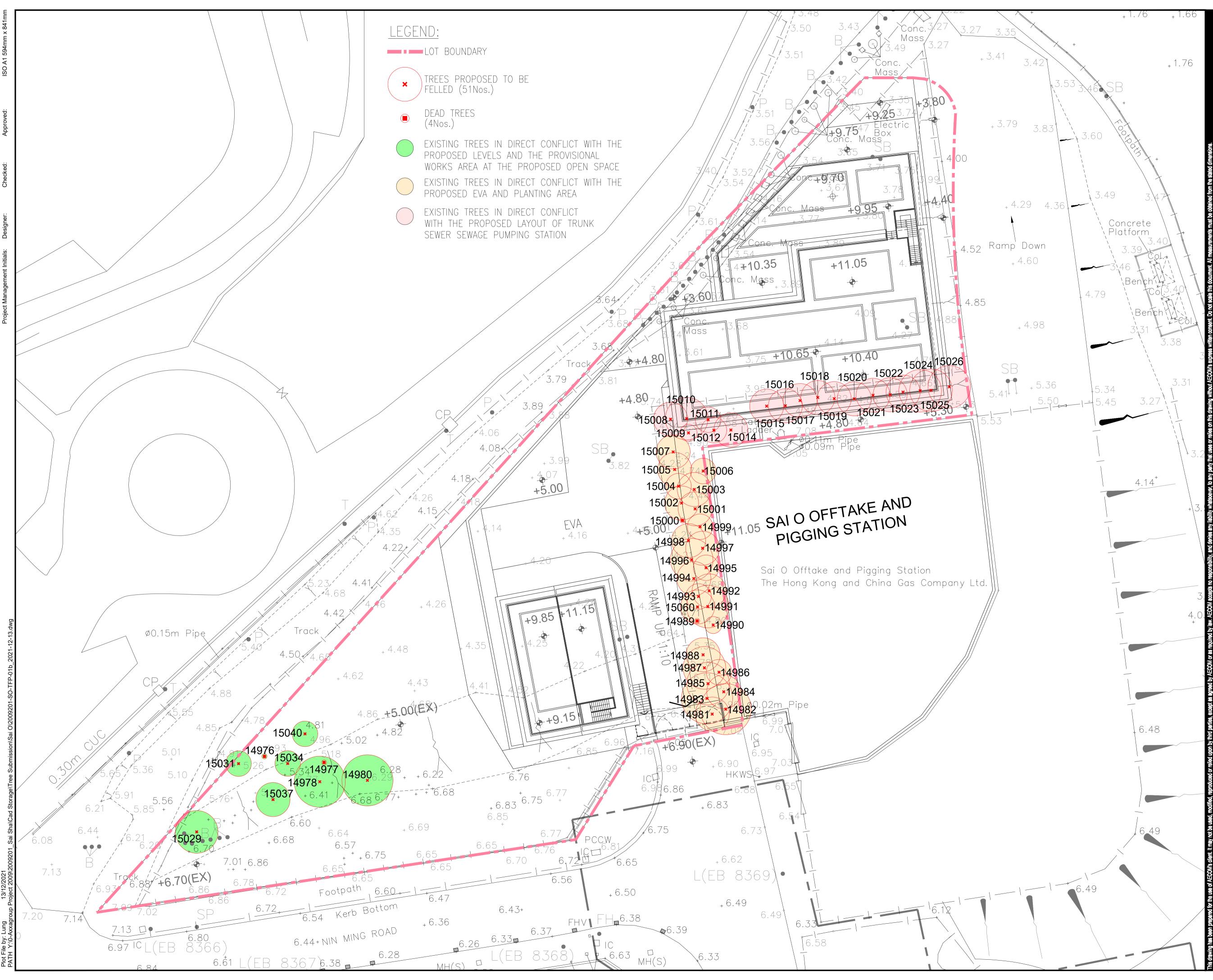
Proposed Sai O Sewage Pumping Station

Tree Photographic Record

## **Appendix F**

**Tree Recommendation Plan** 





Y:\O-Axxagroup Project 2009\2009201\_Sai Sha\Cad Storage\Tree Submission\Sai 0\2009201-S0-TFP-01b\_2021-12-13.dwg, 1:1



### PROJECT <sub>項目</sub>

Proposed Trunk Sewage Pumping Station at Sai O, Tai Po, New Territories (Proposed Government Land Allocation No. TP516)

## CLIENT 業主



## CONSULTANT 工程順間公司

AECOM Asia Company Ltd. www.aecom.com

AXXA Group Limited ag@axxagroup.com.hk

### SUB-CONSULTANTS 分判工程展间公司

#### ISSUE/REVISION 体訂

A <u>I/R</u>	- 日期	GENERAL REVISION DESCRIPTION 內容積要	- CHK. 液核
В	-	GENERAL REVISION	-
_			

### STATUS <sup>階段</sup>

#### CONSTRUCTION

SCALE 比例 A1 1:200 A3 1:400

KEY PLAN 索引圖



# PROJECT NO. 項目編號

DIMENSION UNIT 尺寸單位

METRES

60547289

SHEET TITLE 画紙名稱

TREE RECOMMENDATION PLAN

### SHEET NUMBER 周紙編號

2009201-SO-TFP-01b

### CONTRACT NO.

## Appendix G TPRP Approval Memo



#### <u>MEMO</u>

From	CE/DP, DSD	То	PPC/SDD, DSD
Ref.	(00SFQ2) in DSD DP 7/11/51/22	Attn.	Mr. Ronald LAI
Tel. No.	2594 7400	Your Ref.	(00RUY2) in DSD SD 8/4125DS/172
Fax. No.	3103 0010	Dated	<u>1 December 2021</u> Fax. No. <u>3104 6426</u>
Date	6 January 2022	Total Pages	2

#### Tolo Harbour Sewerage of Unsewered Areas Stage 2-Sai O Sewage Pumping Station

#### Tree Preservation and Removal Proposal (TPRP)

I refer to your MUR enclosing the TPRP for the captioned project.

2. The Project-level Tree Works Vetting Panel "TWVP(P)" of DSD (the membership as shown below) considered the captioned TPRP in the meeting held on 29 December 2021.

	Membership of T	WVP(P)	
Chairperson	Mr. WONG Hip Lik	CE/DP	
Member	Mr. CHUI Chi Keung	SLA/HQ	
Secretary	Mr. CHAN Ka Yeung	E/D22	
Absence with apology			
Members	Mr. WAN Nam Fung	SE/DP2	

3. Further to your email dated 3 January 2022 enclosing the responses to the comments given by the members of TWVP during the meeting, approval is given to the captioned TPRP in accordance with DEVB TC(W) No. 4/2020 subject to the following: -

(i) The project division will implement the tree preservation and removal proposal which includes:

Proposal	Number of Trees to be			
Toposar	Retained	Transplanted	Felled	Compensated
This submission	0	0	55	55

Should there be any major change to the above figures during the course of tree works and/or the number of existing trees since the tree survey conducted for the approved TPRP proposal, a revised TPRP should be submitted to the TWVP(P) for consent and approval.

(ii) The project division would comply with the conditions/requirements, if any, imposed by relevant divisions in DSD, LandsD and other departments, in relation to their consents of taking up the future management and maintenance of the trees concerned.

4. With regard to the TPRP, please properly protect the trees adjoining to the project boundaries and minimize the disturbance to the surrounding environment.

5.

Notwithstanding the approval of the TPRP, the project division is responsible for settling /

answering any claim / objection / enquiry in relation to the tree preservation and removal exercise. The project division is also wholly responsible for the consequences of an objection / confrontation to the said exercise which may or may not lead to any delay in project or contractual claims.

6. The project division shall report the commencement and completion of the captioned tree works to the TWVP(P) for record.

7. Should you have any further queries, please contact the Secretary to TWVP(P), Mr. Coleman CHAN (E/D22) at 2594 7346.

(WONG Hip-lik, Thomas) Chairperson, TWVP(P) Chief Engineer/ Drainage Projects Drainage Services Department

c.c. (By Fax)

SLA/HQ

(Attn.: Mr. Chris CHUI) (Fax: 2827 9352)

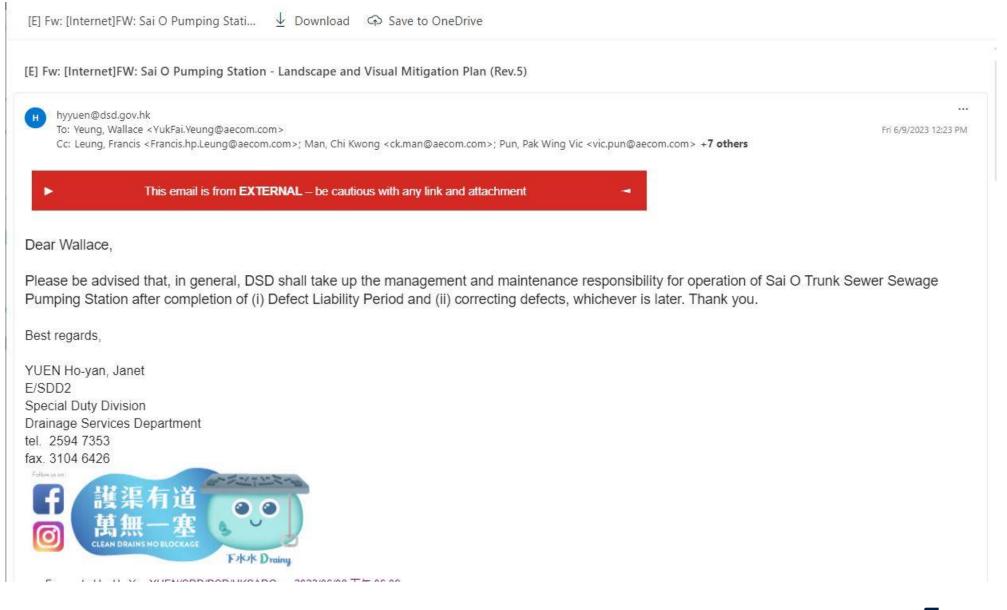
# **Appendix H**

Agreement from the Corresponding Responsible Party/parties on the LVMP



UGRO

#### H.1 Agreement from DSD



# **Appendix I**

Agreed meeting minute for the agreement from HKBTS on the revised scheme south elevation of transformer room block





J5230 - Sai Sha Road Widening – Sai Sha Comprehensive Development, Shap Sz Heung, Sai Kung North, NT Minute of Bi-Monthly Meeting with Hong Kong Baptist Theological Seminary

Date & Time: 12 Dec 2023 14:30 – 15:00

Venue: Site Office Conference Room B and Zoom meeting

#### Attendance:

Party	Name	Post Title
Hong Kong Baptist Theological	Mr. John Pak	Consultant
Seminary	Ms. Celia Juergens	Honorary Dean of Administrative Affairs
	Ms. Ophelia Chow	Director of Administration
	Ms. Emily Chung,	Administrative Secretary
Sun Hung Kai Properties Group	Mr. Grant HL Yuen	Project Manager
(SHK)		
AECOM	Mr. Man Chi Kwong	Senior Resident Engineer
	Mr. Wallace Yeung Yuk Fai	Resident Engineer (E&M)
Sanfield-Gammon Construction	Mr. Tat Yan Chan	Project Manager
JV Co. Ltd (SGJV)	Mr. Samuel Lam Ping Sum	PR Officer
	Ms. Carrie Ka Hei Kwan	Environmental Engineer
P&T Architect	Mr. Wan Lee	Associate Architect
Axxa Group Limited	Ms. Joan Wong	Landscape Architect



J5230 - Sai Sha Road Widening – Sai Sha Comprehensive Development, Shap Sz Heung, Sai Kung North, NT Minute of Bi-Monthly Meeting with Hong Kong Baptist Theological Seminary

ltem	Description
1	Introduction and the progress of Sai O Sewage Pumping Station
1.1	<ol> <li>SGJV has reported the programme of the SOSPS and mentioned that the structural works of the transformer room and the pumping station has been completed.</li> <li>E&amp;M works and external works is undertaking during the reporting period.</li> <li>SGJV understood the exam of HKBTS has been held during this weekend (11 to 15 Dec 2023) and noisy works would be held after 17:00 after the exam has been finished.</li> </ol>
2	Complaints or comments from HKBTS regarding construction works
2.1	<ol> <li>HKBTS has no comments or complaints regarding to the construction works during the reporting period.</li> </ol>
3	Change of Landscape design of SOSPS
3.1	<ol> <li>SGJV reported comments were raised up by EPD regarding to the change of design of SOSPS from the submissions of Landscape and Visual Mitigation Plan (LVMP).</li> <li>Mr. Wan explained that design has been changed because of the new water meter cabinet (WMC) has been added for future proposes.</li> <li>HKBTS stated that there shall be tall plants in front of the new WMC to have better visual coverage of the SOSPS.</li> <li>Ms. Joan mentioned that the landscape design can be modified by moving two tall trees in front of the WMC to have better coverage.</li> <li>All parties were agreed with the modifications by moving two tall trees in front of the WMC.</li> </ol>
4	A.O.B.
4.1	<ol> <li>HKBTS has requested an on-site visit of the SOSPS in the future.</li> <li>SGJV will schedule the site visit in April 2024.</li> </ol>
4.2	Next Meeting Schedule
	3. Next regular meeting is scheduled on 20 February 2024 at 14:00pm through Zoom.