

SUB-SURFACE CONDITION ASSESSMENT OF LAND PARCEL ST 28D AT SUNGEI TENGAH

ASSESSMENT REPORT



CHODAI & BURO ENGINEERING PTE LTD
(PREVIOUSLY KNOWN AS BURO ENGINEERING PTE LTD)

Consulting Civil + Structural Engineers

28 SIN MING LANE, #05-134 MIDVIEW CITY, SINGAPORE 573972 TEL: 66590740

Email: buro@buroengr.com.sg Co. Reg. No. 198901899R GST No. M200865936

Date: 05th March 2020

SLA/058/SCA/ST 28D/-_PE1-29-LAMD-2018-SAP

SUB-SURFACE CONSITION ASSESSMENT OF LAND PARCEL ST 28D AT SUNGEI TENGAH

TABLE OF CONTENTS	PAGE NO.
1) INTRODUCTION	02
2) SCOPE OF WORK	05
3) INSPECTION PHOTOGRAPHS AND ASSESSMENT	08
4) CONCLUSION	11

1.0 INTRODUCTION

1.0 INTRODUCTION

This report covers the soil sub-surface condition assessment of state land parcel ST 28D at Sungei Tengah. This sub-surface soil inspection is carried out to assess soil condition and possibility of other material dumping. The inspection was carried out on 21st January 2020 as required by the Singapore Land Authority (SLA).

1.1 LAYOUT PLAN

Land Parcel : ST 28D MK11-03747M

Location : Sungei Tengah

Area : 6274.9 sq m

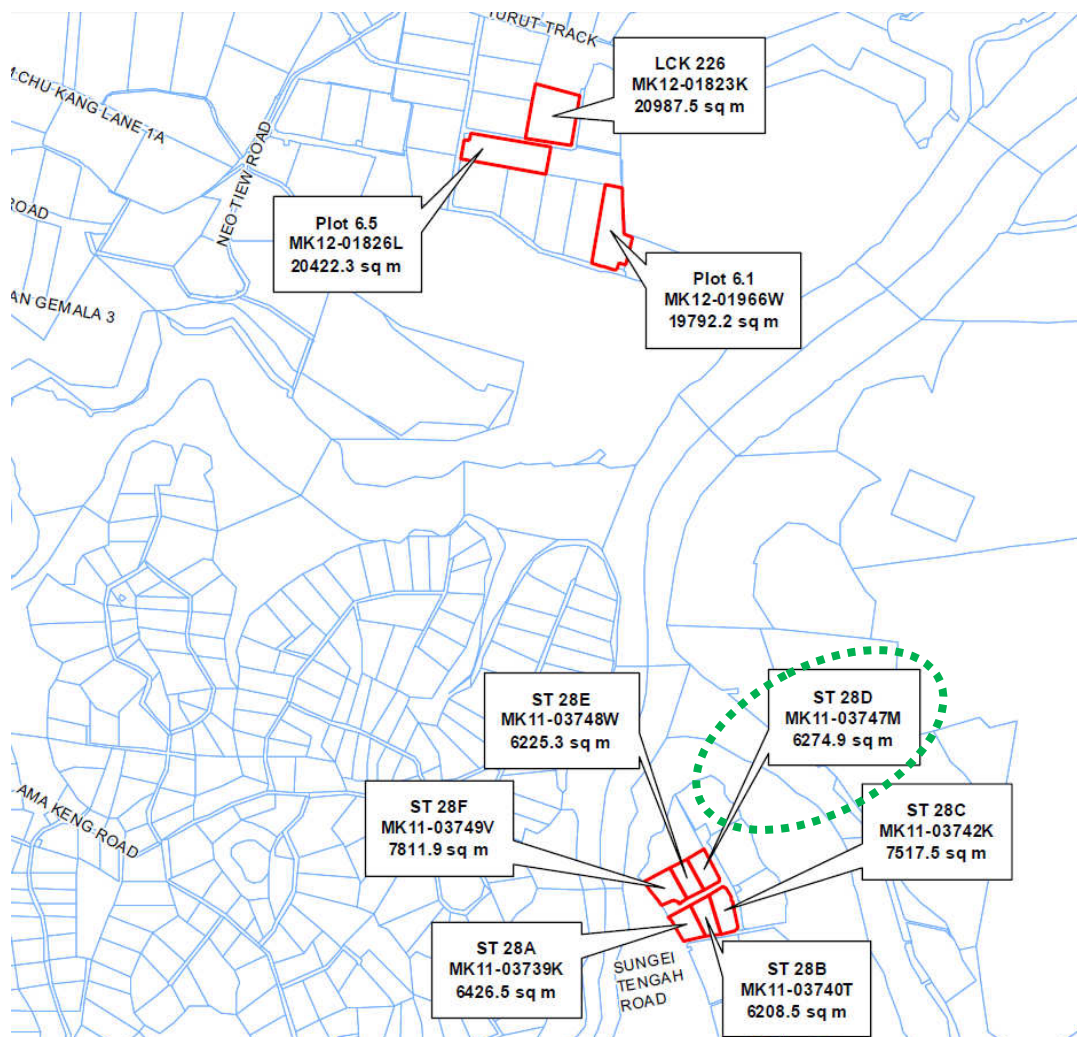


Fig 1.1: Overall location plan

1.2 TRIAL PIT LOCATION

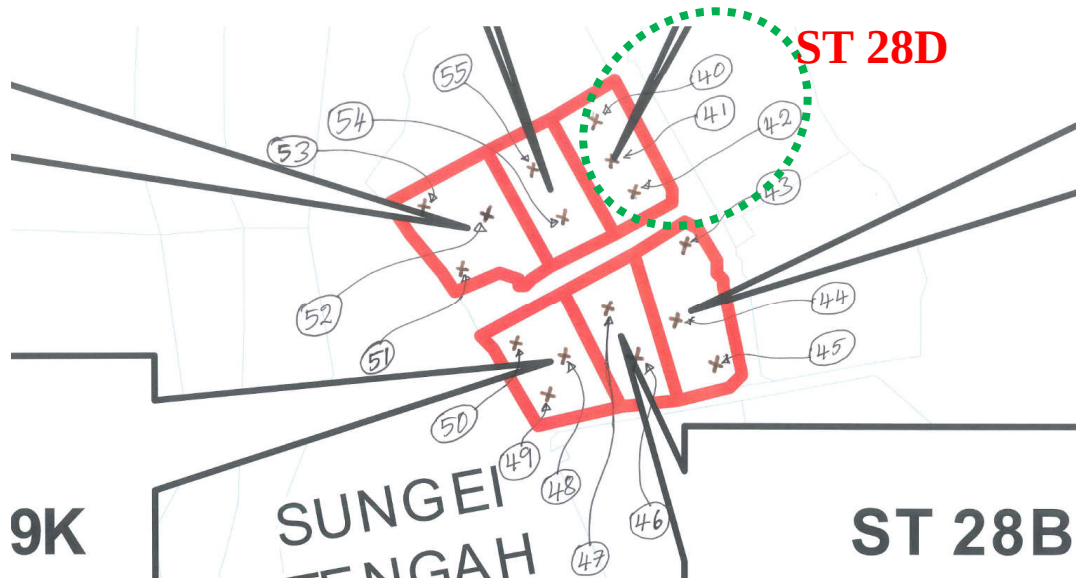


Fig 1.2: Trial pits ID and location plan

State Land Plot ST 28D consist of 3-Trial pits; TP No. 40 to 42 as shown on above trial pit ID and location plan.



Fig 1.2: Aerial view of location

2.0 SCOPE OF WORK

2.0 SCOPE OF WORK

This report covers the soil sub-surface condition assessment of state land parcel ST 28F at Sungei Tengah. This sub-surface soil inspection is carried out to assess soil condition and possibility of other material dumping. The inspection was carried out on 18th January 2020 as required by the Singapore Land Authority (SLA).

2.1 The Purpose of the report

- To assess the sub-surface condition of the proposed Land Parcel and provide general soil data from visual inspection.
- To determine the existence of any other findings / material dumping found on site.
- To observe the water table where as possible.

2.2 Description of Trial Pit Excavation

- 1.5m x 1.5m x 1.5m (depth) trial pit is excavated as required.
- Up to 1.5m depth sub-surface soil strata is assessed.
- Excavated soil material is inspected and recorded as photograph.

2.3 Trial pit “METHOD AND SCOPE OF WORK”

1. Carry out the cable detection within the state land using LCDW.
2. Mark down the utilities on plans and submit to PE for proposal of trial trench location.
3. Receive the proposed trial pit locations from PE and mark down the trial pit location by pegging on site.
4. Carry out excavation of trial pit with size of 1.5m x 1.5m x 1.5m (d) pit.
5. Mark down the soil type, colour, physical & mechanical character of layers of soil with depth while carry out excavation.
6. Take photograph in each stage of excavation to illustrate insitue soil exposure condition.
7. If any other finding object or non-residual filling layers found, then report with detail description with photos.

8. Mark down the water table (WT) level from surface if water table is found during the excavation of depth of 1.5m.
9. Request for Photographs and visual inspections to carry out by PE.
10. Unattended trial pit to be covered and barricaded.
11. After the completion of PE inspection, trial pit to be covered back with the same material and reinstate the grass topping layer as original or equivalent.

3.0 INSPECTION PHOTOGRAPHS AND ASSESSMENT

3.0 INSPECTION PHOTOGRAPHS AND ASSESSMENT

Trial pits are excavated one by one. Excavated materials stockpiled beside the trial pit for inspection and assessment as required. Inspection of sub-soil carried out with the verification of trial pit depth on site.



Trial pit No. 40:

Original State : Topped with natural grass and crops
Type of Soil : Lightly reddish sandy SILT to reddish grey firm sandy SILT at 1.5m depth
Other Material : Not found
Water Table : Found about 1.4m depth



Trial pit No. 41:

Original State : Topped with natural grass and crops

Type of Soil : Reddish silty SAND to reddish silty SAND at 1.5m depth

Other Material : Some concrete pieces

Water Table : Found about 1.3m depth



Trial pit No. 42:

Original State : Exposed ground

Type of Soil : Reddish sandy SILT to firm reddish sandy SILT at 1.5m depth

Other Material : Some concrete pieces

Water Table : Found about 1.4m depth



4.0 CONCLUSION

4.0 CONCLUSION

State Land's most area covered by natural grass & crops and one third of south portion is exposed. Three number of trial pits with 1.5m depth are carried out for assessment. Water table generally found about 1.4m depth from ground level. Generally, top most layer is reddish soil and reddish firm soil when it reaches about 1.5m depth.



Mr. Jeevanath Surendranath

05th Mar 2020