

- REPORT No.** : 1191040-1 Issue 3
- CLIENT** : Pared Victoria T/A Lysterfield Lake College
C/- HWL Ebsworth Lawyers
Level 8, 447 Collins Street
MELBOURNE VIC 3000
- PROJECT** : Lysterfield Lake College
19-23 Horswood Road
NARRE WARREN NORTH
- PROPOSAL** : It is proposed to develop this site with a classroom, a chapel, administrative buildings and multipurpose courts on strip footings or pad footings and paving slabs.

1. COMMISSION:

Carry out relevant insitu soil tests, log test bores and recommend suitable bearing pressures and founding depths for the proposed structure.

All testing and observations carried out are to follow the relevant provisions of AS 1726:2017 (Geotechnical Site Investigations).

2. SITE GEOLOGY:

Geological maps show that this site is in an area of Devonian Granodiorite & Granite - CLAYS. The site investigation confirmed this.

3. SITE TOPOGRAPHY:

The site has a gentle slope down to the east. The ground cover comprises of natural grasses and native trees.

4. INVESTIGATION:

Twenty-two boreholes were drilled by mechanical auger at the approximate locations shown on the attached plan.

**ADVERTISED
PLAN**

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any

5. FINDINGS:

The boreholes revealed that the natural soil profile consisted generally of silty SAND with clay overlying silty CLAY with and without sand.

6. SITE CLASSIFICATION:

Based on the site investigation and the geology of the area, this site would be classified as CLASS M with respect to Australian Standard 2870-2011 (Residential Slabs and Footings). However, this classification is technically not correct for the proposed type of structure, therefore is given as a guide only. It is anticipated that the seasonal surface movement at this site will not exceed 40mm.

It must be emphasised that the heave mentioned and recommendations referred to in this report are based solely on the observed soil profile at the time of the investigation for this report without taking into account the effects of any abnormal moisture conditions that may develop after construction as defined in Clause 1.3.3 (A) (B) (C) (D) (E).

The above recommendation assumes that the foundations are located more than 1.5 times the matured tree height away from the existing trees. If this is not the case, then the site would be classified as CLASS P. Foundation design should then be carried out by a qualified engineer.

The following bearing pressures can be used as a guide in this instance:

Depth from Existing Ground Level (mm)	Allowable Bearing Capacity (kPa)
1000	180
1200	200
1500	220
1800	240

The recommendations given in this report have been based largely on the soil conditions encountered at the time of the field investigation. Under inclement weather or prolonged wet weather conditions, the soil conditions noted and reported in this report could vary. It is advisable to undertake construction during and following good weather conditions - i.e., dry weather conditions - not during or following inclement weather or prolonged wet weather conditions.

7. RECOMMENDATIONS:

7.1 For Load Bearing Pad and/or Strip Footing Foundations:

Taking into consideration the area geology, the information obtained from the bore holes and the proposed superstructure, it is recommended that a founding depth of not less than 525mm below the finished surface level surrounding the structure should be adopted. However, the depth must be at least 100mm into any of the naturally occurring stiff silty CLAY soils as described in the Logs of Boring attached.

This is in order to be below the zone of significant seasonal moisture movement which may otherwise result in damage to the structure. Based on the site investigation and any measured shear strength values of the soils found in the bores, an allowable bearing pressure of at least 160kPa will exist beneath the footings at the above mentioned depth.

However, allowable bearing pressures of 180kPa and 240kPa at depths of 300mm and 1200mm respectively into any of the naturally occurring stiff silty CLAY soils can be assumed.

As a guide, with reference to the information obtained from the bores, the minimum founding depth mentioned above will be 700mm in relationship to the existing surface where this surface is to be the finished surface level surrounding the structure.

After excavation for the footings have been completed if there is any doubt as to the bearing capacity of the founding soil, then this company should be contacted.

In accordance with Appendix D of AS2870–2011, the soil profile and site conditions should be inspected at footing excavation stage by CIVILTEST PTY LTD to confirm the soil profile and site classification.

7.2 Floor Paving Slab Foundations:

7.2.1 Paving Slabs:

The floor slab and any stiffening beams may be placed on or in the existing site surface soils. This is providing that all the vegetation and any soil containing deleterious matter has been removed and any soft areas have been well compacted with the soil in a moist condition with a small vibratory roller or vibratory plate compactor. This surface material will provide a subgrade for the slab and based on the field observations and tests can be assumed to have a modulus of subgrade reaction of 35kPa/mm.

If the walls of the proposed structure are supported on piers or piles, it is likely that there will be some differential movement between walls and internal paving slabs. It is therefore recommended that allowance should be made for this movement in the design, particularly where fixtures are fitted to both floors and walls (i.e. amenities buildings).

7.2.2 Levelling Fill:

Where levelling fill is used the floor slab and any stiffening beams required may be placed on or in levelling fill provided that not more than 300mm of site derived clayey or 600mm of site derived sandy or imported granular fill is used (excluding existing fill), provided that the fill is placed in 150mm thick layers and densely compacted in a moist condition with a small vibratory roller or vibratory plate compactor. After allowing for the likely wetting up under the slab and the condition of the fill after compaction, this surface can be assumed to have a modulus of subgrade reaction of 40kPa/mm for SAND fill and 30kPa/mm for CLAY fill.

7.2.3 Filled ground:

Where a floor slab is to be placed on fill with depths greater than 300mm for clayey and 600mm for sandy materials including existing fill material, if any, placed on the existing surface, then the fill must be placed under controlled conditions and compacted to the minimum of 98% of AS 1289, 5.1.1 (Standard Compaction). In situ density testing should be carried out in this case to ensure that the minimum compaction has been achieved.

7.3 Piers:

If piers are used they should be founded not less than 100mm into the naturally occurring stiff silty CLAY soils as described in the logs of boring which from the site investigation can be assumed to have an allowable bearing capacity of 160kPa at this depth. At a depth of 1200mm into the naturally occurring stiff silty CLAY soils, a bearing capacity of 240kPa can be assumed.

A skin friction of 30kPa will exist between the piers and the naturally occurring stiff silty CLAY soils except for the soil within 1500mm of the surface and FILL soils, where no skin friction should be assumed.

If screw in piers or driven piers are considered at this site, they should be founded at least 600mm into the naturally occurring stiff silty CLAY soils to achieve a reasonable set. For the design of screw in piles an undrained cohesion $C_u = 80\text{kPa}$ should be adopted.

In the design of bored piers or driven piles, consideration should be given to the possibility of adverse lateral loading on the piers/piles induced by foundation movements as a result of permanent moisture changes in the foundation material after construction or by variable moisture changes in the foundation material due to seasonal influences. The above is of particular importance at the edge of fill batters and adjacent to service trenches. Changes in moisture contents of the foundation material due to seasonal variation are more prevalent at the edges of the proposed building and in particular, where piers/piles are used to protect the building from the influence of existing trees.

8. RECOMMENDED FOUNDATION FOR SLABS:

8.1 Stiffened Raft Slab:

8.1.1 Edge Beams:

It is recommended that a CLASS M (Refer AS2870 – 2011) slab on ground should be used at this site with edge beams founded not less than 200mm below the finished surface level surrounding the structure.

However, the founding depth must be at least 100mm into any of the naturally occurring soils after the removal of any organic and deleterious matter as described in the logs of boring which from the site investigation can be assumed to have an allowable bearing capacity of 80kPa at this depth.

As a guide to the actual site founding depths with regard to the above along with information obtained from the bores, the actual founding depth at this site will be up to 200mm in relationship to the existing surface where this surface is to be the finished surface level.

8.1.2 Slab and or Stiffening Beams:

Any organic and deleterious matter should be removed from under the proposed slab area to a depth of not less than 50mm and replaced where necessary with levelling fill (See levelling fill below) under the slab and internal beams. This excavated surface can be assumed to have an allowable bearing pressure of at least 50kPa.

8.1.3 Levelling Fill:

Up to 300mm of CLAY FILL or 600mm of SAND FILL, imported or site derived, including existing FILL material, if any, may be placed under the slab and internal beams providing that this filling is placed in 150mm thick layers and compacted in a moist condition using a light weight vibratory roller or vibratory plate tamper or similar to form a dense layer. Based on the likely condition of this levelling fill, an allowable bearing pressure of at least 50kPa can be assumed to exist beneath the slab and any internal beams founded in or on this filling.

If more than 300mm of CLAY FILL or 600mm of SAND FILL, imported or site derived, including existing FILL material, is required, then the slab must be designed as a suspended slab and supported by a grid of beams founded through any fill material in accordance with the above edge beam recommendations.

In accordance with Appendix D of AS2870–2011, the soil profile and site conditions should be inspected at footing excavation stage by CIVILTEST PTY LTD to confirm the soil profile and site classification.

9. CONDITIONS OF THE RECOMMENDATIONS:

- 9.1 The recommendations made in this report may need to be reviewed should any site works disturb any soil 300mm below the founding depth of the structure.
- 9.2 Since the soil horizons and layers can vary in depth and in thickness over the site, the depths and bearing pressures given above are given as a guide only. If the footings are founded at the minimum depth, as stated and are in the soil as described in the logs of boring for this site, then the requirements of this report have been met.
- 9.3 Where any filling is to be placed (other than under the floor slab, refer to 7.2 above) the footing founding depths recommended in this report will need to be increased accordingly by the depth of that fill, unless:
- 9.3.1 The base of the footing is founded in the founding soil recommended in 7.1.
 - 9.3.2 The fill has been placed under controlled conditions and compacted to a minimum of 98% of AS 1289, 5.1.1 (Standard Compaction) throughout. In this case, the footings may be placed in this fill depending on the findings of further site investigations and the revision of the recommendations made in this report.
- 9.4 It is recommended that where any footings are to be constructed next to existing underground services (sewers etc.), then these footings or edge beams should be founded at a depth above the invert of the service at an angle of repose of 45° for CLAYS and 30° for SANDS, unless special consideration has been given to the founding material.
- 9.5 The descriptions of the soils found in the boreholes closely follow those outlined in AS 1726:2017 (Geotechnical Site Investigations). Colour descriptions can vary with soil moisture content. It should be noted therefore, colour and shade descriptions mentioned in this report are made when the soil is in a moist condition.
- In accordance with Appendix D of AS2870–2011, the soil profile and site conditions should be inspected at footing excavation stage by CIVILTEST PTY LTD to confirm the soil profile and site classification.
- 9.6 This report has been compiled and recommendations made based on information supplied in the brief to Civiltest Pty Ltd and from the field investigation and observations made including the extent of, if any, site filling. Every care has been taken within the terms of the brief to ensure that the field investigation is representative of the site. Therefore, if it is found that for any reason information received by Civiltest Pty Ltd is incorrect or conditions on site vary from those described in this report then the comments and recommendations made in this report may need to be amended.
- 9.7 The recommendations given in this report have been based largely on the soil conditions encountered at the time of the field investigation. Under inclement weather or prolonged wet weather conditions, the soil conditions noted and reported in this report could vary. It is advisable to undertake construction during and following good weather conditions - i.e., dry weather conditions - not during or following inclement weather or prolonged wet weather conditions.

- 9.8** To ensure acceptable long term performance of the footing systems recommended in this report, care should be taken that the fundamental building, landscaping and long term maintenance procedures are adhered to as set out in the CSIRO Division of Building, Construction and Engineering: Building Technology File 18-2011, "Foundation Maintenance and Footing Performance: A homeowners guide" which is available on the CSIRO website <http://www.publish.csiro.au/home.htm>. This information sheet forms an integral part of this report.
- 9.9** The information and any recommendations given in this report are limited to the client named herein.
- 9.10** Whilst CIVILTEST PTY LTD has accepted the commission for the work reported herein, the ownership of the report and any liabilities associated with it, remain with CIVILTEST PTY LTD until all relevant accounts have been paid.
- 9.11** Finally, no responsibility will be taken for this report if it is altered in any way or not reproduced in full.

This report consists of eight pages including one site plan. Appendix A (Engineering Logs) is attached.



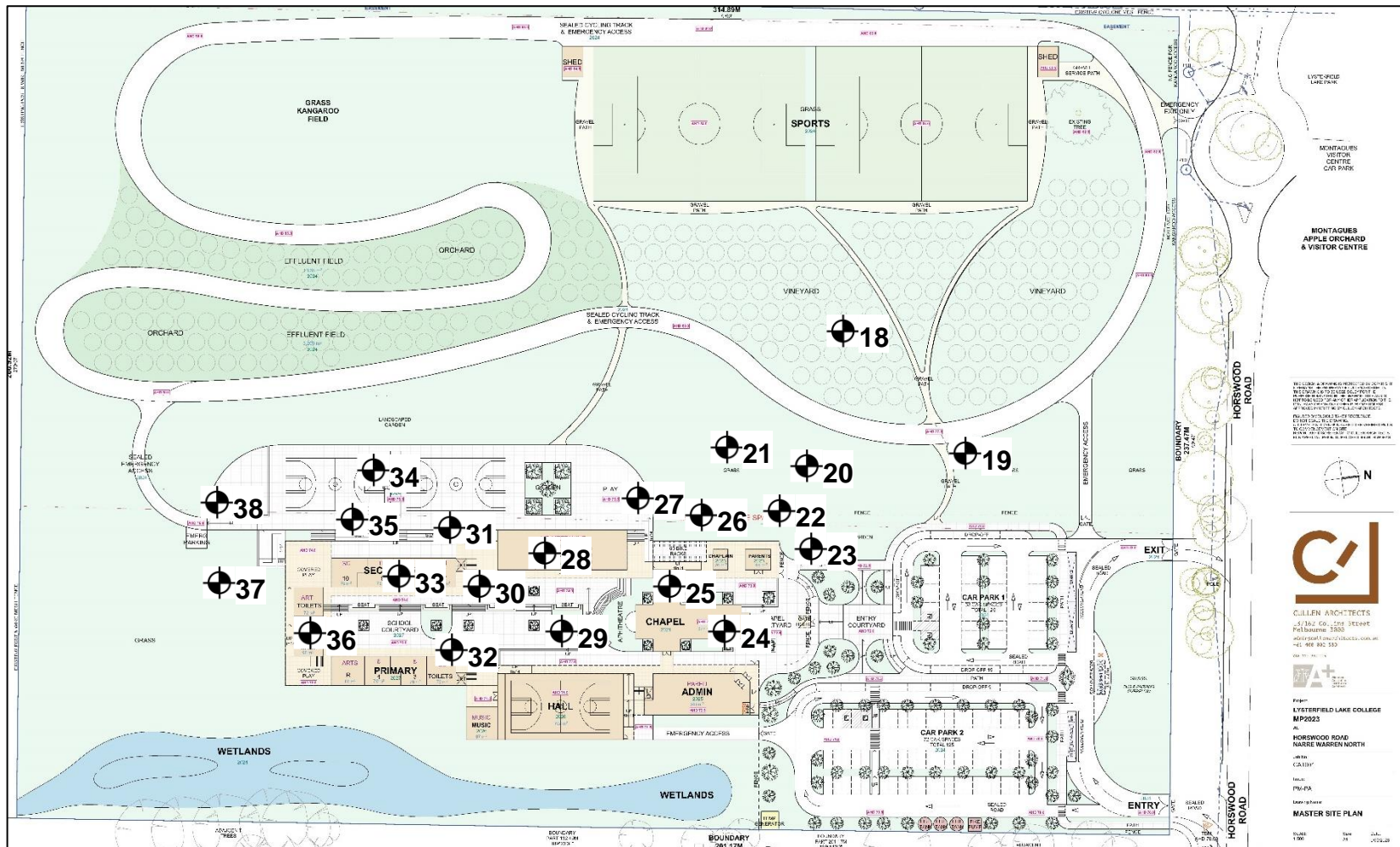
LIAM COX
SENIOR GEOTECHNICAL ENGINEER
CIVILTEST PTY LTD

REF: MC/MR/DO/LC/MS/th/mg/sb

30 May 2023

AMENDMENT: *This report was first issued on 31 October 2019. Sections of this report were amended on 5 May 2023 and 30 May 2023, and consequently this revised report now takes precedence over any previously dated report.*

LOCATION OF TEST SITES: LYSERFIELD LAKE COLLEGE, 19-23 HORSWOOD ROAD NARRE WARREN NORTH



☉ Denotes Boreholes
 For Boreholes 1 to 17, see *Civiltest* reports 1191040-3 & -5

NOT TO SCALE

THIS SKETCH IS NOT INTENDED TO BE AN ACCURATE DEPICTION OF THE NUMBER, SIZE OR LOCATION OF TREES AND/OR SHRUBS

APPENDIX A

ENGINEERING LOGS

For Engineering Logs 1 to 17, see Civiltest Reports 1191040-3 & -5

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 18
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 19
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 20
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm More moist with depth CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 21
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.60	Moist, Firm More moist with depth Becoming wet at 0.4m CLAY, silty, trace gravel Pale brown mottled orange grey								
1	Moist, Stiff								
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 22
DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 23
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 25
DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 26
DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay								
0.10	Grey Moist, Medium dense								
0.30	CLAY, sandy, trace gravel Pale brown mottled orange Moist, Firm								
1	CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 27
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm More moist with depth CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 28
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.60	Moist, Firm More moist with depth Becoming wet at 0.4m CLAY, silty, trace gravel Pale brown mottled orange grey								
1	Moist, Stiff								
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 29
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 30
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 31
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 32
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.50	Moist, Firm CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)			1.5					3.9
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 33
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey								
0.20	Moist, Medium dense CLAY, sandy, trace gravel Pale brown mottled orange								
0.60	Moist to wet, Firm wet at 0.5m CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
 FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 36
 DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, with clay Grey Moist, Medium dense								
0.40	CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

ENGINEERING LOG

REPORT NO. 1191040
FIELD TECHNICIAN: MC,MR,DO

BOREHOLE NO. 37
DATE: 11-OCT-2019



DEPTH (m)	STRATA DESCRIPTION	NOTES	GRAPHIC LOG	IN SITU TESTING					
				DEPTH (m)	RESULTS				
					DCP Blows/100mm	FIELD CBR (%)	SPT	MC (%)	PP (kg/cm ²)
0	SAND, silty, trace clay Grey brown Moist, Medium dense Becoming wet at 0.2m								
0.40	CLAY, silty, trace gravel Pale brown mottled orange grey Moist, Stiff								
1									
1.50	END OF BORE (11-Oct-2019)								
2									
3									
4									

