

WANT Geotechnics

Site Classification & Bearing Capacity Assessment

For

Stage C1, Zuccoli, Northern Territory

Prepared for HiQA

Project NTG20212144Rev B

5 August 2021

PROVIDED FOR INFORMATION PURPOSES ONLY
AND SHOULD NOT BE USED FOR CONSTRUCTION
- BUILDERS/BUYERS ARE TO INFORM THEMSELVES

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Project: NTG20212144		
Date	Revision	Comments
12 July 2021	0	Issued to Client
28 July 2021	A	Draft
29 July 2021	B	Final
5 August 2021	C	Borehole Plan added and Section 7 amended

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Distribution: HiQA (1 electronic).....

Table of Contents

	Page
1. Introduction	4
2. Zuccoli Stage C1	4
3. Geology and Land System	4
4. Assessment	5
5. Site Preparation	8
6. Foundations	8
7. Certification.....	8
8. References.....	8
9. Limitations.....	9

Appendix A:

Location Plan

ADG Drawing PC1_C800 Stage 1 Master Services Layout Plan

HiQA Data

Test Pit Logs

Dynamic Cone Penetrometer Results

Site Classification & Bearing Capacity Assessment for Stage C1, Zuccoli, Northern Territory

1. Introduction

WANT Geotechnics (WANT) was commissioned to undertake a review of geotechnical investigation data relating to the site classification and bearing capacity of 45 Lots developed as Stage C1, Zuccoli in the Northern Territory. The review was commissioned by HiQA Darwin.

The assessment of individual lot site classification has been undertaken in general accordance with AS2870. The assessment of bearing capacity has been in accordance with the methodology presented in MJ Stockwell (1977) and titled *Determination of Allowable Bearing Pressure Under Small Structures*.

The geotechnical investigation undertaken by HiQA comprised:

- Drilling an average of at least 1.5 bores per lot; and
- A dynamic cone penetrometer test adjacent to each excavation.

This report presents a review of the data and certification of the site class and bearing capacity of each lot based on data provided by HiQA Darwin, a copy of the data is included in Appendix A.

In our judgement, the extent of this investigation has been sufficient to correlate the observed soil conditions with the known geology and published information for this area. However, localised variations are very difficult to locate using test holes and boreholes and natural soils can vary greatly over short distances. In which case, it would be prudent to commission site inspections during construction, in order that the true site conditions are verified.

2. Zuccoli Stage C1

Zuccoli Stage C1 comprises 45 individual lots, earthworks to form the lots involved cutting and filling and was undertaken by Ostojic Pty Ltd, and Level 2 Supervision by HiQA Darwin. A plan showing the lot layout is included in Appendix A.

3. Geology and Land System

The Extractive Geology of the Outer Darwin Area 1:100 000 Geological Series map indicates Stage C1 is predominantly underlain by Tertiary age laterite gravel and ferricrete.

Reference to NT Government Natural Resource Maps website indicates the site sits on land of the Bustad Land System (sandstone plains and rises and no occurrence of acid sulphate soils).

4. Assessment

Australian Standard AS 2870 provides a system of site classification as shown in the table below.

Class	Predicted Surface Movement	Foundation
A		Most sand and rock sites with little or no ground movement from moisture changes
S	<20mm	Slightly reactive clay or silt sites with slight ground movement from moisture changes
M	20mm to 40mm	Moderately reactive clay or silt sites which can experience moderate ground movement from moisture changes
H1	40mm to 60mm	Highly reactive clay site, which can experience high ground movement from moisture changes
H2	60mm to 75mm	Highly reactive clay site, which can experience very high ground movement from moisture changes
E	>75mm	Extremely reactive sites, which can experience extreme ground movement from moisture changes
A to P		Filled sites
P		Sites which include: soft soils, such as soft clays, silts or organic soils, loose sands, landslip, mine subsidence, collapsing soils, soils subject to erosion, reactive sites subject to abnormal moisture conditions, sites with highly variable conditions such as weathered dolerite dykes, and sites which cannot be classified otherwise.

Table 1 – AS2870 Site Classes

The following tables summarise the ground investigation and DCP results and provide an assessment of site class along with the assessed allowable bearing capacity at likely foundation depth (0.30m to 0.50m).

In light of low initial DCP blow counts, additional DCP testing was undertaken in July 2021, on Lot 15468 at each corner and in the centre of the lot to establish whether the low blow count was an isolated occurrence or not. Based on the additional testing the initial test is considered to be an isolated occurrence.

Lot	Summary of Strata			Site Class	Minimum DCP Blow Count per 100mm below 0.30m	Allowable Bearing Capacity at 0.30m to 0.50m (kPa)
	Fill	Sand, Gravel	Weathered Rock (Gravel size fragments)			
15468	0.00-0.20m		0.20-0.50m	S	9*	230
15469	0.00-0.25m		0.25-0.55m	S	8	210
15470			0.00-0.60m	S	7	200
15471			0.00-0.50m	S	8	210
15472			0.00-0.60m	S	>25	>380
15473			0.00-0.25m	S	17	340
15474			0.00-0.70m	S	23	>380
15475	0.00-0.15m			S	>25	>380
15476	0.00-0.15m			S	10	250
15477			0.00-0.75m	S	11	260
15478	0.00-0.40m		0.40-0.50m	S	24	>380
15479	0.00-0.35m		0.35-0.50m	S	>25	>380
15480	0.00-0.40m		0.40-0.60m	S	17	340
15481	0.00-0.30m		0.30-0.50m	S	>25	>380
15482	0.00-0.30m		0.30-0.45m	S	>25	>380
15483	0.00-0.40m		0.40-0.45m	S	14	310
15484	0.00-0.60m		0.60-0.65m	P Equivalent to S	>25	>380
15485	0.00-0.60m		0.60-0.70m	P Equivalent to S	>25	>380
15486	0.00-0.80m		0.80-1.50m	P Equivalent to S	>25	>380
15487	0.00-1.50m			P Equivalent to S	6	175
15488	0.00-0.40m		0.40-0.45m	S	24	>380
15489	0.00-0.40m		0.40-0.50m	S	5	150

*Following additional DCP testing in July 2021

Table 2 – Site Classification and Allowable Bearing Capacity for Lots 15468 to 15589

Lot	Summary of Strata			Site Class	Minimum DCP Blow Count per 100mm below 0.30m	Allowable Bearing Capacity at 0.30m to 0.50m
	Fill	Sand, Gravel	Weathered Rock (Gravel size fragments)			
15490	0.00-0.35m		0.35-0.45m	S	>25	>380
15491	0.00-0.65m		0.65-0.75m	P Equivalent to S	4	130
15492	0.00-1.40m	1.40-1.70m		P Equivalent to S	40	>380
15493	0.00-1.50m	1.50-1.70m		P Equivalent to S	40	>380
15494	0.00-1.70m			P Equivalent to S	40	>380
15495	0.00-1.70m			P Equivalent to S	25	>380
15496	0.00-1.40m	1.40-1.70m		P Equivalent to S	23	>380
15497	0.00-0.90m	0.90-1.20m		P Equivalent to S	27	>380
15498	0.00-1.50m	1.50-1.70m		P Equivalent to S	19	380
15499	0.00-0.45m		0.45-0.65m	P Equivalent to S	>25	>380
15500	0.00-0.45m		0.45-0.75m	P Equivalent to S	7	200
15501	0.00-0.50m		0.50-0.70m	P Equivalent to S	7	200
15502	0.00-0.35m	0.35-0.45m		S	9	230
15503	0.00-0.45m		0.45-0.60m	P Equivalent to S	15	310
15504	0.00-0.20m		0.20-0.30m	S	>25	>380
15505	0.00-0.10m		0.10-0.25m	S	>25	>380
15506	0.00-0.10m		0.10-0.25m	S	>25	>380
15507	0.00-0.10m		0.10-0.20m	S	>25	>380
15508	0.00-0.10m		0.10-0.25m	S	25	>380
15509	0.00-1.70m			P Equivalent to S	40	>380
15510	0.00-1.50m			P Equivalent to S	40	>380
15511	0.00-1.50m			P Equivalent to S	14	310
15512	0.00-1.10m			P Equivalent to S	6	175

Table 3 – Site Classification and Allowable Bearing Capacity for Lots 15490 to 15512

5. Site Preparation

All earthworks should be carried out in general accordance with the requirements of AS 3798 *Guidelines on earthworks for commercial and residential developments*.

Prior to construction any remnant topsoil, uncontrolled fill and material containing organic matter should be stripped from the site. This material is not considered suitable for use as selected fill but can be stockpiled for later use as non-structural fill or for landscaping purposes.

The exposed surface should then be wetted or dried back to approximate optimum moisture content (OMC) and the exposed subgrade compacted to 95% Standard Maximum Dry Density as required by AS3798. A final test roll, under the supervision of a suitably qualified and experienced engineering geologist, should be undertaken to identify any remaining areas requiring further rolling (sand and gravel) or removal (clay and silt).

If required, additional fill for the building footprint should comprise granular material that is placed in 250mm thick layers, and then compacted to 95% modified maximum dry density ratio, within $\pm 2\%$ of OMC.

6. Foundations

Footing systems for residential dwellings on Class S and P equivalent to S sites can be designed in accordance with standard footings as set out in Section 3 of AS 2870.

P equivalent to S class means that in places the site is underlain by more than 0.40m of engineered fill, however because the fill has been engineered (rolled, moisture conditioned and compacted under Level 2 supervision) the fill can be considered equivalent to in situ material, in effect the site is classed as S Class.

7. Certification

Subject to the site preparation set out in Section 3, the data provided, the above review, and utilising Stockwell's method for the determination of bearing capacity, then all 45 Lots making up Zuccoli Stage C1 are certified as having:

- an allowable bearing capacity of at least 100kPa at likely foundation depth (0.30m to 0.50m depth);
- are Class S or P equivalent to S; and
- hence are considered suitable for the construction of single or double storey masonry buildings.

8. References

1. Northern Territory Geological Survey *Extractive Minerals Within the Outer Darwin Area*
2. Australian Standard AS 2870 *Residential Slabs and Footings*
3. MJ Stockwell, 1977, *Determination of Allowable Bearing Pressure Under Small Structures*

9. Limitations

SCOPE OF SERVICES

This geotechnical report has been prepared in accordance with the scope of services set out in the agreement between WANT Geotechnics and their client and is subject to any qualifications and assumptions set out in the report. In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints.

RELIANCE ON DATA

In preparing the report, WANT Geotechnics has relied upon data, surveys, and plans provided by the client. WANT Geotechnics has not verified the accuracy or completeness of the data, to the extent that the any statements, opinions, facts, conclusions and/or recommendations in the report (conclusions) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. WANT Geotechnics will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have not been fully disclosed to WANT Geotechnics.

GEOTECHNICAL INVESTIGATION

This report was prepared expressly for the client and expressly for purposes indicated by the client or his representative. Use by any other persons for any purpose, or by the client for a different purpose, is not recommended. The client should not use this report for other than its intended purpose without seeking additional geotechnical advice.

LIMITATIONS OF SITE INVESTIGATION

In assessing a structure from a single exploratory location there is the possibility that variations may occur that were not encountered. Site exploration identifies specific subsurface conditions only at those points from which samples have been taken. The risk that variations will not be detected can be reduced by increasing the frequency of test locations; however, this often does not result in any overall cost savings for the project. The data derived from the investigation and subsequent laboratory testing have been extrapolated to form an inferred model and an engineering opinion is rendered about overall subsurface conditions and their likely behaviour with regard to the structure. Actual conditions at the site might differ from those inferred to exist, since no subsurface exploration program, no matter how comprehensive, can reveal all subsurface details and anomalies. The exploratory test records are the subjective interpretation of subsurface conditions at a particular location, made by trained personnel. The interpretation may be limited by the method of investigation and cannot always be definitive. For example, inspection of an excavation or test pit allows a greater area of the subsurface profile to be inspected than borehole investigation; however, such methods are limited by depth and site disturbance restrictions. In borehole investigation, the actual interface between materials may be more gradual or abrupt than a report indicates

SUBSURFACE CONDITIONS ARE TIME DEPENDENT

Subsurface conditions may be modified by changing natural forces or man-made influences. A geotechnical engineering report is based on conditions which existed at the time of subsurface exploration. Construction operations, at or adjacent to the site, and natural events, such as floods or groundwater fluctuations may also affect subsurface conditions and thus the continuing adequacy of a geotechnical report. The geotechnical engineer should be kept apprised of any such events and should be consulted to determine if additional tests are necessary.

EXPLORATORY LOGS SHOULD NOT BE SEPARATED FROM THE ENGINEERING REPORT

Final exploratory logs are developed by geotechnical engineers based upon their interpretation of field logs and laboratory evaluation of field samples. Customarily, only the final exploratory logs are included in geotechnical engineering reports. These logs should not under any circumstances be redrawn for inclusion in architectural or other design drawings. To minimise the likelihood of exploratory log misinterpretation, contractors should be given access to the complete geotechnical engineering report prepared or authorised for their use. Providing the best available information to contractors helps prevent costly construction problems. For further information on this matter reference should be made to 'Guidelines for the Provision of Geotechnical Information in Construction Contracts' published by the Institution of Engineers Australia, National Headquarters, Canberra 1987.

OTHER LIMITATIONS

WANT Geotechnics will not be liable to update or revise the report to consider any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.

WANT Geotechnics Pty Ltd

“Unfortunately, soils are made by nature and not by man, and the products of nature are always complex. As soon as we pass from steel and concrete to earth, the omnipotence of theory ceases to exist. Natural soil is never uniform. Its properties change from point to point while our knowledge of its properties is limited to those few spots at which the samples have been collected. In soil mechanics the accuracy of the computed results never exceeds that of a crude estimate and the principal function of theory consists in teaching us what and how to observe in the field”

Karl Terzaghi – Founder of Modern Geotechnology

Appendix A

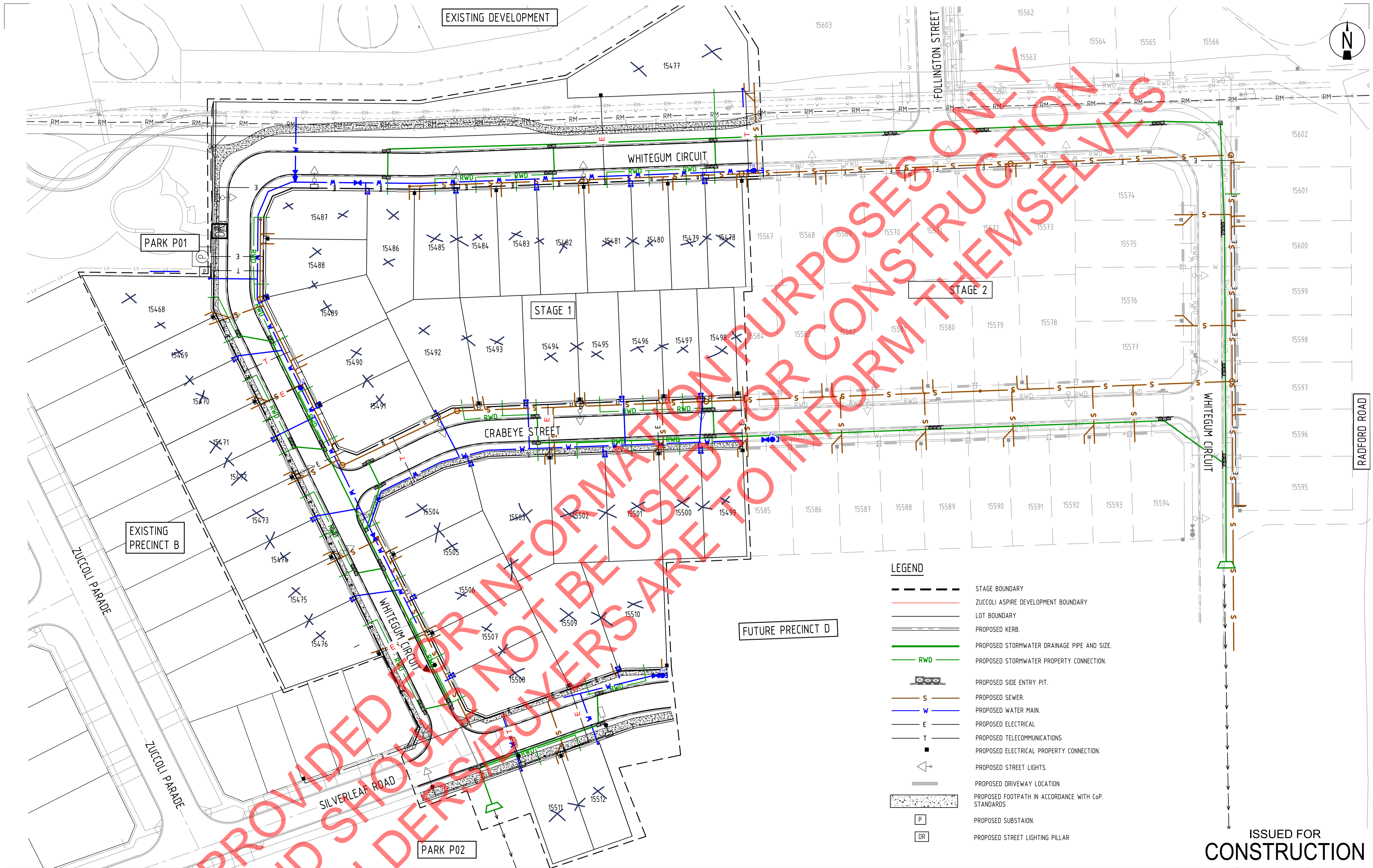
ADG Drawing PC1_C800 Stage 1 Master Services Layout Plan

Location Plan

HiQA Data

Test Pit Logs

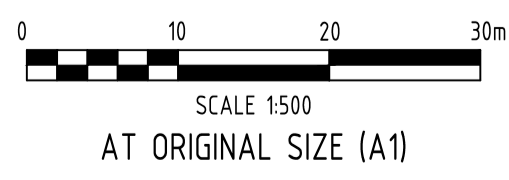
Dynamic Cone Penetrometer Results



- LEGEND**
- STAGE BOUNDARY
 - ZUCCOLI ASPIRE DEVELOPMENT BOUNDARY
 - LOT BOUNDARY
 - PROPOSED KERB
 - PROPOSED STORMWATER DRAINAGE PIPE AND SIZE
 - PROPOSED STORMWATER PROPERTY CONNECTION
 - PROPOSED SIDE ENTRY PIT
 - PROPOSED SEWER
 - PROPOSED WATER MAIN
 - PROPOSED ELECTRICAL
 - PROPOSED TELECOMMUNICATIONS
 - PROPOSED ELECTRICAL PROPERTY CONNECTION
 - PROPOSED STREET LIGHTS
 - PROPOSED DRIVEWAY LOCATION
 - PROPOSED FOOTPATH IN ACCORDANCE WITH CoP. STANDARDS
 - PROPOSED SUBSTATION
 - PROPOSED STREET LIGHTING PILLAR

ISSUED FOR
CONSTRUCTION

Rev	Date	Description	By	Chk
1	18.02.21	ISSUED FOR CONSTRUCTION	JL	SW
0	9.02.21	ISSUED FOR CONSTRUCTION	JL	SW
B	09.11.20	FOR INFORMATION	DT	SW
A	02.11.20	FOR INFORMATION	JMB	SW



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Client
COSTOJIC PTY LTD
Project Name
**ZUCCOLI ASPIRE
PRECINCT C - STAGE 1
CIVIL WORKS**

Discipline
CIVIL
Designed By
JMB
Checked By
SW
Project No.
20696
Drawn By
JL
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Status
CONSTRUCTION
Approved By
DG
Scale at A1
1:500
Title
**STAGE 1 MASTER SERVICES
LAYOUT PLAN**
Drawing No.
PC1_C800
Revision
1

Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15503			Easting/Northing		718519/8615469							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 1	0.0 – 0.45	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 1	0.45 – 0.60	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	Fine to Course	Fine to Medium	Angular-Sub Angular	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.60m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

Constituent Parts are logged: Least Second MOST, MPS = Maximum Particle Size, **LL = Liquid Limit, Pass. 0.075 = Passing the 0.075mm Sieve

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15502			Easting/Northing		718537/8615467							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 2	0.0 – 0.35	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 2	0.35 – 0.45	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	RESIDUAL SOIL	Roots Present. Refusal at 0.45m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15502/15501			Easting/Northing		718545/8615467							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 3	0.0 – 0.5	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 3	0.5 – 0.7	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 40 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.75m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15501			Easting/Northing		718554/8615465							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 4	0.0 – 0.45	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 4	0.45 – 0.65	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERED ROCK	Roots Present. Refusal at 0.65m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15500			Easting/Northing		718568/8615464							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 5	0.0 – 0.45	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 5	0.45 – 0.75	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.75m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15500/15499			Easting/Northing		718573/8615465							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 6	0.0 – 0.45	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 6	0.45 – 0.65	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 - -	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.65m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15499		Easting/Northing		718577/8615467							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 7	0.0 – 0.40	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 7	0.40 – 0.60	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.60m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15506/15503		Easting/Northing		718518/8615451							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
TP 08	0.0 – 0.25	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
TP 08	0.25 – 0.75	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Cobbles
TP 08	0.75 - 0.95	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Roots Present. Refusal at 0.95m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig			Surface Elevation :			Finished Surface	
Lot No. 15506			Easting/Northing		718507/8615448							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 9	0.0 – 0.10	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 9	0.10 – 0.25	Dry	GM	Silty Sandy GRAVEL Dark Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERED ROCK	Roots Present. Refusal at 0.25m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :		19/04/2021	Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.		15505	Easting/Northing		718500/8615460							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 10	0.0 – 0.10	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 10	0.10 – 0.25	Dry	GM	Silty Sandy GRAVEL Dark Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.25m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15505/15504		Easting/Northing		718497/8615466							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 11	0.0 – 0.20	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 11	0.20 – 0.3	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERED ROCK	Roots Present. Refusal at 0.30m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15504		Easting/Northing		718494/8615473							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 12	0.0 – 0.10	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 12	0.10 – 0.25	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Roots Present. Refusal at 0.25m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15476			Easting/Northing		718455/8615435							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 13	0.0 – 0.15	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	FILL	Roots Present. Refusal at 0.20m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15476/15475			Easting/Northing		718457/8615438							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 14	0.0 – 0.15	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Roots Present. Refusal at 0.15m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15475		Easting/Northing		718451/8615446							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 15	0.0 – 0.20	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.20m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15474			Easting/Northing		718456/8615461							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 16	0.0 – 0.70	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.70m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15474/15473		Easting/Northing		718456/8615468							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 17	0.0 – 0.25	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.25m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15473		Easting/Northing		718451/8615473							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 18	0.0 – 0.2	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.2m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15472		Easting/Northing		718447/8615484							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 19	0.0 – 0.6	Dry	GM	Silty Sandy GRAVEL Dark Orange/Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.6m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface		
Lot No.	15472/15471		Easting/Northing		718441/8615492								
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 20	0.0 – 0.5	Dry	GM	Silty Sandy GRAVEL Dark Orange/Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.5m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15471		Easting/Northing		718426/8615495							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 21	0.0 – 0.7	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date : 19/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15470			Easting/Northing		718425/8615506							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 22	0.0 – 0.6	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.6m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15470/15469		Easting/Northing		718422/8615512							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 23	0.0 – 0.6	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.6m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15469		Easting/Northing		718422/8615520							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 24	0.0 – 0.25	Moist	GM	Silty Sandy GRAVEL Dark Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	15 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 24	0.25 – 0.55	Dry	GM	Silty Sandy GRAVEL Dark Red/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.55m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15468		Easting/Northing		718420/8615530							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 25	0.0 – 0.2	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 25	0.25 – 0.5	Moist	GM	Silty Sandy GRAVEL Dark Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 25	0.5 - 0.7	Dry	GM	Silty Sandy GRAVEL Dark Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots Present. Refusal at 0.75m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	19/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15468		Easting/Northing		718410/8615526							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 26	0.0 – 0.6	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 25 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.6m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15486		Easting/Northing		718483/8615552							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 27	0.0 – 0.55	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 27	0.55 – 0.8	Moist	GM	Silty Sandy GRAVEL Dark Grey	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 27	0.8 – 1.50	Moist	GM	Silty Sandy GRAVEL Pale Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 40 30	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	No Refusal.
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15486		Easting/Northing		718483/8615537							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 28	0.0 – 0.5	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 28	0.5 – 0.75	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.75m, cobbles
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15485		Easting/Northing		718492/8615545							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 29	0.0 – 0.55	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 29	0.55 – 0.6	Moist	SM	Silty Sandy GRAVEL Pale Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	2 20 15	Fine to Course	-	-	FILL	Roots
BH 29	0.6 – 0.7	Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.70m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15485/15484		Easting/Northing		718501/8615546							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 30	0.0 – 0.45	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Cobbles, Refusal at 0.45m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface	
Lot No.	15484		Easting/Northing		718507/8615545						
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 31	0.0 – 0.55	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) 10 LL (%) 35 Pass. 0.075 (%) 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Cobbles
BH 31	0.55 – 0.6	Moist	GM	Silty Sandy GRAVEL Dark Grey/Brown	-	MPS (mm) 5 LL (%) 25 Pass. 0.075 (%) 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Roots
BH 31	0.6 – 0.65	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) 10 LL (%) 30 Pass. 0.075 (%) 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.65m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15483			Easting/Northing		718516/8615541							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 32	0.0 – 0.35	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 32	0.35 – 0.4	Moist	GM	Silty Sandy GRAVEL Dark Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Roots
BH 32	0.4 – 0.45	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.45m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig			Surface Elevation :			Finished Surface	
Lot No. 15483/15482			Easting/Northing		718526/8615540							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 33	0.0 – 0.3	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 33	0.3 – 0.5	Dry	GM	Silty Sandy GRAVEL Dark Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots
BH 33	0.5 – 0.65	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.65m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15482		Easting/Northing		718533/8615538							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 34	0.0 – 0.3	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 34	0.3 – 0.45	Dry	GM	Silty Sandy GRAVEL Dark Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Refusal at 0.45m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15481			Easting/Northing		718545/8615542							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 35	0.0 – 0.3	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	FILL	-
BH 35	0.3 – 0.5	Dry	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular- Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15481/15480		Easting/Northing		718553/8615541							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 36	0.0 – 0.25	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 36	0.25 – 0.4	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Roots present.
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15480			Easting/Northing		718559/8615542							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 37	0.0 – 0.25	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 37	0.25 – 0.6	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.6m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15479			Easting/Northing		718568/8615542							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 38	0.0 – 0.35	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 38	0.35 – 0.5	Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERED ROCK	Roots present, Refusal at 0.6m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15479/15478		Easting/Northing		718575/8615541							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 39	0.0 – 0.35	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 39	0.35 – 0.5	Moist	GM	Silty Sandy GRAVEL Dark Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERED ROCK	Roots present, Refusal at 0.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15478			Easting/Northing		718582/8615541							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 40	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 40	0.4 – 0.5	Dry	GM	Silty Sandy GRAVEL Dark Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERED ROCK	Roots present, Refusal at 0.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15488		Easting/Northing		718456/8615543							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 41	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 41	0.4 – 0.45	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Cobbles, Refusal at 0.45m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15488/15489			Easting/Northing		718458/8615535							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 42	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 42	0.4 – 0.5	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Cobbles, Refusal at 0.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :		20/04/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No.		15489		Easting/Northing		718456/8615527							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 43	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-	
BH 43	0.4 – 0.5	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMLEY WEATHERD ROCK	Cobbles and roots present, Refusal at 0.5m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15490		Easting/Northing		718462/8615514							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 44	0.0 – 0.35	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 44	0.35 – 0.45	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Cobbles present, Refusal at 0.45m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	20/04/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No.	15490/15491		Easting/Northing		718456/8615505							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties		Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 45	0.0 – 0.6	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	Cobbles present.
BH 45	0.6 – 0.65	Moist	SM	Silty Sandy GRAVEL Dark Grey	-	MPS (mm) LL (%) Pass. 0.075 (%)	2 25 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 45	0.65 – 0.75	Dry	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Roots present, Refusal at 0.75m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15491			Easting/Northing		718466/8615501							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 46	0.0 – 0.5	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	FILL	-
BH 46	0.5 – 0.7	Dry	GM	Silty Sandy GRAVEL Dark Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Cobbles and roots present, Refusal at 0.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No. 15477			Easting/Northing		718577/8615603							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 47	0.0 – 0.75	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 40 30	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.75m
						MPS (mm) LL (%) Pass. 0.075 (%)						
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 20/04/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15477			Easting/Northing		718599/8615597							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 48	0.0	Moist	GM	Silty Sandy GRAVEL Dark Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	-
BH 48		Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 40 25	Fine to Course	Fine to Medium	Sub Angular-Sub Rounded	EXTREMELY WEATHERD ROCK	-
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No.	15487		Easting/Northing		718449/8615566							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 1	0.0 – 0.25	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	38 30 25	Fine to Medium	Fine to Medium	Sub Rounded	FILL	-
BH 1	0.25 – 0.5	Moist	SM	Silty Sandy GRAVEL Pale Grey/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Medium	-	-	FILL	-
BH 1	0.5 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Orange/Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	13 30 20	Fine to Course	Fine to Medium	Sub Rounded	EXTREMELY WEATHERD ROCK	BH terminated at 1.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 27/05/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15487			Easting/Northing		718460/8615563							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 2	0.0 – 1.1	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	38 30 25	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 2	1.1 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Grey/Black	-	MPS (mm) LL (%) Pass. 0.075 (%)	13 30 20	Fine to Course	Fine to Medium	Rounded	FILL	BH terminated at 1.5m
					-	MPS (mm) LL (%) Pass. 0.075 (%)						
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No.	15492		Easting/Northing		718496/8615522							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 16	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale White/Yellow	-	MPS (mm) 27 LL (%) 30 Pass. 0.075 (%) 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-	
BH 16	0.4 – 1.4	Moist	GM	Silty Sandy GRAVEL Pale Red/Yellow	-	MPS (mm) 29 LL (%) 30 Pass. 0.075 (%) 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-	
BH 16	1.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Grey/Yellow	-	MPS (mm) 5 LL (%) 40 Pass. 0.075 (%) 20	Fine to Course	-	-	-	BH terminated at 1.7m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-		

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Date : 27/05/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15492/15493			Easting/Northing		718503/8615524							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 17	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale White/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-
BH 17	0.4 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Orange/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 17	1.5 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale White/Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Rounded	-	BH terminated at 1.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :			Finished Surface		
Lot No.	15493		Easting/Northing		718510/8615525								
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 18	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-	
BH 18	0.4 – 1.4	Moist	GM	Silty Sandy GRAVEL Pale Orange/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-	
BH 18	1.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale White/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 20	-	Fine to Medium	Sub Rounded	-	BH terminated at 1.7m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15494		Easting/Northing		718525/8615527							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 19	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	-	-	-	FILL	-
BH 19	0.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale White/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	16 30 20	-	Fine to Medium	-	FILL	BH terminated at 1.7m
					-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 27/05/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15494/15495			Easting/Northing		718536/8615526							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 20	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale White/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Course	Sub Angular	FILL	-
BH 20	0.4 – 1.2	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	Refusal at 1.2m
					-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :		27/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.		15495		Easting/Northing		718537/8615526							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 21	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-	
BH 21	0.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Red/Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	BH terminated at 1.7m	
					-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		

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Date : 27/05/2021			Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No. 15496			Easting/Northing		718554/8615525							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 22	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	-	-	-	FILL	-
BH 22	0.4 – 1.4	Moist	GM	Silty Sandy GRAVEL Pale Orange/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	16 30 20	-	-	-	FILL	-
BH 22	1.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Grey/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	3 35 20	-	-	-	-	BH terminated at 1.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15496/15497		Easting/Northing		718559/8615527							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 23	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	36 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-
BH 23	0.4 – 1.4	Moist	GM	Silty Sandy GRAVEL Pale Brown/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-
BH 23	1.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Grey/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	16 35 20	-	Fine to Medium	Sub Rounded	-	BH terminated at 1.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :			Finished Surface		
Lot No.	15497		Easting/Northing		718564/8615527								
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 24	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-	
BH 24	0.4 – 0.9	Moist	GM	Silty Sandy GRAVEL Pale Orange/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-	
BH 24	0.9 – 1.2	Moist	GM	Silty Sandy GRAVEL Pale Grey/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 35 20	-	Fine	Sub Rounded	-	BH terminated at 1.7m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :			Finished Surface		
Lot No.	15498		Easting/Northing		718572/8615527								
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 25	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Course	Sub Rounded	FILL	-	
BH 25	0.4 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Orange/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-	
BH 25	1.5 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale White/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	5 35 20	-	Fine	Sub Rounded	-	BH terminated at 1.7m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-		

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15498/15584		Easting/Northing		718584/8615527							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 26	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	27 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 26	0.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Brown/Yellow	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 30 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	BH terminated at 1.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No.	15509		Easting/Northing		718536/8615451							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments	
BH 37	0.0 – 0.3	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	-	MPS (mm) 19 LL (%) 25 Pass. 0.075 (%) 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-	
BH 37	0.3 – 0.6	Moist	GM	Silty Sandy GRAVEL Pale Red/Orange	-	MPS (mm) 19 LL (%) 25 Pass. 0.075 (%) 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-	
BH 37	0.6 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Yellow/Brown	-	MPS (mm) 5 LL (%) 30 Pass. 0.075 (%) 20	Fine to Course	Fine to Medium	Rounded	FILL	BH terminated at 1.7m	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-		
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-		

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Date :	27/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15509/15510		Easting/Northing		718541/8615430							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 38	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 25 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 38	0.4 – 1.7	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 25 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	BH terminated at 1.7m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	

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Date : 27/05/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15510			Easting/Northing		718547/8615450							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 39	0.0 – 0.8	Moist	GM	Silty Sandy GRAVEL Pale Grey/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 25 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 39	0.8 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Orange/Red	-	MPS (mm) LL (%) Pass. 0.075 (%)	19 25 20	Fine to Course	Fine to Medium	Sub Rounded	FILL	BH terminated at 1.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 16/06/2021			Drill Rig/Excavator :		Drill Rig			Surface Elevation :		Finished Surface		
Lot No. 15511/15512			Easting/Northing		718453/8615393							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 01	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	25 30 30	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 01	0.4 – 0.65	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	13 30 30	Fine to Course	Fine to Medium	Sub Rounded	FILL	
BH 01	0.65 – 1.1	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	25 27 20	Fine to Course	Fine to Course	Sub Rounded	FILL	BH terminated at 1.1m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 16/06/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15511			Easting/Northing		718463/8615393							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 02	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 30	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 02	0.4 – 0.65	Moist	GM	Silty Sandy GRAVEL Pale Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 25	Fine to Course	Fine to Medium	Sub Rounded	FILL	
BH 02	0.65 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	20 25 20	Fine to Course	Fine to Course	Sub Rounded	FILL	BH terminated at 1.5m
		-	-			MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-			MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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Date : 28/05/2021			Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No. 15507			Easting/Northing		718504/8615431							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH04	0.0 – 0.10	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Rounded	FILL	
BH04	0.10 – 0.2	Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.2m. Organics present.
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	28/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15507/15508		Easting/Northing		718507/8615423							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH05	0.0 – 0.10	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Rounded	FILL	
BH05	0.10 – 0.25	Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.25m. Organics present.
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	-	-	-	-	-	

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Date :	28/05/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15508		Easting/Northing		718509/8615410							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH06	0.0 – 0.10	Moist	GM	Silty Sandy GRAVEL Dark Orange/Brown	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 25	Fine to Course	Fine to Medium	Sub Rounded	FILL	
BH06	0.10 – 0.25	Moist	GM	Silty Sandy GRAVEL Dark Orange	-	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 20	Fine to Course	Fine to Medium	Sub Rounded	EXTREMELY WEATHERD ROCK	Refusal at 0.25m. Organics present.
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)	- - -	-	-	-	-	

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Date :	16/06/2021		Drill Rig/Excavator :		Drill Rig				Surface Elevation :		Finished Surface	
Lot No.	15512		Easting/Northing		718451/8615393							
TP/BH (No.)	Depth (m)	Estimated Moisture Condition	USC	Colour & Visual Description	Estimated Consistency	Estimated Properties	-	Estimated Sand Grain Size	Estimated Gravel Grain Size	Estimated Gravel Shape	Estimated Material Origin	Comments
BH 02	0.0 – 0.4	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	10 35 30	Fine to Course	Fine to Medium	Sub Rounded	FILL	-
BH 02	0.4 – 0.65	Moist	GM	Silty Sandy GRAVEL Pale Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	10 30 25	Fine to Course	Fine to Medium	Sub Rounded	FILL	
BH 02	0.65 – 1.5	Moist	GM	Silty Sandy GRAVEL Pale Orange/Brown	Firm	MPS (mm) LL (%) Pass. 0.075 (%)	20 25 20	Fine to Course	Fine to Course	Sub Rounded	FILL	BH terminated at 1.5m
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	
		-	-		-	MPS (mm) LL (%) Pass. 0.075 (%)		-	-	-	-	

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HiQa Geotechnical

Client : Ostojic Group Pty Ltd

Project #: D20214

Project Name: OST2005-Zuccoli Aspire Precinct C1 & C2

Tested Date: 19/04/2021

Tested By: g.cawdrey

Location: Zuccoli Aspire Precinct C1 & C2 Work Request: 3594

Dynamic Cone Penetrometer Multi

Dynamic Cone Penetrometer Test Details

Max. # of Tests	70
Number of Rows	19
Location Type	Easting & Northing
Increment Size (mm)	100
Note: Increment size should be 50mm or 100mm for this test method	

Preparation and Equipment

DCP #	D-22	Drop Height 510 ± 5mm	510
Cone Sharpness	ok	Ruler #	HQA14

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594A	D21-3594B	D21-3594C	D21-3594D	D21-3594E	D21-3594F
Location	15503	15502	15502/15501	15501	15500	15500/15499
Easting	718519	718537	718545	718554	718568	718573
Northing	8615469	8615467	8615467	8615465	8615464	8615465
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0.0	0.0	0	0	0	0
0-100 blows/100 mm	25	18	21	21	7	25 - Refusal
100-200 blows/100 mm	21	20	21	24	14	
200-300 blows/100 mm	18	15	16	17	10	
300-400 blows/100 mm	16	13	11	10	8	
400-500 blows/100 mm	15	10	10	7	12	
500-600 blows/100 mm	25 - Refusal	9	9	11	11	
600-700 blows/100 mm		10	12	13	12	
700-800 blows/100 mm		15	17	25 - Refusal	19	
800-900 blows/100 mm		25 - Refusal	25 - Refusal		25 - Refusal	
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594G	D21-3594H	D21-3594I	D21-3594J	D21-3594K	D21-3594L
Location	15499	15506/15503	15506	15505	15505/15504	15504
Easting	718577	718518	718507	718500	718497	718494
Northing	8615467	8615451	8615448	8615460	8615466	8615473
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	25 - Refusal	9	25 - Refusal	25 - Refusal	25 - Refusal	25 - Refusal
100-200 blows/100 mm		12				
200-300 blows/100 mm		12				
300-400 blows/100 mm		10				
400-500 blows/100 mm		12				
500-600 blows/100 mm		14				
600-700 blows/100 mm		7				
700-800 blows/100 mm		5				
800-900 blows/100 mm		5				
900-1000 blows/100 mm		3				
1000-1100 blows/100 mm		8				
1100-1200 blows/100 mm		25 - Refusal				
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594M	D21-3594N	D21-3594O	D21-3594P	D21-3594Q	D21-3594R
Location	15476/15475	15476	15475	15474	15474/15473	15473
Easting	718457	718455	718541	718456	718456	718451
Northing	8615438	8615435	8615446	8615461	8615468	8615473
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	15	18	25 - Refusal	23	17	21
100-200 blows/100 mm	24	5		25 - Refusal	23	25 - Refusal
200-300 blows/100 mm	25 - Refusal	3			25 - Refusal	
300-400 blows/100 mm		4				
400-500 blows/100 mm		15				
500-600 blows/100 mm		25 - Refusal				
600-700 blows/100 mm						
700-800 blows/100 mm						
800-900 blows/100 mm						
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594S	D21-3594T	D21-3594U	D21-3594V	D21-3594W	D21-3594X
Location	15472	15472/15471	15471	15470	15470/15469	15469
Easting	718447	718441	718426	718425	718522	718422
Northing	8615484	8615492	8615495	8615506	8615512	8615520
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	25 - Refusal	23	8	10	4	8
100-200 blows/100 mm		25 - Refusal	8	18	4	9
200-300 blows/100 mm			23	17	9	25 - Refusal
300-400 blows/100 mm			25 - Refusal	7	16	
400-500 blows/100 mm				16	16	
500-600 blows/100 mm				25 - refusal	17	
600-700 blows/100 mm					25 - Refusal	
700-800 blows/100 mm						
800-900 blows/100 mm						
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594Y	D21-3594Z	D21-3594AA	D21-3594AB	D21-3594AC	D21-3594AD
Location	15468	15468	15486	15486	15485	15485/15484
Easting	718420	718410	718483	718483	718492	718501
Northing	8615530	8615526	8615552	8615537	8615545	8615546
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	16	10	16	25 - Refusal	25 - Refusal	25 - Refusal
100-200 blows/100 mm	13	10	16			
200-300 blows/100 mm	21	10	18			
300-400 blows/100 mm	25 - Refusal	2	12			
400-500 blows/100 mm		3	6			
500-600 blows/100 mm		2	3			
600-700 blows/100 mm		5	2			
700-800 blows/100 mm		11	3			
800-900 blows/100 mm		25 - Refusal	4			
900-1000 blows/100 mm			7			
1000-1100 blows/100 mm			12			
1100-1200 blows/100 mm			25 - Refusal			
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594AE	D21-3594AF	D21-3594AG	D21-3594AH	D21-3594AI	D21-3594AJ
Location	15484	15483	15483/15482	15482	15481	15481/15480
Easting	718507	718516	718526	718533	718545	718553
Northing	8615545	8615541	8615540	8615538	865542	8615541
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	25 - Refusal	14	25 - Refusal	25 - Refusal	25 - Refusal	25 - Refusal
100-200 blows/100 mm		20				
200-300 blows/100 mm		25 - Refusal				
300-400 blows/100 mm						
400-500 blows/100 mm						
500-600 blows/100 mm						
600-700 blows/100 mm						
700-800 blows/100 mm						
800-900 blows/100 mm						
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594AK	D21-3594AL	D21-3594AM	D21-3594AN	D21-3594AO	D21-3594AP
Location	15480	15479	15479/15478	15478	15488	15488/15489
Easting	718559	718568	718575	718582	718456	718458
Northing	8615542	8615542	8615541	8615541	8615543	8615535
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	17	25 - Refusal	25 - Refusal	24	24	9
100-200 blows/100 mm	20			25 - Refusal	25 - Refusal	19
200-300 blows/100 mm	25 - Refusal					15
300-400 blows/100 mm						9
400-500 blows/100 mm						7
500-600 blows/100 mm						5
600-700 blows/100 mm						15
700-800 blows/100 mm						25 - Refusal
800-900 blows/100 mm						
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594AQ	D21-3594AR	D21-3594AS	D21-3594AT	D21-3594AU	D21-3594AV
Location	15489	15490	15490/15491	15491	15477	15477
Easting	718456	718462	718456	718466	718577	718599
Northing	8615527	8615514	8615505	8615501	8615603	8615597
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Moist	Moist	Moist	Moist	Moist	Moist
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	9	25 - Refusal	19	8	16	6
100-200 blows/100 mm	15		11	9	25 - Refusal	6
200-300 blows/100 mm	9		14	6		9
300-400 blows/100 mm	3		8	4		16
400-500 blows/100 mm	4		9	6		11
500-600 blows/100 mm	2		8	8		12
600-700 blows/100 mm	3		13	19		17
700-800 blows/100 mm	4		20	25 - Refusal		25 - Refusal
800-900 blows/100 mm	10		25 - Refusal			
900-1000 blows/100 mm	12					
1000-1100 blows/100 mm	16					
1100-1200 blows/100 mm	25 - Refusal					
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594AW	D21-3594AX	D21-3594AY	D21-3594AZ	D21-3594BA	D21-3594BB
Location	15487	15487	15492	15492/15493	15493	15494
Easting	718449	718460	718496	718503	718510	718525
Northing	8615566	8615563	8615522	8615524	8615525	8615527
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Dry	Dry	Dry	Dry	Dry	Dry
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	15	9	40	40	40	40
100-200 blows/100 mm	18	13	Refusal <50	Refusal <60	Refusal <50	Refusal <60
200-300 blows/100 mm	18	12				
300-400 blows/100 mm	40	17				
400-500 blows/100 mm	45	29				
500-600 blows/100 mm	18	22				
600-700 blows/100 mm	8	17				
700-800 blows/100 mm	8	16				
800-900 blows/100 mm	6	11				
900-1000 blows/100 mm	6	13				
1000-1100 blows/100 mm	10	7				
1100-1200 blows/100 mm	30	6				
1200-1300 blows/100 mm	Refusal 1150	4				
1300-1400 blows/100 mm		4				
1400-1500 blows/100 mm		9				
1500-1600 blows/100 mm		18				
1600-1700 blows/100 mm		18				
1700-1800 blows/100 mm		Terminated				
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594BC	D21-3594BD	D21-3594BE	D21-3594BF	D21-3594BG	D21-3594BH
Location	15494/15495	15495	15509	15509/15510	15510	15498/15584
Easting	718536	718539	718536	718541	718547	718584
Northing	8615526	8615526	8615451	8615430	8615450	8615527
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Dry	Dry	Dry	Dry	Dry	Dry
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	40	50	75	40	40	17
100-200 blows/100 mm	Refusal <80	25	Refusal <95	Refusal <80	Refusal <90	Refusal
200-300 blows/100 mm		Refusal <140				
300-400 blows/100 mm						
400-500 blows/100 mm						
500-600 blows/100 mm						
600-700 blows/100 mm						
700-800 blows/100 mm						
800-900 blows/100 mm						
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594BI	D21-3594BJ	D21-3594BK	D21-3594BL	D21-3594BM	D21-3594BN
Location	15498	15497	15496/15497	15496	15508	15512
Easting	718572	718564	718559	718554	718509	718451
Northing	8615527	8615527	8615527	8615525	8615410	8615393
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs	Refer Logs
Reduced Level (mm)						
Moisture Condition	Dry	Dry	Dry	Dry	Dry	Dry
Start Depth (mm)	0	0	0	0	0	0
0-100 blows/100 mm	19 Refusal	27	23 Refusal	36 Refusal	25	5
100-200 blows/100 mm		12 Refusal			Refusal <125	12
200-300 blows/100 mm						8
300-400 blows/100 mm						6
400-500 blows/100 mm						6
500-600 blows/100 mm						32
600-700 blows/100 mm						20
700-800 blows/100 mm						Refusal <630
800-900 blows/100 mm						
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E	N/E	N/E
Remarks						

Dynamic Cone Penetrometer (AS 1289 6.3.2)

Sample #	D21-3594BO	D21-3594BP	D21-3594BQ	D21-3594BR		
Location	15512/15511	15511	15507	15507/15508		
Easting	718453	718463	718504	718507		
Northing	8615393	8615393	8615431	8615423		
Soil Description	Refer Logs	Refer Logs	Refer Logs	Refer Logs		
Reduced Level (mm)						
Moisture Condition	Dry	Dry	Dry	Dry		
Start Depth (mm)	0	0	0	0		
0-100 blows/100 mm	5	5	40	40		
100-200 blows/100 mm	10	12	Refusal <85	Refusal <80		
200-300 blows/100 mm	9	27				
300-400 blows/100 mm	7	24				
400-500 blows/100 mm	20	17				
500-600 blows/100 mm	Refusal <430	14				
600-700 blows/100 mm		20				
700-800 blows/100 mm		22				
800-900 blows/100 mm		Refusal <740				
900-1000 blows/100 mm						
1000-1100 blows/100 mm						
1100-1200 blows/100 mm						
1200-1300 blows/100 mm						
1300-1400 blows/100 mm						
1400-1500 blows/100 mm						
1500-1600 blows/100 mm						
1600-1700 blows/100 mm						
1700-1800 blows/100 mm						
1800-1900 blows/100 mm						
Ground Water Level	N/E	N/E	N/E	N/E		
Remarks						

Material Test Report


Report Number: D20214-164
Issue Number: 1
Date Issued: 12/07/2021
Client: Ostoic Group Pty Ltd
PO Box 38915, WINNELLIE NT 0821
Contact: Richard Houghton
Project: D20214 - OST2005-Zuccoli Aspire Precinct C1 & C2
Project Location: Zuccoli Aspire Precinct C1 & C2
Work Request: 4065



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Accredited for compliance with ISO/IEC 17025 - Testing


Approved Signatory: James Acton
Annex Laboratory Leader
NATA Accredited Laboratory Number: 13121

Dynamic Cone Penetrometer AS 1289 6.3.2

Sample Number	D21-4065A	D21-4065B	D21-4065C	D21-4065D	D21-4065E
Location	Southern Corner	Centre of Lot	Northern Corner	Eastern Corner	Western Corner
Date Tested	07/07/2021	07/07/2021	07/07/2021	07/07/2021	07/07/2021
Soil Description	Sandy Silty Gravel	Sandy Silty Gravel	Sandy Silty Gravel	Sandy Silty Gravel	Sandy Silty Gravel
Reduced Level (mm)	-200mm	-200mm	-200mm	-200mm	-200mm
Moisture Condition	Dry	Dry	Dry	Dry	Dry
Start Depth (mm)	0	0	0	0	0
0-100 blows/100 mm	9	6	11	12	9
100-200 blows/100 mm	9	11	8	9	9
200-300 blows/100 mm	14	16	9	12	11
300-400 blows/100 mm	20	16	10	16	10
400-500 blows/100 mm	24	22	16	21	15
500-600 blows/100 mm	>25R	>25R	22	>25	20
600-700 blows/100 mm			>25R		>25R
700-800 blows/100 mm					
800-900 blows/100 mm					
900-1000 blows/100 mm					
Ground Water Level					
Remarks					