Australian Geotechnical Testing

Level One Inspection and Testing

Project No: AGTE21784
Project: Lucas Estate Stage H4
Suburb: Lucas

Client: Wayne Horne Earthmoving

Date: 15th November 2022

Geotechnical	Pavement	Environmental	Residential	Design
Slope Stability Assessment	Land Capability Assessments	Erosion and Sediment Control Plan
Retaining Walls	Level 1 Supervision	Earthworks Specification's	Percolation

Adelaide | Brisbane | Ballarat | Melbourne | Warrnambool

Contents

1 Introduction

Australian Geotechnical Testing (AGT) has been engaged by Wayne Horne Earthmoving to provide Level 1 Geotechnical Supervision for the LUH4 project. The Estate is located in Lucas Estate.

This Level 1 report presents the results of supervision activities, compaction and moisture control, material placement and laboratory testing for ground works undertaken for the project. This report covers construction activities carried out from **7th July to 7th September 2022.**

2 Scope of Works

The scope of works involved the placement of on-site General Fill. Fill Material was placed in Level one fill areas, in accordance with ***AS 3798-2007***, ***Guidelines on earthworks for commercial and residential developments and project specifications***. The level of FILL to be placed is less than 5m as per AS3798 Section 1.1.

The fill material is required as per AS3798 and the project specification to achieve:

- **95% Standard Maximum Dry Density (Compaction)**

General fill material used for the construction was locally sourced and predominantly comprising of **Clay.**

3 Inspections / Supervision

Full-time Level 1 supervision and inspection was undertaken including the supervision and inspections regarding the stripping and removal as per AS3798 Section 3 shall have removed:

- Organic soils, such as topsoils, severely root affected subsoils and peat;
- Contaminated soils are part of the brief;
- Materials which undergo volume change or loss of strength when disturbed and exposed to moisture;
- Silts, or materials that have deleterious engineering properties of silt;
- Other materials with properties that are unsuitable for the forming of structural fill;
- Fill that contains wood, metal plastic, boulders or other deleterious material, in sufficient proportions to affect the required performance of the fill.
- The maximum particle size of any rocks or other lumps, within the layer, has not exceeded two-thirds ($^2/_3$) of the compacted layer thickness.

The lots inspected were essentially homogeneous in relation to material type and moisture condition, rolling response and compaction technique and which has been used for the assessment of relative compaction of an area of work (AS3798 Section 1.2.8).

Prior to placement any existing filled ground, for which the conditions of the placement are not adequately documented have not been assumed to have been of either standard compaction or of the composition adequate to support fill or any loads has been removed (AS3798 Section 2).

4 Testing

The project was classified as **Residential**, thereby requiring a minimum compaction result of ***95%*** density ratio Standard Compaction for the ***cohesive soils (***AS 1289 5.7.1 & 5.1.1) throughout the Level 1 Fill and in accordance with AS 3798-2007 – Table 5.2. The test was performed using a Nuclear Density Gauge for field density determination *AS 1289.5.8.1.*

As a minimum testing was undertaken either 3 tests per lot, 1 test per 2,500m^2 per layer, or 1 test per 500m^3 throughout the placement of fill as per AS3798 Table 8.1.

The material was site derived Silty Clay**.** The material was placed in approximately 250mm loose layers, rolling effort with on-site Compactor (to seal of each layer of placed General Fill material) to a compacted 150mm layer that achieved 95% Standard Compaction which met Australian Standards specifications. This was considered the best method to achieve compaction using the plant and machinery available.

The NATA compaction reports verify the achievement of the minimum density requirement of 95% Standard Compaction throughout the full depth area, with each layer tested accordingly. All test results were provided to our client: Wayne Horne Earthmoving for inclusion within their internal quality system.

At the completion of the structural layers and material within 150mm of permanent subgrade level in cuttings, test rolling was undertaken, and the layers withstood test rolling without visible deformation or springing (AS 3798 Section 5.5).

The area covered by this Level 1 Supervision report is shown in the Site Plan (Refer to Appendix A). The results of the laboratory Testing are indicated in Appendix B.

5 Conclusion

On the completion of the earthworks and after analysing the materials used, it has been concluded that the filling procedure conducted by our client **Wayne Horne Earthmoving satisfied** the general requirements of AS 3798 regards to the placement of fill materials on a project under Level 1 Supervision and in accordance with the project specification as provided to AGT.

The fill meets the requirements for “structural fill for residential applications” in accordance with AS3798. The fill has been placed, compacted and tested in accordance with AS3798 and the fill meets the requirements for controlled fill in accordance with AS2870 (2011) “Residential Slabs and Footings”.

This report has been prepared for the benefit of our client with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement. No responsibility for this report will be taken by AGT if it is altered in any way, or not reproduced in full.

6 Applicability

The findings and conclusions contained in this Report are made based on site conditions that existed at the time this work was conducted. The conclusions presented in this report are relevant to the conditions of the site and the state of legislation currently enacted as at the date of this report.

Findings and conclusions are made assuming that the soil, groundwater, geological and chemical conditions detailed within this report are accurate and remain applicable to the site at the time of writing. The conclusions of this report may become invalid if filling or excavation occurs after the boreholes and test pits referred to in this report were drilled or excavated. No other warranties are made or intended.

AGT has used a degree of skill and care ordinarily exercised by reputable members of our profession practicing in the same or similar locality.

AGT does not make any representation or warranty that the conclusions in this report will be applicable in the future as there may be changes in the condition of the site, applicable legislation or other factors that would affect the conclusions contained in this report.
This report has been prepared exclusively for use by our client. This report cannot be reproduced without the written authorisation of AGT and then can only be reproduced in its entirety.

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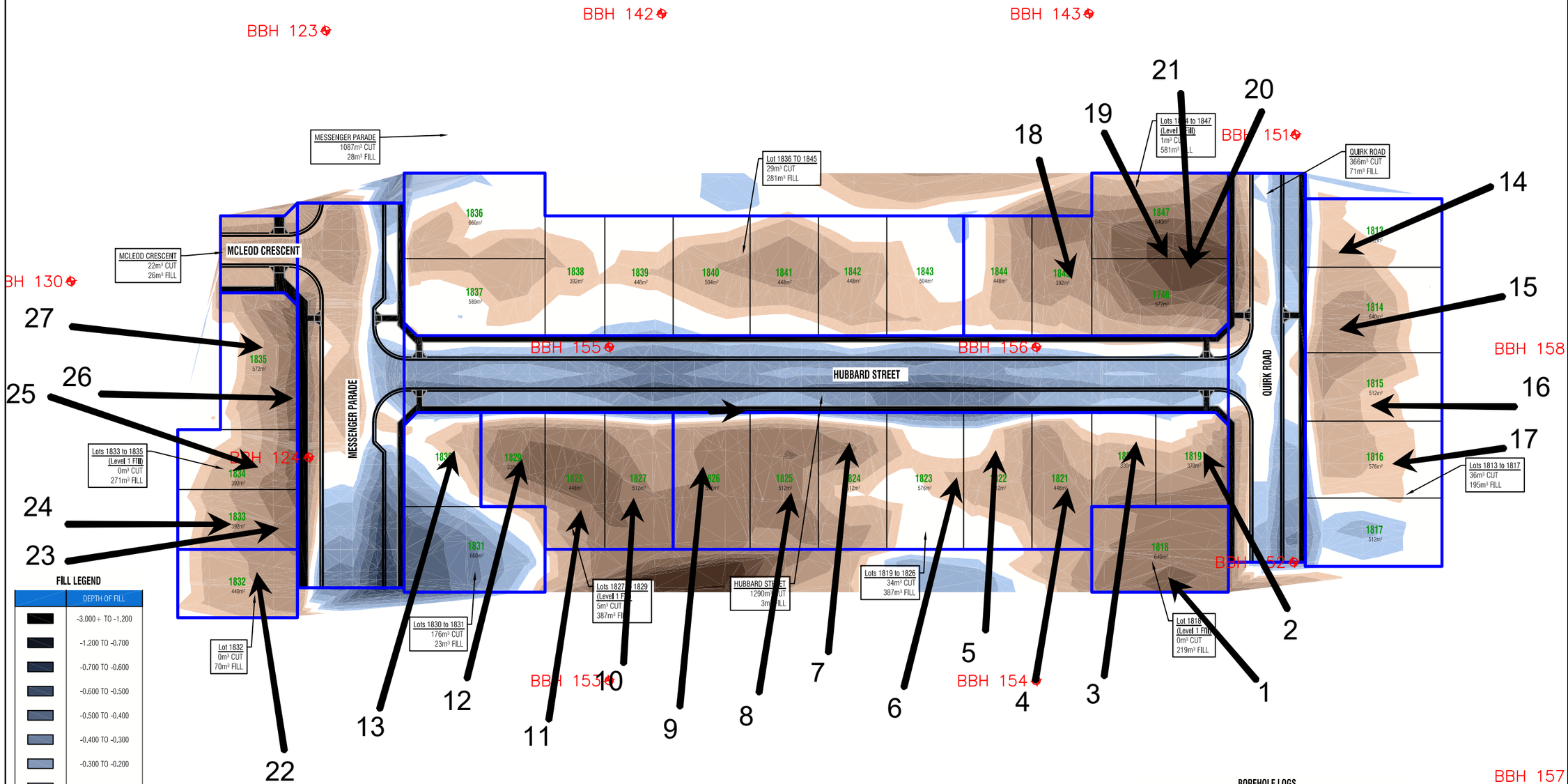
Appendix A – Site Plan

Test Locations - Lucas Stage H4
2022



FILL LEGEND

DEPTH OF FILL
-3.000+ TO -1.200
-1.200 TO -0.700
-0.700 TO -0.600
-0.600 TO -0.500
-0.500 TO -0.400
-0.400 TO -0.300
-0.300 TO -0.200
-0.200 TO -0.100
-0.100 TO -0.050
0.050 TO 0.100
0.100 TO 0.200
0.200 TO 0.300
0.300 TO 0.400
0.400 TO 0.500
0.500 TO 0.600
0.600 TO 0.700
0.700 TO 1.200
1.200 to 3.000+

BOREHOLE LOGS

BOREHOLE	SILT (mm)	CLAY (mm)	ROCK
124	600 mm	1600 mm	YES
151	600 mm	1400 mm	YES
152	300 mm	1400 mm	YES
155	700 mm	1400 mm	YES
156	400 mm	900 mm	YES

BOREHOLE LOGS NOTES:
** POSSIBLE FLOATER
1. SILT QUANTITY INCLUDES GRAVELLY CLAY
2. ROCK CLASSIFIED AS BASALT

General Notes

SAFETY FIRST
SAFETY STARTS WITH YOU

Rev	Amendment	Initials	Date
4			
3			
2			
1	Issued for Contract	DG	20/05/21

Integra
180 Eleanor Drive, Lucas
Post Office Box 4226
Lucas Victoria 3350
T: 03 5322 5999 F: 03 5322 5995

Project
LUCAS ESTATE
RESIDENTIAL SUBDIVISION
STAGE H4
LUCAS

Authority
Ballarat City Council - (03) 5320 5500

Drawing Title
EARTHWORKS PLAN

Status
PRELIMINARY
NOT FOR CONSTRUCTION

Designer: D.Georgalas
Checker:
Verified:

Scale (A1) 1:500 Scale (A3) 1:1000
HOR 0 5 10 15 20 25
VER

Sheet Number
1 of 1

Drawing Number
LUH4-CD-701

Revision
1

Appendix B – Laboratory Testing

Material Test Report

Report Number: **AGT60134-1**
Issue Number: 1
Date Issued: 12/07/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1014
Date Sampled: 07/07/2022
Dates Tested: 07/07/2022 - 11/07/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: (CH) silty CLAY- Brown
Material Source: Onsite

Australian Geotechnical Testing
Ballarat Laboratory
2/55 Heinz Road Delacombe VIC 3356
Phone: 1300 026 583
Email: PaulF@ausgeotest.com.au

Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Paul Francis
Laboratory Manager - Ballarat
NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60134-1	60134-2	60134-3	60134-4	60134-5	60134-6
Date Tested	07/07/2022	07/07/2022	07/07/2022	07/07/2022	07/07/2022	07/07/2022
Time Tested	10:45	10:50	10:55	11:10	11:20	11:35
Test Request #/Location	Test Request 1 Lot 1818	Test Request 1 Lot 1819	Test Request 1 Lot 1820	Test Request 1 Lot 1821	Test Request 1 Lot 1822	Test Request 1 Lot 1823
Latitude	37.54269	-37.54589	-37.54638	-37.54649	-37.54664	-37.54672
Longitude	143.76790	143.76788	143.76779	143.76772	143.76772	143.76763
Layer / Reduced Level	300 Below FSL	150 Below FSL	FSL	150 Below FSL	FSL	150 Below FSL
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**	**
Field Wet Density (FWD) t/m^3	2.04	2.04	2.04	2.09	1.98	2.04
Field Moisture Content %	22.7	15.6	20.7	18.5	24.6	21.2
Field Dry Density (FDD) t/m^3	1.67	1.77	1.69	1.77	1.59	1.68
Peak Converted Wet Density t/m^3	2.09	2.03	2.00	2.00	2.04	2.08
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**	**	**
Moisture Variation (Wv) %	-2.5	1.0	1.5	3.0	-1.0	-2.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	**97.5**	**100.5**	**102.0**	**104.5**	**97.5**	**97.5**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Material Test Report

Report Number: **AGT60134-1**
Issue Number: 1
Date Issued: 12/07/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1014
Date Sampled: 07/07/2022
Dates Tested: 07/07/2022 - 11/07/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: (CH) silty CLAY- Brown
Material Source: Onsite

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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60134-7	60134-8	60134-9	60134-10	60134-11	60134-12
Date Tested	07/07/2022	07/07/2022	07/07/2022	07/07/2022	07/07/2022	07/07/2022
Time Tested	11:45	11:50	12:00	12:10	12:20	12:30
Test Request #/Location	Test Request 1 Lot 1824	Test Request 1 Lot 1825	Test Request 1 Lot 1826	Test Request 1 Lot 1827	Test Request 1 Lot 1828	Test Request 1 Lot 1829
Latitude	-37.54689	-37.54710	-37.54719	-37.54734	-3754754	-37.54759
Longitude	143.76768	143.76762	143.76754	143.76754	143.76747	143.76747
Layer / Reduced Level	300 Below FSL	150 Below FSL	FSL	300 Below FSL	150 Below FSL	FSL
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**	**
Field Wet Density (FWD) t/m^3	2.10	1.96	1.98	2.10	2.12	2.08
Field Moisture Content %	21.0	24.4	28.3	24.1	20.9	22.2
Field Dry Density (FDD) t/m^3	1.73	1.58	1.54	1.69	1.75	1.70
Peak Converted Wet Density t/m^3	2.07	2.04	1.96	1.98	2.16	2.09
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**	**	**
Moisture Variation (Wv) %	-0.5	-2.5	-3.0	0.5	0.5	-0.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	**101.5**	**96.5**	**101.0**	**106.0**	**98.0**	**99.5**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Material Test Report

Report Number: **AGT60134-1**
Issue Number: 1
Date Issued: 12/07/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1014
Date Sampled: 07/07/2022
Dates Tested: 07/07/2022 - 11/07/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: (CH) silty CLAY- Brown
Material Source: Onsite

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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60134-13					
Date Tested	07/07/2022					
Time Tested	12:50					
Test Request #/Location	Test Request 1 Lot 1830					
Latitude	-37.54773					
Longitude	143.76741					
Layer / Reduced Level	150 Below FSL					
Thickness of Layer (mm)	150					
Soil Description	Brown Silty Clay					
Test Depth (mm)	125					
Sieve used to determine oversize (mm)	19.0					
Percentage of Wet Oversize (%)	**					
Field Wet Density (FWD) t/m^3	2.16					
Field Moisture Content %	**					
Field Dry Density (FDD) t/m^3	1.85					
Peak Converted Wet Density t/m^3	2.14					
Adjusted Peak Converted Wet Density t/m^3	**					
Moisture Variation (Wv) %	-0.5					
Adjusted Moisture Variation %	**					
Hilf Density Ratio (%)	**101.0**					
Compaction Method	**Standard**					
Report Remarks	**					

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Material Test Report

Report Number: **AGT60134-2**
Issue Number: 1
Date Issued: 12/07/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1015
Date Sampled: 07/07/2022
Dates Tested: 07/07/2022 - 08/07/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: (CH) silty CLAY- Brown
Material Source: Onsite

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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	60134-14	60134-15	60134-16	60134-17
Date Tested	07/07/2022	07/07/2022	07/07/2022	07/07/2022
Time Tested	15:40	15:30	15:25	15:20
Test Request #/Location	Test Request 2 Lot 1813	Test Request 2 Lot 1814	Test Request 2 Lot 1815	Test Request 2 Lot 1816
Latitude	-37.54585	-37.54559	-37.54596	-37.54602
Longitude	143.76710	143.76786	143.76756	143.76776
Layer / Reduced Level	150 Below FSL	300 Below FSL	150 Below FSL	FSL
Thickness of Layer (mm)	150	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**
Field Wet Density (FWD) t/m^3	1.98	2.02	1.98	2.02
Field Moisture Content %	19.1	18.1	17.7	19.2
Field Dry Density (FDD) t/m^3	1.67	1.71	1.68	1.70
Peak Converted Wet Density t/m^3	1.97	1.98	1.98	1.98
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**
Moisture Variation (Wv) %	2.0	2.0	2.0	2.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	**100.5**	**102.0**	**100.0**	**102.0**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**
Report Remarks	**	**	**	**

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Material Test Report

Report Number: **AGT60134-3**
Issue Number: 1
Date Issued: 14/09/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1024
Date Sampled: 14/07/2022
Dates Tested: 15/07/2022 - 15/07/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: Brown Silty Clay
Material Source: Onsite

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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60134-18	60134-19	60134-20
Date Tested	14/07/2022	14/07/2022	14/07/2022
Time Tested	13:00	13:05	16:55
Test Request #/Location	Level One Supervision Lot 1846	Level One Supervision Lot 1847	Level One Supervision Lot 1847
Latitude	-37.54618	-37.54619	-37.54447
Longitude	143.76734	143.76706	143.77024
Layer / Reduced Level	450mm Below FSL	450mm Below FSL	150mm Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Brown Silty Clay	Brown Silty Clay	Brown Silty Clay
Test Depth (mm)	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**
Field Wet Density (FWD) t/m^3	1.96	2.14	2.07
Field Moisture Content %	23.4	20.0	18.7
Field Dry Density (FDD) t/m^3	1.59	1.79	1.74
Peak Converted Wet Density t/m^3	2.05	2.10	2.06
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Moisture Variation (Wv) %	0.5	0.5	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**96.0**	**102.0**	**100.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Report Remarks	**	**	**

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Material Test Report

Report Number: **AGT60134-4**
Issue Number: 1
Date Issued: 18/07/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1025
Date Sampled: 15/07/2022
Dates Tested: 15/07/2022 - 15/07/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: Brown Silty Clay
Material Source: Onsite

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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60134-21		
Date Tested	15/07/2022		
Time Tested	09:30		
Test Request #/Location	Level One Supervision Lot 1847		
Latitude	-37.54617		
Longitude	143.7671		
Layer / Reduced Level	FSL		
Thickness of Layer (mm)	150		
Soil Description	Brown Silty Clay		
Test Depth (mm)	125		
Sieve used to determine oversize (mm)	19.0		
Percentage of Wet Oversize (%)	**		
Field Wet Density (FWD) t/m^3	2.07		
Field Moisture Content %	22.9		
Field Dry Density (FDD) t/m^3	1.69		
Peak Converted Wet Density t/m^3	2.03		
Adjusted Peak Converted Wet Density t/m^3	**		
Moisture Variation (Wv) %	0.5		
Adjusted Moisture Variation %	**		
Hilf Density Ratio (%)	**102.0**		
Compaction Method	**Standard**		
Report Remarks	**		

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Material Test Report

Report Number: AGT60134-5
Issue Number: 1
Date Issued: 13/09/2022
Client: Wayne Horne Earthmoving
3 Trewin Street, Wendouree VIC 3355
Project Number: AGT60134
Project Name: Lucas Estate Stage H4
Project Location: Lucas Estate Stage H4
Work Request: 1078
Date Sampled: 07/09/2022
Dates Tested: 07/09/2022 - 09/09/2022
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95% Standard
Site Selection: Selected by Client
Location: Lucas Estate Stage H4
Material: (CH) silty CLAY- Brown
Material Source: Onsite

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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60134-22	60134-23	60134-24	60134-25	60134-26	60134-27
Date Tested	07/09/2022	07/09/2022	07/09/2022	07/09/2022	07/09/2022	07/09/2022
Time Tested	11:50	11:55	12:05	12:15	12:20	12:30
Test Request #/Location	Level One Supervision Lot 1832	Level One Supervision Lot 1833	Level One Supervision Lot 1833	Level One Supervision Lot 1834	Level One Supervision Lot 1835	Level One Supervision Lot 1835
Latitude	37.54824	-37.54814	-37.54818	-37.54816	-37.54820	-37.54821
Longitude	143.76773	143.76763	143.76752	143.76736	143.76747	143.76729
Layer / Reduced Level	FSL	150 BelowFSL	FSL	FSL	150 BelowFSL	FSL
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
Test Depth (mm)	125	125	125	125	125	125
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**	**
Field Wet Density (FWD) t/m^3	2.00	1.94	2.09	2.12	1.98	2.05
Field Moisture Content %	25.2	20.9	20.0	23.0	24.1	21.4
Field Dry Density (FDD) t/m^3	1.59	1.61	1.74	1.73	1.60	1.69
Peak Converted Wet Density t/m^3	2.10	2.02	2.13	2.03	2.05	2.05
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**	**	**
Moisture Variation (Wv) %	-1.5	-0.5	-1.0	0.0	0.0	0.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	**95.5**	**96.0**	**98.5**	**104.5**	**96.5**	**100.0**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**
Report Remarks	**	**	**	**	**	**

Moisture Variation Note:
Positive values = test is dry of OMC
Negative values = test is wet of OMC

Appendix C – Site Photos