



# Australian Geotechnical Testing

## Level One Inspection and Testing

Project No: AGTEAGTE240210  
Project: Drews Paddock Stage 3  
Suburb: Invermay



**Client: Wayne Horne Earth Moving**

**Date: 3<sup>rd</sup> July 2024**

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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**

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## 1 Introduction

Australian Geotechnical Testing (AGT) has been engaged by Wayne Horne Earth Moving to provide Level 1 Geotechnical Supervision for the Drews Paddock Stage 2 project. The Estate is located in Invermay.

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 **6<sup>th</sup> December 2023 to 22<sup>nd</sup> April 2024**.

## 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 ( $\frac{2}{3}$ ) 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<sup>2</sup> per layer, or 1 test per 500m<sup>3</sup> throughout the placement of fill as per AS3798 Table 8.1.

The material was site derived Sandy Clay fill & imported Gravelly Sandy Clay Fill. 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 Earth Moving 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 Earth Moving 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.

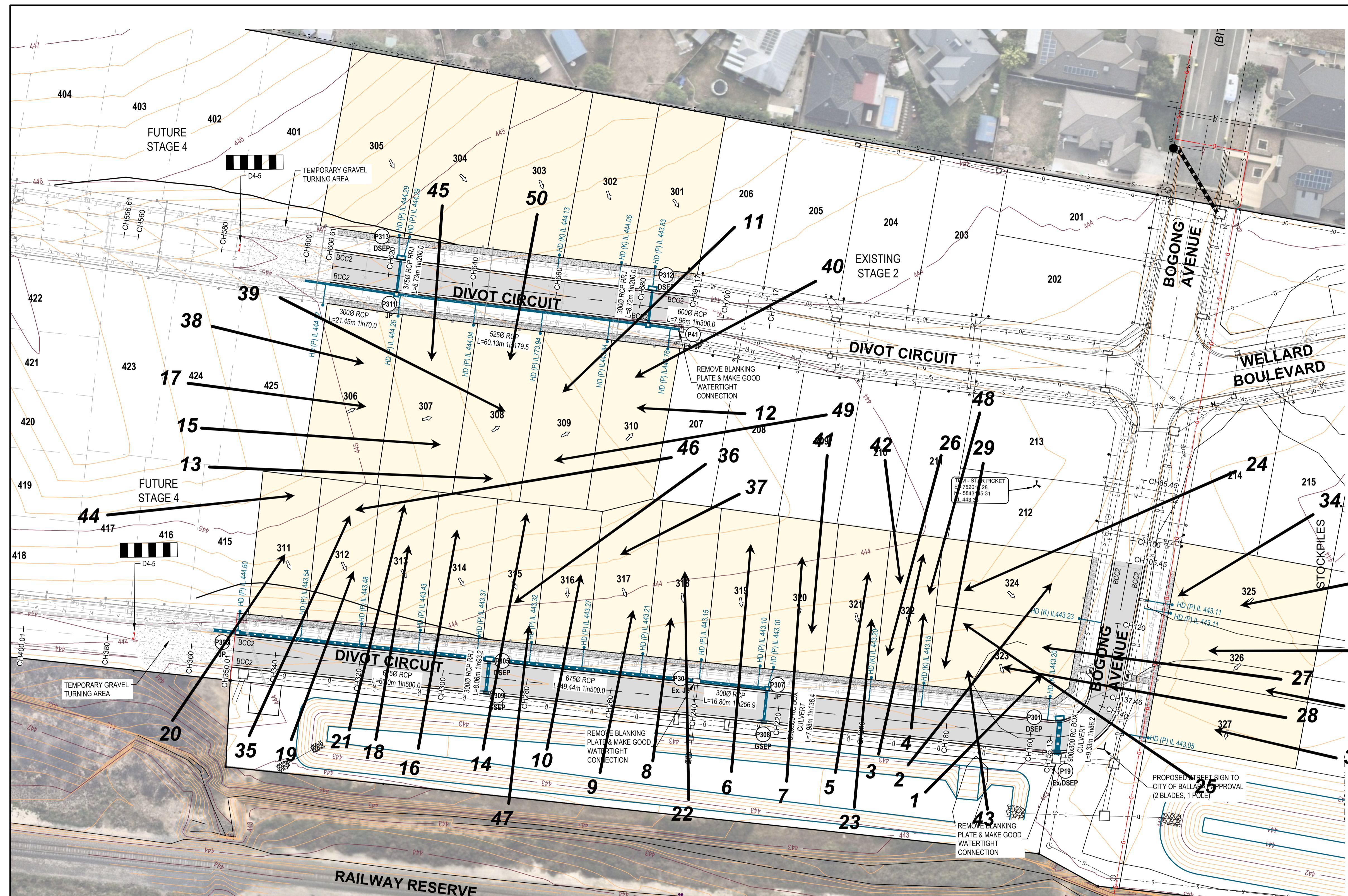


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## Appendix A – Site Plan



#### ROAD & DRAINAGE LAYOUT

SCALE 1:500

**NOTE:**  
THE 3D SURFACE IS TO BE USED IN CONJUNCTION WITH THE DESIGN PLANS.  
THERE ARE LIKELY TO BE DISCREPANCIES, AND THE DESIGN PLANS ARE TO TAKE  
PRECEDENCE.

THE CONTRACTOR SHOULD CONTACT STANTEC IF THERE IS UNCERTAINTY  
REGARDING THE INFORMATION PROVIDED.

**NOTE:**  
THE CONTRACTOR IS TO CONFIRM INVERT LEVELS OF THE EXISTING STORMWATER  
AT PITS P19, P41 & P304 PRIOR TO ANY DRAINAGE WORKS COMMENCING.

**NOTE:**  
THE CONTRACTOR IS TO NOTIFY LAND OWNERS EFFECTED BY WORKS AT LEAST  
7 DAYS PRIOR TO WORKS COMMENCING.

**NOTE:**  
CONTRACTOR IS TO BE AWARE OF THE LOCALISED  
LOWERING OF SERVICES INFRASTRUCTURE TO  
PROVIDE MINIMUM CLEARANCES TO EXISTING AND  
PROPOSED INFRASTRUCTURE. LOCALISED LOCATIONS  
ARE INDICATED BASED ON ANTICIPATED SERVICE  
INFRASTRUCTURE ALIGNMENTS AND SHOULD BE  
CONSIDERED BY THE CONTRACTOR WHEN PRICING.

**NOTE:**  
CONTRACTOR TO CONFIRM EXISTING PAVEMENT LEVELS PRIOR TO  
COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE REPORTED TO  
THE ENGINEER. ALL KERB SETOUT TO BE INSPECTED AND APPROVED BY THE COUNCIL  
OFFICER PRIOR TO PLACEMENT OF KERB & CHANNEL.

**NOTE:**  
ALL DISTURBED SURFACES, FENCING & OTHER ITEMS TO BE RE-INSTATED TO  
ORIGINAL CONDITION.

**NOTE:**  
THE LOCATION OF EXISTING UNDERGROUND SERVICES ARE SHOWN INDICATIVELY  
ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AUTHORITIES  
TO DETERMINE THE LOCATION OF UNDERGROUND SERVICES PRIOR TO THE  
COMMENCEMENT OF CONSTRUCTION WORK. ANY CLASH OF WORKS WITH A  
SERVICE IS TO BE REPORTED TO THE ENGINEER IMMEDIATELY. THE  
CONTRACTOR SHALL ENSURE THAT ALL SERVICES ARE FULLY PROTECTED  
DURING CONSTRUCTION. ANY SERVICES DAMAGED DURING CONSTRUCTION  
SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

**ISSUED FOR TENDER  
PURPOSES ONLY**

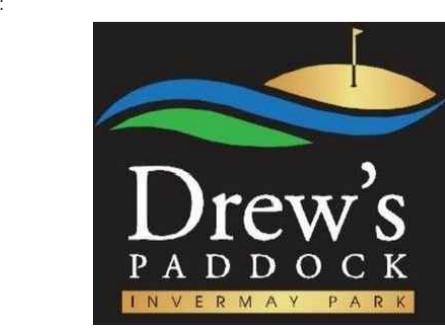
ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED	ISSUE	ISSUED FOR	DATE	DRAWN	APPROVED
01	INFORMATION	08/05/2023	CB						
02	TENDER	07/06/2023	CB/LP						



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Communities Designed for Living



STAGE  
3  
27 LOTS

CIVIL DRAWING

DRAWING TITLE  
ROAD & DRAINAGE LAYOUT PLAN

REF. No.: 17547-203 SHEET: C02 OF 08 REV: 02

## Appendix B – Laboratory Testing

# Material Test Report

**Report Number:** AGT60298-1  
**Issue Number:** 1  
**Date Issued:** 08/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1835  
**Date Sampled:** 29/01/2024  
**Dates Tested:** 29/01/2024 - 30/01/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** The grange estate



Australian Geotechnical Testing

Ballarat Laboratory

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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	60298-1	60298-2	60298-3
Date Tested	29/01/2024	29/01/2024	29/01/2024
Time Tested	13:00	13:05	13:10
Test Request #/Location	Drews Paddock - Stage 3 Lot 323	Drews Paddock - Stage 3 Lot 324	Drews Paddock - Stage 3 Lot 322
Latitude	-37.524086	-37.524128	-37.524357
Longitude	143.851270	143.851539	143.851869
Layer / Reduced Level	400 Below FSL	400 Below FSL	400 Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
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 <sup>3</sup>	1.98	2.09	2.11
Field Moisture Content %	18.9	18.3	20.6
Field Dry Density (FDD) t/m <sup>3</sup>	1.67	1.76	1.75
Peak Converted Wet Density t/m <sup>3</sup>	2.06	2.16	2.16
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**
Moisture Variation (Wv) %	3.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	96.5	97.5
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:** AGT60298-2  
**Issue Number:** 1  
**Date Issued:** 08/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1836  
**Date Sampled:** 30/01/2024  
**Dates Tested:** 30/01/2024 - 31/01/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Import grange



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Laboratory Manager - Ballarat

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-4	60298-5	
Date Tested	30/01/2024	30/01/2024	
Time Tested	13:00	13:05	
Test Request #/Location	Drews Paddock - Stage 2 Lot 322	Drews Paddock - Stage 2 Lot 321	
Latitude	-37.523931	-37.523886	
Longitude	143.851575	143.851523	
Layer / Reduced Level	400 Below FSL	400 Below FSL	
Thickness of Layer (mm)	150	150	
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	
Test Depth (mm)	125	125	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	**	**	
Field Wet Density (FWD) t/m <sup>3</sup>	2.06	2.06	
Field Moisture Content %	16.9	19.4	
Field Dry Density (FDD) t/m <sup>3</sup>	1.76	1.73	
Peak Converted Wet Density t/m <sup>3</sup>	2.05	2.07	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Moisture Variation (Wv) %	0.0	0.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	100.5	99.5	
Compaction Method	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:** AGT60298-3  
**Issue Number:** 1  
**Date Issued:** 08/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1841  
**Date Sampled:** 31/01/2024  
**Dates Tested:** 31/01/2024 - 01/02/2024  
**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:** Drews Paddock Stage 3, Invermay  
**Material:** Silty CLAY



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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	60298-6	60298-7
Date Tested	31/01/2024	31/01/2024
Time Tested	13:00	13:10
Test Request #/Location	Drews Paddock-Stage 3 Lot 319	Drews Paddock-Stage 3 Lot 320
Latitude	-37.52384	-37.5235
Longitude	143.85176	143.851
Layer / Reduced Level	450mm below FSL	450mm below FSL
Thickness of Layer (mm)	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
Test Depth (mm)	125	125
Sieve used to determine oversize (mm)	19.0	19.0
Percentage of Wet Oversize (%)	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.00	1.97
Field Moisture Content %	21.5	21.9
Field Dry Density (FDD) t/m <sup>3</sup>	1.65	1.62
Peak Converted Wet Density t/m <sup>3</sup>	1.98	2.01
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**
Moisture Variation (Wv) %	0.0	-0.5
Adjusted Moisture Variation %	**	**
Hilf Density Ratio (%)	101.5	98.0
Compaction Method	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:** AGT60298-4  
**Issue Number:** 1  
**Date Issued:** 08/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1842  
**Date Sampled:** 02/02/2024  
**Dates Tested:** 02/02/2024 - 03/02/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Import grange



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Laboratory Manager - Ballarat

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1		
Sample Number	60298-8	60298-9
Date Tested	02/02/2024	02/02/2024
Time Tested	16:20	16:25
Test Request #/Location	Drews Paddock - Stage 3 Lot 318	Drews Paddock - Stage 3 Lot 317
Latitude	-37.523451	-37.523444
Longitude	143.851608	143.851639
Layer / Reduced Level	450 Below FSL	450 Below FSL
Thickness of Layer (mm)	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
Test Depth (mm)	125	125
Sieve used to determine oversize (mm)	19.0	19.0
Percentage of Wet Oversize (%)	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.08	2.08
Field Moisture Content %	21.9	18.4
Field Dry Density (FDD) t/m <sup>3</sup>	1.70	1.75
Peak Converted Wet Density t/m <sup>3</sup>	2.08	2.06
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**
Moisture Variation (Wv) %	-0.5	-0.5
Adjusted Moisture Variation %	**	**
Hilf Density Ratio (%)	100.0	101.0
Compaction Method	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:** AGT60298-5  
**Issue Number:** 1  
**Date Issued:** 08/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1846  
**Dates Tested:** 06/02/2024 - 07/02/2024  
**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:** Drews Paddock, Stage 3  
**Material:** Silty CLAY  
**Material Source:** Import



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NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-10	60298-11	60298-12
Date Tested	06/02/2024	06/02/2024	06/02/2024
Time Tested	13:00	13:05	13:10
Test Request #/Location	Drews Paddock - Stage 3 Lot 316	Drews Paddock - Stage 3 Lot 309	Drews Paddock - Stage 3 Lot 310
Latitude	-37.52356	-37.52364	37.52368
Longitude	143.5152	143.85171	143.85185
Layer / Reduced Level	450 mm below FSL	450 mm below FSL	450 mm below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Silty CLAY	Silty CLAY	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 <sup>3</sup>	2.15	2.01	1.96
Field Moisture Content %	13.4	14.5	16.1
Field Dry Density (FDD) t/m <sup>3</sup>	1.90	1.75	1.69
Peak Converted Wet Density t/m <sup>3</sup>	2.12	2.00	1.93
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**
Moisture Variation (Wv) %	3.0	2.0	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	101.5	100.0	102.0
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:** AGT60298-6  
**Issue Number:** 1  
**Date Issued:** 15/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1852  
**Date Sampled:** 12/02/2024  
**Dates Tested:** 12/02/2024 - 14/02/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Lucas, Grange



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Laboratory Manager - Ballarat

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	60298-13	60298-14	60298-15	60298-16
Date Tested	12/02/2024	12/02/2024	12/02/2024	12/02/2024
Time Tested	14:00	14:05	14:10	14:15
Test Request #/Location	Drews Paddock - Stage 3 Lot 308	Drews Paddock - Stage 3 Lot 315	Drews Paddock - Stage 3 Lot 307	Drews Paddock - Stage 3 Lot 314
Latitude	-37.523127	-37.522982	-37.522930	-37.523343
Longitude	143.851800	143.852399	143.851915	143.851841
Layer / Reduced Level	400 Below FSL	400 Below FSL	400 Below FSL	400 Below FSL
Thickness of Layer (mm)	150	150	150	150
Soil Description	(CH) silty CLAY- Brown			
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 <sup>3</sup>	2.17	2.12	2.08	2.10
Field Moisture Content %	18.1	16.9	17.0	18.2
Field Dry Density (FDD) t/m <sup>3</sup>	1.84	1.81	1.78	1.78
Peak Converted Wet Density t/m <sup>3</sup>	2.10	2.11	2.13	2.14
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	3.0	3.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	103.5	100.5	98.0	98.0
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:** AGT60298-6  
**Issue Number:** 1  
**Date Issued:** 15/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1852  
**Date Sampled:** 12/02/2024  
**Dates Tested:** 12/02/2024 - 14/02/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Lucas, Grange



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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	60298-17	60298-18	60298-19	60298-20
Date Tested	12/02/2024	12/02/2024	12/02/2024	12/02/2024
Time Tested	14:20	14:25	14:30	14:35
Test Request #/Location	Drews Paddock - Stage 3 Lot 306	Drews Paddock - Stage 3 Lot 313	Drews Paddock - Stage 3 Lot 312	Drews Paddock - Stage 3 Lot 311
Latitude	-37.523104	-37.523124	-37.523132	-37.522833
Longitude	143.851916	143.851661	143.851967	143.851708
Layer / Reduced Level	400 Below FSL	400 Below FSL	400 Below FSL	400 Below FSL
Thickness of Layer (mm)	150	150	150	150
Soil Description	(CH) silty CLAY- Brown			
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 <sup>3</sup>	2.16	2.17	2.19	2.19
Field Moisture Content %	16.0	18.4	14.9	16.9
Field Dry Density (FDD) t/m <sup>3</sup>	1.86	1.83	1.91	1.87
Peak Converted Wet Density t/m <sup>3</sup>	2.10	2.19	2.11	2.11
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	3.5	3.0	4.5	4.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	102.5	99.0	104.0	104.0
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:** AGT60298-7  
**Issue Number:** 1  
**Date Issued:** 15/02/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1853  
**Date Sampled:** 13/02/2024  
**Dates Tested:** 13/02/2024 - 14/02/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Lucas, The Grange



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Laboratory Manager - Ballarat

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	60298-21	60298-22	60298-23	60298-24
Date Tested	13/02/2024	13/02/2024	13/02/2024	13/02/2024
Time Tested	13:00	13:05	13:10	13:15
Test Request #/Location	Drews Paddock - Stage 3 Lot 313	Drews Paddock - Stage 3 Lot 318	Drews Paddock - Stage 3 Lot 321	Drews Paddock - Stage 3 Lot 324
Latitude	-37.523351	-37.523715	-37.523853	-37.524298
Longitude	143.8515301	143.851497	143.851341	143.851602
Layer / Reduced Level	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150	150
Soil Description	(CH) silty CLAY- Brown			
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 <sup>3</sup>	2.04	2.11	2.11	2.15
Field Moisture Content %	16.8	13.3	18.0	14.6
Field Dry Density (FDD) t/m <sup>3</sup>	1.75	1.86	1.79	1.88
Peak Converted Wet Density t/m <sup>3</sup>	2.08	2.12	2.15	2.11
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	1.5	0.0	-0.5	-0.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	98.5	99.5	98.5	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:** AGT60298-8  
**Issue Number:** 1  
**Date Issued:** 01/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1871  
**Date Sampled:** 06/12/2023  
**Dates Tested:** 09/12/2023 - 09/12/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Remarks:** Copied from AGT60290-1 as incorrect Stage Number used  
**Specification:** 95% Standard  
**Site Selection:** Selected by Client  
**Location:** Drews Paddock Stage 3, Invermay  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Onsite



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Laboratory Manager - Ballarat

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-25	60298-26	60298-27
Date Tested	06/02/2024	06/02/2024	06/02/2024
Time Tested	12:20	16:40	16:45
Test Request #/Location	Level One Supervision Lot 323	Level One Supervision Lot 322	Level One Supervision Lot 323
Easting	-37.5241	-37.5248	-67.52416
Northing	143.85173	143.85126	143.85132
Layer / Reduced Level	1.0m below FSL	1.0m below FSL	1.0m below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
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 <sup>3</sup>	1.92	1.96	1.92
Field Moisture Content %	25.0	23.0	17.0
Field Dry Density (FDD) t/m <sup>3</sup>	1.54	1.60	1.64
Peak Converted Wet Density t/m <sup>3</sup>	1.95	1.97	1.96
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**
Moisture Variation (Wv) %	0.5	0.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.5	99.5	98.0
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:** AGT60298-9  
**Issue Number:** 1  
**Date Issued:** 01/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1872  
**Date Sampled:** 07/02/2024  
**Dates Tested:** 08/12/2023 - 09/12/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Remarks:** Copies from AGT60290-2 as incorrect Stage used  
**Specification:** 95% Standard  
**Site Selection:** Selected by Client  
**Location:** Drews Paddock Stage 3, Invermay  
**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	60298-28	60298-29
Date Tested	07/12/2023	07/12/2023
Time Tested	11:15	16:15
Test Request #/Location	Level One Supervision Lot 323	Level One Supervision Lot 323
Latitude	-37.52412	-37.52403
Longitude	143.85132	143.85132
Layer / Reduced Level	700mm below FSL	400mm below FSL
Thickness of Layer (mm)	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
Test Depth (mm)	125	125
Sieve used to determine oversize (mm)	19.0	19.0
Percentage of Wet Oversize (%)	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	1.91	1.92
Field Moisture Content %	26.0	30.3
Field Dry Density (FDD) t/m <sup>3</sup>	1.52	1.48
Peak Converted Wet Density t/m <sup>3</sup>	1.92	1.93
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**
Moisture Variation (Wv) %	0.0	0.0
Adjusted Moisture Variation %	**	**
Hilf Density Ratio (%)	99.5	99.5
Compaction Method	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:** AGT60298-10  
**Issue Number:** 1  
**Date Issued:** 01/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1873  
**Date Sampled:** 18/12/2023  
**Dates Tested:** 21/12/2023 - 21/12/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Remarks:** Copied from AGT60290-7 as incorrect stage used  
**Specification:** 95% Standard  
**Site Selection:** Selected by Client  
**Location:** Drews Paddock Stage 3, Invermay  
**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	60298-30	60298-31	
Date Tested	18/02/2024	18/02/2024	
Time Tested	13:00	13:05	
Test Request #/Location	Level One Supervision Lot 326	Level One Supervision Lot 325	
Latitude	-37.52428	-37.52478	
Longitude	143.84495	143.85173	
Layer / Reduced Level	300mm below FSL	300mm below FSL	
Thickness of Layer (mm)	150	150	
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown	
Test Depth (mm)	125	125	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	**	**	
Field Wet Density (FWD) t/m <sup>3</sup>	2.10	2.12	
Field Moisture Content %	14.5	20.5	
Field Dry Density (FDD) t/m <sup>3</sup>	1.83	1.76	
Peak Converted Wet Density t/m <sup>3</sup>	2.08	2.09	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Moisture Variation (Wv) %	0.0	0.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	100.5	101.5	
Compaction Method	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:** AGT60298-11  
**Issue Number:** 1  
**Date Issued:** 01/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1874  
**Date Sampled:** 20/12/2023  
**Dates Tested:** 21/12/2023 - 21/12/2023  
**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:** Drews Paddock Stage 3, Invermay  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Onsite



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NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1		
Sample Number	60298-32	60298-33
Date Tested	20/12/2023	20/12/2023
Time Tested	13:00	13:05
Test Request #/Location	Level One Supervision Lot 326	Level One Supervision Lot 327
Latitude	-37.52657	-37.52489
Longitude	143.58184	143.85128
Layer / Reduced Level	FSL	FSL
Thickness of Layer (mm)	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
Test Depth (mm)	125	125
Sieve used to determine oversize (mm)	19.0	19.0
Percentage of Wet Oversize (%)	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.00	2.04
Field Moisture Content %	14.5	20.5
Field Dry Density (FDD) t/m <sup>3</sup>	1.75	1.69
Peak Converted Wet Density t/m <sup>3</sup>	2.04	2.07
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**
Moisture Variation (Wv) %	0.0	0.5
Adjusted Moisture Variation %	**	**
Hilf Density Ratio (%)	98.0	98.5
Compaction Method	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:** AGT60298-12  
**Issue Number:** 1  
**Date Issued:** 01/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1875  
**Date Sampled:** 21/12/2023  
**Dates Tested:** 22/12/2023 - 22/12/2023  
**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:** Drews Paddock Stage 3, Invermay  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Onsite



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NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-34		
Date Tested	21/12/2023		
Time Tested	13:00		
Test Request #/Location	Level One Supervision Lot 325		
Latitude	-37.52515		
Longitude	143.8514		
Layer / Reduced Level	FSL		
Thickness of Layer (mm)	150		
Soil Description	(CH) silty CLAY- Brown		
Test Depth (mm)	125		
Sieve used to determine oversize (mm)	19.0		
Percentage of Wet Oversize (%)	**		
Field Wet Density (FWD) t/m <sup>3</sup>	2.07		
Field Moisture Content %	19.3		
Field Dry Density (FDD) t/m <sup>3</sup>	1.74		
Peak Converted Wet Density t/m <sup>3</sup>	2.09		
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**		
Moisture Variation (Wv) %	0.5		
Adjusted Moisture Variation %	**		
Hilf Density Ratio (%)	99.0		
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:** AGT60298-13  
**Issue Number:** 1  
**Date Issued:** 26/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1903  
**Date Sampled:** 22/03/2024  
**Dates Tested:** 22/03/2024 - 25/03/2024  
**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:** Drews Paddock Stage 3  
**Material:** Silty Clay  
**Material Source:** Onsite



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	60298-38	60298-39	60298-40	60298-41	60298-42	60298-43
Date Tested	22/03/2024	22/03/2024	22/03/2024	22/03/2024	22/03/2024	22/03/2024
Time Tested	10:40	10:45	10:50	12:55	13:00	13:05
Test Request #/Location	Level One Supervisor Lot 306	Level One Supervisor Lot 308	Level One Supervisor Lot 310	Level One Supervisor Lot 320	Level One Supervisor Lot 322	Level One Supervisor Lot 323
Latitude	-37.523625	-37.523265	-37.523055	-37.524645	-37.523986	-37.524372
Longitude	143.851921	143.852075	143.851907	143.851506	143.851567	143.851412
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150	150	150	150
Soil Description	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 <sup>3</sup>	1.98	1.95	1.97	1.93	1.96	1.94
Field Moisture Content %	22.0	22.0	20.3	18.5	19.6	19.5
Field Dry Density (FDD) t/m <sup>3</sup>	1.63	1.60	1.64	1.63	1.64	1.62
Peak Converted Wet Density t/m <sup>3</sup>	2.01	2.02	2.00	2.01	2.01	2.02
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**	**	**
Moisture Variation (Wv) %	0.5	-0.5	0.0	0.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	98.5	96.5	99.0	96.0	97.5	96.0
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

# Material Test Report

**Report Number:** AGT60298-14  
**Issue Number:** 1  
**Date Issued:** 26/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1899  
**Date Sampled:** 21/03/2024  
**Dates Tested:** 21/03/2024 - 22/03/2024  
**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:** Drews Paddock Stage 3  
**Material:** Silty Clay  
**Material Source:** Onsite



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Laboratory Manager - Ballarat

NATA Accredited Laboratory Number: 20457

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-35	60298-36	60298-37
Date Tested	21/03/2024	21/03/2024	21/03/2024
Time Tested	13:05	13:10	13:15
Test Request #/Location	Level One Supervision Lot 312	Level One Supervision Lot 315	Level One Supervision Lot 317
Latitude	-37.523051	-37.523312	-37.523465
Longitude	143.851660	143.851834	143.851735
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	150	150	150
Soil Description	Silty Clay	Silty Clay	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 <sup>3</sup>	1.81	1.82	1.85
Field Moisture Content %	19.7	31.4	24.7
Field Dry Density (FDD) t/m <sup>3</sup>	1.51	1.38	1.48
Peak Converted Wet Density t/m <sup>3</sup>	1.89	1.87	1.86
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**
Moisture Variation (Wv) %	4.0	2.5	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	97.0	99.5
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:** AGT60298-15  
**Issue Number:** 1  
**Date Issued:** 27/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1904  
**Date Sampled:** 25/03/2024  
**Dates Tested:** 25/03/2024 - 25/03/2024  
**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:** Drews Paddock Stage 3  
**Material:** (CH) silty CLAY- Brown  
**Material Source:** Import



Australian Geotechnical Testing

Ballarat Laboratory

2/55 Heinz Road Delacombe VIC 3356

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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	60298-44	60298-45
Date Tested	25/03/2024	25/03/2024
Time Tested	13:00	13:05
Test Request #/Location	Drews Paddock Stage 3 Lot 311	Drews Paddock Stage 3 Lot 307
Latitude	-37.523004	-37.523208
Longitude	143.851848	143.851876
Layer / Reduced Level	FSL	FSL
Thickness of Layer (mm)	150	150
Soil Description	(CH) silty CLAY- Brown	(CH) silty CLAY- Brown
Test Depth (mm)	125	125
Sieve used to determine oversize (mm)	19.0	19.0
Percentage of Wet Oversize (%)	**	**
Field Wet Density (FWD) t/m <sup>3</sup>	2.03	1.95
Field Moisture Content %	19.9	27.1
Field Dry Density (FDD) t/m <sup>3</sup>	1.69	1.53
Peak Converted Wet Density t/m <sup>3</sup>	2.03	2.00
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**
Moisture Variation (Wv) %	0.0	0.0
Adjusted Moisture Variation %	**	**
Hilf Density Ratio (%)	100.0	97.5
Compaction Method	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:** AGT60298-16  
**Issue Number:** 1  
**Date Issued:** 27/03/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1910  
**Date Sampled:** 26/03/2024  
**Dates Tested:** 26/03/2024 - 26/03/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CL) CLAY- Brown  
**Material Source:** Import Napoleons Quarrie



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-46	60298-47	60298-48
Date Tested	26/03/2024	26/03/2024	26/03/2024
Time Tested	13:00	13:05	13:10
Test Request #/Location	Drews Paddock - Stage 3 Lot 312	Drews Paddock - Stage 3 Lot 315	Drews Paddock - Stage 3 Lot 322
Latitude	-37.523110	-37.523482	-37.523902
Longitude	143.851988	143.881913	143.851813
Layer / Reduced Level	150 Below FSL	300 Below FSL	150 Below FSL
Thickness of Layer (mm)	150	150	150
Soil Description	(CL) CLAY- Brown	(CL) CLAY- Brown	(CL) CLAY- Brown
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 <sup>3</sup>	1.93	1.94	1.94
Field Moisture Content %	21.7	23.2	24.6
Field Dry Density (FDD) t/m <sup>3</sup>	1.59	1.57	1.56
Peak Converted Wet Density t/m <sup>3</sup>	1.98	1.87	1.92
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**
Moisture Variation (Wv) %	5.5	4.5	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.5	103.5	101.5
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:** AGT60298-17  
**Issue Number:** 1  
**Date Issued:** 22/04/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1935  
**Date Sampled:** 16/04/2024  
**Dates Tested:** 16/04/2024 - 19/04/2024  
**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:** Drews Paddock, Stage 3  
**Material:** (CL) CLAY- Brown  
**Material Source:** Onsite



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	60298-49		
Date Tested	16/04/2024		
Time Tested	12:50		
Test Request #/Location	Drews Paddock - Stage 3 Lot 309		
Latitude	-37.523407		
Longitude	143.852116		
Layer / Reduced Level	FSL		
Thickness of Layer (mm)	150		
Soil Description	CLAY		
Test Depth (mm)	125		
Sieve used to determine oversize (mm)	19.0		
Percentage of Wet Oversize (%)	**		
Field Wet Density (FWD) t/m <sup>3</sup>	2.05		
Field Moisture Content %	18.2		
Field Dry Density (FDD) t/m <sup>3</sup>	1.74		
Peak Converted Wet Density t/m <sup>3</sup>	2.09		
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**		
Moisture Variation (Wv) %	-1.5		
Adjusted Moisture Variation %	**		
Hilf Density Ratio (%)	98.0		
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:** AGT60298-18  
**Issue Number:** 1  
**Date Issued:** 26/04/2024  
**Client:** Wayne Horne Earthmoving  
 3 Trewin Street, Wendouree VIC 3355  
**Project Number:** AGT60298  
**Project Name:** Drews Paddock, Stage 3  
**Project Location:** Invermay  
**Work Request:** 1950  
**Date Sampled:** 22/04/2024  
**Dates Tested:** 22/04/2024 - 24/04/2024  
**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:** Drews Paddock Stage 3  
**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	60298-50		
Date Tested	22/04/2024		
Time Tested	15:55		
Test Request #/Location	Drews Paddock Stage 3 Lot 308		
Latitude	-37.523525		
Longitude	143.851783		
Layer / Reduced Level	150 below		
Thickness of Layer (mm)	150		
Soil Description	(CH) silty CLAY- Brown		
Test Depth (mm)	125		
Sieve used to determine oversize (mm)	19.0		
Percentage of Wet Oversize (%)	**		
Field Wet Density (FWD) t/m <sup>3</sup>	1.92		
Field Moisture Content %	25.0		
Field Dry Density (FDD) t/m <sup>3</sup>	1.54		
Peak Converted Wet Density t/m <sup>3</sup>	1.94		
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**		
Moisture Variation (Wv) %	4.0		
Adjusted Moisture Variation %	**		
Hilf Density Ratio (%)	99.0		
Compaction Method	Standard		
Report Remarks	**		

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

## Appendix C – Site Photos

