



# Australian Geotechnical Testing

## Level One Inspection and Testing

Project No:

Project: Miravale Stage 6

Suburb: Angle Vale



**Client: Neo Infrastructure**

**Date: 21/03/23**

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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	

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## 1 Introduction

Australian Geotechnical Testing (AGT) has been engaged by Neo Infrastructure to provide Level 1 Geotechnical Supervision for the Miravale Stage 6 project. The Estate is located at Angle Vale.

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 the 13<sup>th</sup> of July 2022 to 28<sup>th</sup> of October 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)**
- **+/- 2% of Optimum Moisture Content**

General fill material used for the construction was locally sourced and predominantly comprising of **Gravelly Sandy 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 and imported Gravelly Sandy CLAY Fill**. The material was placed in approximately 300mm loose layers, rolling effort with on-site Compactor (to seal of each layer of placed General Fill material) to a compacted 200mm 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: Neo Infrastructure 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 Neo Infrastructure 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.

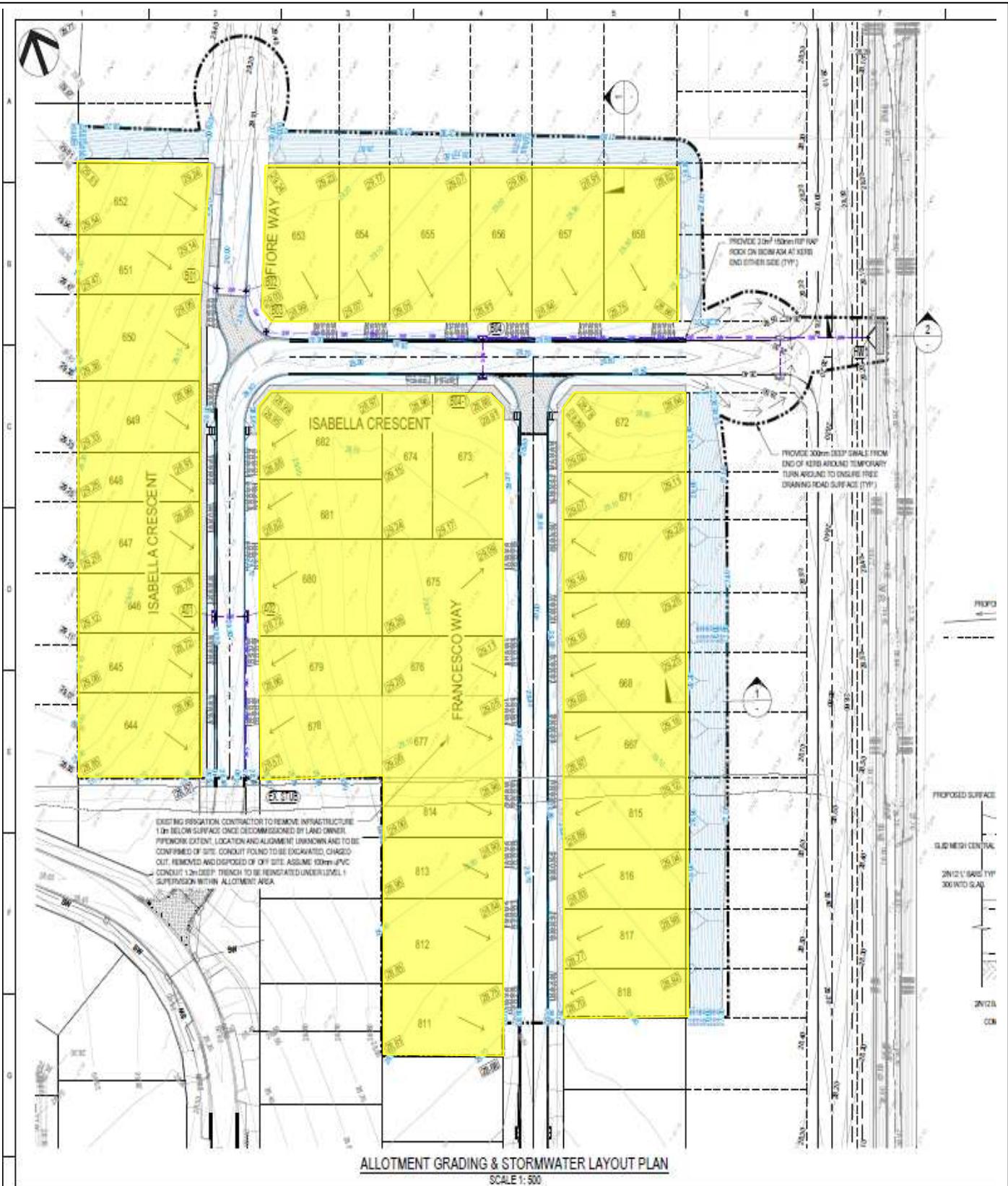


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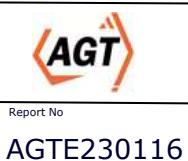
## Appendix A – Site Plan



SITE PLAN - NOT TO SCALE

**Key**

Level One Fill Location



**Miravale Stage 6**

**Angle Vale**

**Neo Infrastructure**

## Appendix B – Laboratory Testing

# Project Summary Report

**Report Date:** 21/03/2023  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Contact:** Don Winter  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Specification:** 95% Standard AS1289 5.1.1  
**Test Methods:** AS 1289 5.1.1 STD & 5.4.1 & 5.8.1 & 2.1.1



Australian Geotechnical Testing

Adelaide Laboratory

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Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m³)
**	41183-1	13/07/2022	Lot 646	8m N	6m E	**	Subgrade	100.0	-0.5	11.8	2.16
**	41183-2	13/07/2022	Lot 649	10m N	18m E	**	Subgrade	95.0	1.5	8.5	2.01
**	41183-3	15/07/2022	Lot 644	12m N	6m N	**	Subgrade	101.0	0.0	10.6	2.18
**	41183-4	15/07/2022	Lot 651	18m E	6m E	**	Subgrade	98.0	-1.0	10.9	2.11
**	41183-8	15/07/2022	Lot 811	10m N	18m W	**	Subgrade	95.0	0.0	12.8	2.04
**	41183-5	15/07/2022	Lot 645	6m N	11m W	**	Layer 1	99.0	-1.0	9.7	2.17
**	41183-6	15/07/2022	Lot 648	4m N	15m W	**	Layer 1	96.0	-1.0	8.5	2.21
**	41183-7	15/07/2022	Lot 651	5m N	12m W	**	Layer 1	96.5	-0.5	8.0	2.24
**	41183-9	15/07/2022	Lot 813	6m N	16m W	**	Subgrade	95.5	0.5	15.1	2.05
**	41183-10	15/07/2022	Lot 677	8m N	14m W	**	Subgrade	98.0	1.5	11.4	2.05
**	41183-11	15/07/2022	Lot 679	4m N	11m W	**	Subgrade	97.5	1.0	10.9	2.05
**	41183-12	15/07/2022	Lot 681	6m N	14m W	**	Subgrade	95.0	0.5	11.1	2.04
**	41183-13	15/07/2022	Lot 674	21m N	4m W	**	Subgrade	95.5	0.5	10.8	2.03
**	41183-14	15/07/2022	Lot 673	15m N	8m W	**	Subgrade	96.0	0.0	11.6	2.06
**	41183-19	21/07/2022	Lot 653	6m N	8m E	**	Subgrade	98.0	2.0	7.7	2.12
**	41183-20	21/07/2022	Lot 656	22m N	7m E	**	Subgrade	96.5	1.0	8.4	2.08
**	41183-21	21/07/2022	Lot 658	12m N	6m E	**	Subgrade	97.5	1.0	9.5	2.13
**	41183-15	21/07/2022	Lot 682	10m N	11m W	**	Layer 1	96.5	0.0	10.3	2.09
**	41183-16	21/07/2022	Lot 679	6m N	14m W	**	Layer 1	96.0	1.5	8.7	2.07
**	41183-17	21/07/2022	Lot 811	8m N	14m W	**	Layer 1	99.5	0.5	8.8	2.15
**	41183-18	21/07/2022	Lot 813	6m N	15m W	**	Layer 1	98.5	1.0	8.7	2.13
**	41183-22	25/07/2022	Lot 644	10m W	2m N	**	Layer 2	95.0	-1.0	11.6	2.14
**	41183-23	25/07/2022	Lot 649	8m W	4m N	**	Layer 2	96.0	-1.0	10.3	2.15
**	41183-24	25/07/2022	Lot 652	5m W	5m N	**	Layer 2	95.0	0.5	7.6	2.11
**	41183-25	25/07/2022	Lot 678	4m W	2m N	**	Layer 2	100.0	-1.0	12.1	2.21
**	41183-26	25/07/2022	Lot 681	10m W	4m N	**	Layer 2	101.5	0.0	7.9	2.19
**	41183-27	26/07/2022	Lot 675	4m W	4m N	**	Layer 3	96.5	1.0	6.9	2.11
**	41183-28	26/07/2022	Lot 682	10m W	6m N	**	Layer 3	95.0	0.0	7.8	2.13
**	41183-29	26/07/2022	Lot 679	8m W	5m N	**	Layer 3	95.0	1.5	8.1	2.10
**	41183-30	27/07/2022	Lot 646	6m W	4m N	**	Layer 3	95.0	-1.0	8.0	2.09
**	41183-31	27/07/2022	Lot 649	8m W	5m N	**	Layer 3	99.0	-1.0	8.9	2.22
**	41183-32	27/07/2022	Lot 651	5m W	2m N	**	Layer 3	97.0	-1.0	8.3	2.18
**	41183-33	27/07/2022	Lot 682	8m W	4m N	**	Layer 4	98.0	-1.0	9.0	2.19
**	41183-34	27/07/2022	Lot 679	10m W	3m N	**	Layer 4	95.0	-1.0	8.4	2.09
**	41183-35	27/07/2022	Lot 675	5m W	2m N	**	Layer 4	97.0	-1.0	8.7	2.16
**	41183-36	29/07/2022	Lot 672	10m W	4m N	**	Layer 1	95.0	0.5	8.7	2.07
**	41183-37	29/07/2022	Lot 670	6m W	3m N	**	Layer 1	97.5	2.0	7.7	2.11
**	41183-38	29/07/2022	Lot 668	8m W	5m N	**	Layer 1	100.0	0.0	7.9	2.18
**	41183-39	01/08/2022	Lot 672	12m W	4m N	**	Subgrade	95.0	-0.5	7.4	2.06
**	41183-40	01/08/2022	Lot 669	8m W	6m N	**	Subgrade	97.5	-1.0	8.6	2.19
**	41183-41	01/08/2022	Lot 815	10m W	3m N	**	Subgrade	96.5	-0.5	8.3	2.17
**	41183-42	02/08/2022	Lot 818	6m W	4m N	**	Subgrade	95.0	1.0	7.8	2.09
**	41183-43	02/08/2022	Lot 813	8m W	1m N	**	Layer 1	96.0	-1.0	8.3	2.21
**	41183-44	02/08/2022	Lot 811	11m W	3m N	**	Layer 1	95.0	-0.5	8.7	2.20
**	41183-45	02/08/2022	Lot 818	9m W	6m N	**	Layer 1	95.5	-1.0	8.5	2.22
**	41183-46	02/08/2022	Lot 815	5m W	5m N	**	Layer 1	96.0	-0.5	8.2	2.23
**	41183-47	03/08/2022	Lot 650	10m W	6m N	**	Layer 4	100.5	2.0	8.3	2.24
**	41183-48	03/08/2022	Lot 647	8m W	4m N	**	Layer 4	101.5	0.5	9.0	2.31
**	41183-49	03/08/2022	Lot 644	14m W	2m N	**	Layer 4	101.0	1.5	9.1	2.34
**	41183-50	05/08/2022	Lot 811	6m W	4m N	**	Layer 2	95.0	-2.0	10.0	2.19
**	41183-51	05/08/2022	Lot 813	8m W	6m N	**	Layer 2	95.5	-2.0	9.3	2.23
**	41183-52	05/08/2022	Lot 817	10m W	5m N	**	Layer 2	96.0	0.0	10.3	2.15
**	41183-53	09/08/2022	Lot 678	6m W	4m N	**	Layer 5	98.5	-1.0	9.7	2.16
**	41183-54	09/08/2022	Lot 676	10m W	5m N	**	Layer 5	100.5	-0.5	9.0	2.22
**	41183-55	09/08/2022	Lot 680	8m W	6m N	**	Layer 5	100.5	-1.0	10.4	2.23
**	41183-56	09/08/2022	Lot 674	11m W	5m N	**	Layer 5	95.5	-0.5	9.1	2.14
**	41183-57	09/08/2022	Lot 814	10m W	2m N	**	Layer 3	95.0	0.5	8.9	2.05
**	41183-58	09/08/2022	Lot 812	13m W	3m N	**	Layer 3	98.0	-0.5	10.0	2.18

Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
**	41183-59	10/08/2022	Lot 645	8m W	4m N	**	Layer 5	95.0	-2.0	10.9	2.17
**	41183-60	10/08/2022	Lot 649	14m W	3m N	**	Layer 5	95.0	0.0	10.5	2.13
**	41183-61	10/08/2022	Lot 652	10m W	5m N	**	Layer 5	95.0	-1.0	10.9	2.14
**	41183-66	11/08/2022	Lot 669	8m W	4m N	**	Layer 2	98.5	-2.0	8.6	2.18
**	41183-67	11/08/2022	Lot 667	13m W	2m N	**	Layer 2	97.5	-1.5	8.8	2.18
**	41183-65	11/08/2022	Lot 672	4m W	5m N	**	Layer 2	97.5	-2.0	10.0	2.18
**	41183-62	11/08/2022	Lot 671	6m W	4m N	**	Layer 1	100.0	-1.0	7.9	2.21
**	41183-64	11/08/2022	Lot 667	9m W	8m N	**	Layer 1	102.5	-1.0	8.6	2.31
**	41183-63	11/08/2022	Lot 668	11m W	6m N	**	Layer 1	102.5	-1.0	9.0	2.33
**	41183-68	12/08/2022	Lot - 681	14m W	6m N	**	Layer 5	98.0	-1.0	7.7	2.15
**	41183-69	12/08/2022	Lot - 678	8m W	4m N	**	Layer 5	96.5	-1.0	8.0	2.18
**	41183-70	17/08/2022	Lot 814	8m W	4m N	**	Layer 4	95.5	-1.5	10.0	2.14
**	41183-71	17/08/2022	Lot 812	6m W	2m N	**	Layer 4	98.0	-2.0	10.3	2.22
**	41183-72	17/08/2022	Lot 681	14m W	3m N	**	Layer 6	95.5	-2.0	10.6	2.18
**	41183-73	17/08/2022	Lot 679	10m W	2m N	**	Layer 6	98.5	-2.0	10.4	2.19
**	41183-74	17/08/2022	Lot 675	12m W	3m N	**	Layer 6	95.0	-2.0	10.5	2.17
**	41183-75	17/08/2022	Lot 677	4m W	5m N	**	Layer 6	98.5	-1.5	10.7	2.19
**	41183-76	17/08/2022	Lot 672	10m W	4m N	**	Layer 3	96.5	-1.0	10.4	2.16
**	41183-77	17/08/2022	Lot 669	8m W	3m N	**	Layer 3	96.0	-1.5	9.6	2.13
**	41183-78	17/08/2022	Lot 667	8m W	5m N	**	Layer 3	95.0	-1.5	10.1	2.12
**	41183-79	19/08/2022	Lot 671	2m W	4m N	**	Layer 4	98.5	-2.0	11.0	2.21
**	41183-80	19/08/2022	Lot 667	13m W	3m N	**	Layer 4	99.5	-1.0	12.1	2.19
**	41183-81	19/08/2022	Lot 816	10m W	4m N	**	Layer 4	97.0	-2.0	10.7	2.16
**	41183-84	14/09/2022	Sewer - Zone 8 - SBL1-8	16	CL	**	Layer 1	97.5	0.5	13.9	2.06
**	41183-85	14/09/2022	Sewer - Zone 8 - SBL2-8	4	CL	**	Layer 2	96.0	1.0	13.2	2.06
**	41183-86	14/09/2022	Sewer - Zone 8 - SBL3-8	10	CL	**	Layer 3	95.5	0.0	13.7	2.04
**	41183-87	14/09/2022	Sewer - Zone 9 - SBL1-9	20	CL	**	Layer 1	98.0	1.0	13.3	2.07
**	41183-88	14/09/2022	Sewer - Zone 9 - SBL2-9	15	CL	**	Layer 2	96.5	0.0	14.4	2.04
**	41183-89	14/09/2022	Sewer - Zone 9 - SBL3-9	10	CL	**	Layer 3	95.5	0.0	13.8	2.05
**	41183-90	14/09/2022	Sewer - Zone 9 - SBL4-9	4	CL	**	Layer 4	98.5	-1.5	13.9	2.05
**	41183-91	26/09/2022	Sewer - Zone 1 - SBL1-1	22	CL	**	Layer 1	99.5	-2.0	9.6	2.23
**	41183-92	26/09/2022	Sewer - Zone 1 - SBL2-1	18	CL	**	Layer 2	99.0	-2.0	10.4	2.24
**	41183-93	26/09/2022	Sewer - Zone 2 - SBL1-2	26	CL	**	Layer 1	100.0	-0.5	9.1	2.22
**	41183-94	26/09/2022	Sewer - Zone 2 - SBL2-2	22	CL	**	Layer 2	98.5	-2.0	10.4	2.21
**	41183-95	26/09/2022	Lot - 817	5m N	15m W	**	Layer 1	102.0	-1.5	11.3	2.34
**	41183-96	27/09/2022	Sewer Main - Zone 4 - SBL1-4	8	CL	**	Layer 1	96.5	-0.5	18.1	2.04
**	41183-97	27/09/2022	Sewer Main - Zone 4 - SBL2-4	16	CL	**	Layer 2	97.0	2.0	14.6	2.04
**	41183-98	27/09/2022	Sewer Main - Zone 4 - SBL3-4	9	CL	**	Layer 3	96.0	0.0	16.8	2.04
**	41183-99	27/09/2022	Sewer Main - Zone 4 - SBL4-4	4	CL	**	Layer 4	95.0	0.5	16.7	2.04
**	41183-100	27/09/2022	Sewer Main - Zone 4 - SBL5-4	12	CL	**	Layer 5	97.0	0.0	17.5	2.06
**	41183-101	27/09/2022	Sewer Main - Zone 4 - SBL6-4	13	CL	**	Layer 6	98.0	-0.5	17.2	2.07
**	41183-102	29/09/2022	Sewer Main - Zone 1 - SBL3-1	10	CL	**	Layer 3	100.5	-0.5	10.1	2.23
**	41183-103	29/09/2022	Sewer Main - Zone 2 - SBL3-2	18	CL	**	Layer 3	98.5	-1.5	10.2	2.21
**	41183-104	29/09/2022	Man Hole - MHB1-1	176.50	CL	**	Layer 1	102.0	2.0	7.4	2.22
**	41183-105	29/09/2022	Man Hole - MHB2-1	176.50	CL	**	Layer 2	100.0	0.0	8.9	2.20
**	41183-106	29/09/2022	Man Hole - MHB3-1	176.50	CL	**	Layer 3	100.0	0.0	9.4	2.22
**	41183-107	07/10/2022	Sewer Main - Zone 5 - SBL1-5	15	CL	**	Layer 1	96.5	-1.5	13.8	2.14
**	41183-108	07/10/2022	Sewer Main - Zone 5 - SBL2-5	16	CL	**	Layer 2	96.0	-0.5	12.0	2.11
**	41183-109	07/10/2022	Sewer Main - Zone 5 - SBL3-5	17	CL	**	Layer 3	95.5	1.5	10.5	2.09
**	41183-110	07/10/2022	Sewer Main - Zone 5 - SBL4-5	18	CL	**	Layer 4	95.0	-1.0	12.7	2.10
**	41183-111	07/10/2022	Sewer Main - Zone 5 - SBL5-5	19	CL	**	Layer 5	95.0	-1.0	13.6	2.10
**	41183-112	07/10/2022	Sewer - Zone 6 - SBL1-6	10	CL	**	Layer 1	96.5	-0.5	14.0	2.14
**	41183-113	07/10/2022	Sewer - Zone 6 - SBL2-6	11	CL	**	Layer 2	97.0	-0.5	14.2	2.13
**	41183-114	07/10/2022	Sewer - Zone 6 - SBL3-6	12	CL	**	Layer 3	96.0	-0.5	13.8	2.15
**	41183-115	07/10/2022	Sewer - Zone 6 - SBL4-6	13	CL	**	Layer 4	97.5	0.0	14.1	2.13

Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
**	41183-116	07/10/2022	Sewer - Zone 6 - SBL5-6	14	CL	**	Layer 5	97.0	0.5	13.7	2.11
**	41183-117	07/10/2022	Manhole - MHB1-2	150.61	CL	**	Layer 1	95.5	-1.0	14.0	2.11
**	41183-118	07/10/2022	Manhole - MHB2-2	150.61	CL	**	Layer 2	100.0	0.5	13.5	2.15
**	41183-119	07/10/2022	Manhole - MHB3-2	150.61	CL	**	Layer 3	99.0	0.5	12.9	2.14
**	41183-120	07/10/2022	Manhole - MHB4-2	150.61	CL	**	Layer 4	98.5	0.0	13.1	2.13
**	41183-121	07/10/2022	Sewer Connection - Lot 812 - SC1	1	CL	**	FSL	95.0	1.5	12.1	1.93
**	41183-122	07/10/2022	Sewer Connection - Lot 676 - SC2	1	CL	**	FSL	95.0	1.5	11.6	1.90
**	41183-123	07/10/2022	Sewer Connection - Lot 669 - SC3	1	CL	**	FSL	95.0	1.5	11.5	1.88
**	41183-124	07/10/2022	Sewer Connection - Lot 658 - SC4	1	CL	**	FSL	95.0	2.5	12.2	1.92
**	41183-125	07/10/2022	Sewer Connection - Lot 654 - SC5	1	CL	**	FSL	96.0	2.5	11.5	1.94
**	41183-126	07/10/2022	Sewer Connection - Lot 674 - SC6	1	CL	**	FSL	95.0	2.0	11.5	1.91
**	41183-127	07/10/2022	Sewer Connection - Lot 680 - SC7	1	CL	**	FSL	95.0	3.5	10.1	1.89
**	41183-128	07/10/2022	Sewer Connection - Lot 645 - SC8	1	CL	**	FSL	95.5	3.5	12.6	1.90
**	41183-129	07/10/2022	Sewer - Zone 7 - SBL1-7	6	CL	**	Layer 1	98.0	3.0	11.4	1.99
**	41183-130	07/10/2022	Sewer - Zone 7 - SBL2-7	7	CL	**	Layer 2	95.5	3.0	12.0	1.91
**	41183-131	07/10/2022	Sewer - Zone 7 - SBL3-7	8	CL	**	Layer 3	95.0	2.5	13.2	1.92
**	41183-132	07/10/2022	Sewer - Zone 7 - SBL4-7	9	CL	**	Layer 4	95.5	2.0	13.2	1.94
**	41183-133	11/10/2022	Lot 653	4m W	10m N	**	Layer 1	97.5	-0.5	5.9	2.25
**	41183-134	11/10/2022	Lot 655	5m W	16m N	**	Layer 1	97.5	0.0	6.1	2.27
**	41183-135	11/10/2022	Lot 657	7m W	5m N	**	Layer 1	96.0	0.0	5.9	2.26
**	41183-136	11/10/2022	Lot 658	7m W	16m N	**	Layer 2	97.5	1.0	5.9	2.28
**	41183-137	11/10/2022	Lot 656	5m W	10m N	**	Layer 2	96.0	0.0	6.5	2.28
**	41183-138	11/10/2022	Lot 654	4m W	15m N	**	Layer 2	96.0	0.0	6.1	2.29
**	41183-139	18/10/2022	Lot 668	5m W	4m N	**	Layer 2	101.0	-0.5	12.2	2.21
**	41183-140	18/10/2022	Lot 670	3m W	5m N	**	Layer 2	98.5	0.0	9.6	2.20
**	41183-141	18/10/2022	Lot 812	7m W	4m N	**	Layer 5	102.0	1.0	12.2	2.20
**	41183-142	20/10/2022	Lot 671	10m W	6m N	**	Layer 7	96.0	0.5	6.6	2.23
**	41183-143	20/10/2022	Lot 668	14m W	3m N	**	Layer 7	98.5	0.5	7.9	2.27
**	41183-144	20/10/2022	Lot 815	8m W	7m N	**	Layer 7	95.0	-1.5	10.0	2.27
**	41183-145	20/10/2022	Lot 667	18m W	8m N	**	Layer 8	97.5	-1.5	8.6	2.27
**	41183-146	20/10/2022	Lot 670	14m W	6m N	**	Layer 8	96.5	-1.0	8.3	2.25
**	41183-147	20/10/2022	Lot 672	10m W	7m N	**	Layer 8	101.5	1.0	9.0	2.27
**	41183-149	28/10/2022	Watermain - Zone 1 - MW1	25	CL	**	Overlay	100.0	0.5	9.0	1.97
**	41183-150	28/10/2022	Watermain - Zone 2 - MW2	36	CL	**	Overlay	100.0	0.5	9.0	1.97
**	41183-151	28/10/2022	Watermain - Zone 3 - MW3	18	CL	**	Overlay	100.5	0.0	9.2	1.98
**	41183-157	28/10/2022	Lot 670	6m W	4m N	**	Layer 9	98.5	-0.5	8.4	2.23
**	41183-158	28/10/2022	Lot 667	8m W	2m N	**	Layer 9	99.5	0.0	8.6	2.26
**	41183-159	28/10/2022	Lot 816	3m W	6m N	**	Layer 1	100.0	0.0	8.9	2.25
**	41183-152	28/10/2022	Watermain - Zone 4 - MW4	5	CL	**	Overlay	100.0	0.0	9.1	1.98
**	41183-153	28/10/2022	Watermain - Zone 5 - MW5	13	CL	**	Overlay	100.5	0.5	8.9	1.98
**	41183-154	28/10/2022	Watermain - Zone 6 - MW6	16	CL	**	Overlay	100.5	0.0	9.1	1.98
**	41183-155	28/10/2022	Watermain - Zone 7 - MW7	21	CL	**	Overlay	100.0	0.0	9.1	1.97
**	41183-156	28/10/2022	Watermain - Zone 8 - MW8	5	CL	**	Overlay	100.5	0.0	9.1	1.98
**	41183-160	08/11/2022	Stormwater - Zone 1 - SWB 1	18	CL	**	Bedding	102.0	5.0	6.7	1.91
**	41183-161	08/11/2022	Stormwater - Zone 2 - SWB 2	6	CL	**	Bedding	101.0	2.5	9.2	1.94
**	41183-162	08/11/2022	Stormwater - Zone 3 - SWB 3	15	CL	**	Bedding	101.5	3.5	8.1	1.92
**	41183-163	08/11/2022	Stormwater - Zone 4 - SWB 4	10	CL	**	Bedding	102.0	3.0	9.0	1.95
**	41183-164	08/11/2022	Stormwater - Zone 5 - SWB 5	8	CL	**	Bedding	100.5	3.5	8.3	1.91
**	41183-165	08/11/2022	Stormwater - Zone 1 - SWSS 1	19	LHS	**	Side -Support	102.0	-1.5	13.2	2.02
**	41183-166	08/11/2022	Stormwater - Zone 2 - SWSS 2	19	LHS	**	Side Support	100.5	2.5	9.5	1.93
**	41183-167	08/11/2022	Stormwater - Zone 3 - SWSS 3	21	RHS	**	Side Support	101.0	2.5	9.4	1.94
**	41183-168	08/11/2022	Stormwater - Zone 4 - SWSS 4	16	LHS	**	Side Support	102.0	2.5	9.2	1.95
**	41183-169	08/11/2022	Stormwater - Zone 5 - SWSS 5	14	RHS	**	Side Support	102.0	3.0	9.0	1.96
**	41183-170	08/11/2022	Stormwater - Zone 1 - SWO 1	11	CL	**	Overlay	102.0	4.0	7.9	1.93

Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
**	41183-171	08/11/2022	Stormwater - Zone 2 - SWO 2	5	CL	**	Overlay	101.5	2.5	9.4	1.95
**	41183-172	08/11/2022	Stormwater - Zone 3 - SWO 3	8	CL	**	Overlay	99.5	1.5	10.5	1.94
**	41183-173	08/11/2022	Stormwater - Zone 4 - SWO 4	17	CL	**	Overlay	100.5	1.5	10.3	1.95
**	41183-174	08/11/2022	Stormwater - Zone 5 - SWO 5	15	CL	**	Overlay	98.5	-0.5	12.4	1.95
**	41183-175	08/11/2022	Watermain Connections - Lot 644 - MWC 1	1	CL	**	Overlay	100.0	2.0	7.2	1.94
**	41183-176	08/11/2022	Watermain Connections - Lot 650 - MWC 2	0.5	CL	**	Overlay	100.0	3.0	6.5	1.92
**	41183-177	08/11/2022	Watermain Connections - Lot 653 - MWC 3	1	CL	**	Overlay	100.0	2.5	7.0	1.93
**	41183-178	08/11/2022	Watermain Connections - Lot 658 - MWC 4	1	CL	**	Overlay	100.0	2.5	6.9	1.93
**	41183-179	08/11/2022	Watermain Connections - Lot 670 - MWC 5	0.5	CL	**	Overlay	100.0	2.0	7.2	1.94
**	41183-180	08/11/2022	Watermain Connections - Lot 677 - MWC 6	1	CL	**	Overlay	100.0	2.0	7.2	1.94
**	41183-181	08/11/2022	Watermain Connections - Lot 816 - MWC 7	0.5	CL	**	Overlay	100.0	2.0	7.2	1.94
**	41183-182	08/11/2022	Watermain Connections - Lot 811 - MWC 8	1	CL	**	Overlay	100.0	2.5	7.0	1.93
**	41183-183	02/12/2022	Stormwater - SWBF-1 - Zone 1	8	CL	**	FSL	102.0	3.5	6.8	2.29
**	41183-184	02/12/2022	Stormwater - SWBF2 - Zone 2	18	CL	**	FSL	103.0	1.0	6.0	2.30
**	41183-185	02/12/2022	Stormwater - SWBF-3 - Zone 3	6	CL	**	FSL	98.0	1.5	6.2	2.28
**	41183-186	02/12/2022	Stormwater - SWBF-4 - Zone 4	14	CL	**	FSL	99.5	2.0	6.2	2.26
**	41183-187	02/12/2022	Stormwater - SWBF-5 - Zone 5	10	CL	**	FSL	99.0	1.5	7.3	2.29
**	41183-188	02/12/2022	Stormwater Crossings - SWX-1	4	CL	**	FSL	100.5	0.0	6.8	2.28
**	41183-189	02/12/2022	Stormwater Crossings - SWX-2	4	CL	**	FSL	102.0	-0.5	8.0	2.30
**	41183-190	02/12/2022	Roadway - SG1 - Zone 1	18	1m R from CL	**	Subgrade	98.0	1.5	7.0	2.23
**	41183-191	02/12/2022	Roadway - SG2 - Zone 2	16	1m L from CL	**	Subgrade	98.5	0.5	7.9	2.30
**	41183-192	02/12/2022	Roadway - SG3 - Zone 3	15	CL	**	Subgrade	100.5	1.0	6.7	2.28
**	41183-193	02/12/2022	Roadway - SG4 - Zone 4	22	CL	**	Subgrade	98.0	1.5	9.0	2.21
**	41183-194	02/12/2022	Roadway - SG5 - Zone 5	8	1m L from CL	**	Subgrade	99.0	-0.5	9.9	2.20
**	41183-195	02/12/2022	Roadway - SG6 - Zone 6	4	1m R from CL	**	Subgrade	103.0	1.5	8.7	2.27
**	41183-196	02/12/2022	Roadway - SG7 - Zone 7	10	CL	**	Subgrade	99.0	0.0	8.4	2.27
**	41183-197	02/12/2022	Roadway - SG8 - Zone 8	12	CL	**	Subgrade	98.5	-0.5	9.3	2.20
**	41183-198	16/01/2023	Roadways - SB1 - Zone 1	22	CL	**	Subbase	98.5	0.5	5.3	2.36
**	41183-199	16/01/2023	Roadways - SB2 - Zone 2	6	1m L from CL	**	Subbase	99.5	0.0	5.6	2.39
**	41183-200	16/01/2023	Roadways - SB3 - Zone 3	12	1m R from CL	**	Subbase	98.5	0.5	5.3	2.36
**	41183-201	16/01/2023	Roadways - SB4 - Zone 4	18	CL	**	Subbase	99.0	0.5	5.3	2.38
**	41183-202	16/01/2023	Roadways - SB5 - Zone 5	17	1m L from CL	**	Subbase	101.0	0.0	5.6	2.43
**	41183-203	16/01/2023	Roadways - SB6 - Zone 6	13	CL	**	Subbase	100.5	1.0	4.7	2.40
**	41183-204	16/01/2023	Roadways - SB7 - Zone 7	28	CL	**	Subbase	99.0	0.0	5.8	2.38
**	41183-205	16/01/2023	Roadways - SB8 - Zone 8	10	CL	**	Subbase	99.0	0.0	5.5	2.38
**	41183-206	22/02/2023	Roadway - BC1 - Zone 1	26	1m R	**	Base course	99.0	0.0	6.5	2.32
**	41183-207	22/02/2023	Roadway - BC2 - Zone 2	14	CL	**	Base course	99.5	1.5	5.9	2.31
**	41183-208	22/02/2023	Roadway - BC3 - Zone 3	20	CL	**	Base course	99.0	0.5	6.4	2.31
**	41183-209	22/02/2023	Roadway - BC4 - Zone 4	22	1m L	**	Base course	99.0	0.5	6.4	2.31
**	41183-210	22/02/2023	Roadway - BC5 - Zone 5	16	CL	**	Base course	99.5	-0.5	7.2	2.36
**	41183-211	22/02/2023	Roadway - BC6 - Zone 6	8	CL	**	Base course	99.0	-0.5	7.0	2.34
**	41183-212	22/02/2023	Roadways - BC7 - Zone 7	16	CL	**	Base Course	101.0	1.5	5.3	2.34
**	41183-213	22/02/2023	Roadways - BC8 - Zone 8	14	CL	**	Base Course	101.0	1.5	5.4	2.34

Lot #	Sample #	Date Sampled	Location	Line / Offset	Offset	Elevation (m)	Layer	Relative Compaction (%)	Moisture Variation (%)	Moisture Content (%)	Field Wet Density (t/m3)
**	41183-214	22/02/2023	CST Crossings - CSX1 - Zone 1	2	CL	**	Base	101.0	3.0	4.0	2.31
**	41183-215	22/02/2023	CST Crossings - CSX2 - Zone 2	3	CL	**	Base	103.0	3.0	3.8	2.35
**	41183-216	22/02/2023	CST Crossings - CSX3 - Zone 3	3	CL	**	Base	101.0	3.5	3.5	2.30
**	41183-217	22/02/2023	CST Crossings - CSX4 - Zone 4	1	CL	**	Base	103.0	3.0	3.8	2.35
**	41183-218	22/02/2023	CST Crossings - CSX5 - Zone 5	2	CL	**	Base	101.5	3.0	3.8	2.32
**	41183-220	22/02/2023	CST Crossings - CSX7 - Zone 8	3	CL	**	Base	101.5	3.0	3.9	2.32
**	41183-221	22/02/2023	CST Crossings - CSX8 - Zone 9	2	CL	**	Base	103.0	2.5	4.3	2.36
**	41183-222	22/02/2023	CST Crossings - CSX9 - Zone 10	4	CL	**	Base	102.0	3.0	4.1	2.34
**	41183-223	01/03/2023	CST B-Fill - CST1 - Zone 1	16	CL	**	FSL	101.5	2.0	5.9	2.17
**	41183-224	01/03/2023	CST B-Fill - CST2 - Zone 2	8	CL	**	FSL	101.0	2.0	5.6	2.18
**	41183-225	01/03/2023	CST B-Fill - CST3 - Zone 3	12	CL	**	FSL	100.5	1.5	5.9	2.18
**	41183-226	01/03/2023	CST B-Fill - CST4 - Zone 4	10	CL	**	FSL	101.0	2.5	5.5	2.22
**	41183-227	01/03/2023	CST B-Fill - CST5 - Zone 5	5	CL	**	FSL	101.0	2.0	6.2	2.25
**	41183-228	01/03/2023	CST B-Fill - CST6 - Zone 6	16	CL	**	FSL	100.0	2.5	5.9	2.17
**	41183-229	01/03/2023	CST B-Fill - CST7 - Zone 7	20	CL	**	FSL	101.0	2.0	5.6	2.23
**	41183-230	01/03/2023	CST B-Fill - CST8 - Zone 8	24	CL	**	FSL	101.0	1.5	5.9	2.23
**	41183-231	01/03/2023	CST B-Fill - CST9 - Zone 9	7	CL	**	FSL	101.0	2.0	5.8	2.20
**	41183-232	01/03/2023	CST B-Fill - CST10 - Zone 10	17	CL	**	FSL	102.0	2.5	5.8	2.21
**	41183-233	01/03/2023	Footpaths - FPS1 - Zone 1	12	CL	**	Subgrade	101.0	2.0	5.8	2.24
**	41183-234	01/03/2023	Footpaths - FPS2 - Zone 2	9	CL	**	Subgrade	101.0	2.0	5.5	2.22
**	41183-235	01/03/2023	Footpaths - FPS3 - Zone 3	6	CL	**	Subgrade	100.5	2.5	5.2	2.21
**	41183-236	06/03/2023	Footpath - FSP4 - Zone 4	16	CL	**	Subgrade	101.5	6.0	4.6	2.14
**	41183-237	06/03/2023	Footpath - FSP5 - Zone 5	8	CL	**	Subgrade	100.5	3.5	5.0	2.17
**	41183-238	06/03/2023	Footpath - FSP6 - Zone 6	20	CL	**	Subgrade	100.5	6.0	5.1	2.15
**	41183-239	06/03/2023	Footpath - FSP7 - Zone 7	10	CL	**	Subgrade	102.0	5.0	4.4	2.18
**	41183-240	10/03/2023	Footpaths - FPSB1 - Zone 1	18	CL	**	Subbase	95.5	0.5	5.0	2.29
**	41183-241	10/03/2023	Footpaths - FPSB2 - Zone 2	6	CL	**	Subbase	96.0	1.5	4.3	2.29
**	41183-242	10/03/2023	Footpaths - FPSB3 - Zone 3	11	CL	**	Subbase	96.5	1.0	4.5	2.30
**	41183-243	10/03/2023	Footpaths - FPSB4 - Zone 4	4	CL	**	Subbase	96.0	0.5	5.0	2.30
**	41183-244	10/03/2023	Footpaths - FPSB5 - Zone 5	8	CL	**	Subbase	97.5	1.0	4.5	2.32
**	41183-245	13/03/2023	Footpaths - FPSB6 - Zone 6	21	CL	**	Subbase	99.0	0.0	5.7	2.39
**	41183-246	13/03/2023	Footpaths - FPSB7 - Zone 7	8	CL	**	Subbase	100.5	1.0	4.6	2.40

**Moisture Variation Note:**

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-1  
**Issue Number:** 1  
**Date Issued:** 01/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7125  
**Date Sampled:** 13/07/2022  
**Dates Tested:** 14/07/2022 - 27/07/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



Australian Geotechnical Testing

Adelaide Laboratory

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Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Loky Maynard

Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1		
Sample Number	41183-1	41183-2
Date Tested	13/07/2022	13/07/2022
Time Tested	15:40	15:55
Test Request #/Location	Lot 646	Lot 649
Line / Offset	8m N	10m N
Offset	6m E	18m E
Layer / Reduced Level	Subgrade	Subgrade
Thickness of Layer (mm)	200	200
Soil Description	Sandy Clay	Sandy Clay
Test Depth (mm)	150	150
Fraction Tested (mm)	19.0	19.0
Oversize (wet basis) %	**	**
Oversize (dry basis) %	**	**
Curing Hours	19.0	19.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.16	2.01
Field Moisture Content %	11.8	8.5
Field Dry Density t/m <sup>3</sup>	1.94	1.86
Maximum Dry Density t/m <sup>3</sup>	1.94	1.96
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**
Optimum Moisture Content (OMC) %	11.0	10.0
Adjusted Optimum Moisture Content (OMC) %	**	**
Moisture Variation %	-0.5	1.5
Moisture Ratio %	106.0	85.0
Density Ratio %	100.0	95.0
Compaction Method	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-2  
**Issue Number:** 1  
**Date Issued:** 01/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7152  
**Date Sampled:** 15/07/2022  
**Dates Tested:** 15/07/2022 - 25/07/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Approved Signatory: Loky Maynard

Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1		
Sample Number	41183-3	41183-4
Date Tested	15/07/2022	15/07/2022
Time Tested	07:00	07:15
Test Request #/Location	Lot 644	Lot 651
Line / Offset	12m N	18m E
Offset	6m N	6m E
Layer / Reduced Level	Subgrade	Subgrade
Thickness of Layer (mm)	200	200
Soil Description	Sandy Clay	Sandy Clay
Test Depth (mm)	150	150
Fraction Tested (mm)	19.0	19.0
Oversize (wet basis) %	**	**
Oversize (dry basis) %	**	**
Curing Hours	26.0	26.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.18	2.11
Field Moisture Content %	10.6	10.9
Field Dry Density t/m <sup>3</sup>	1.97	1.90
Maximum Dry Density t/m <sup>3</sup>	1.95	1.93
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**
Optimum Moisture Content (OMC) %	10.5	10.0
Adjusted Optimum Moisture Content (OMC) %	**	**
Moisture Variation %	0.0	-1.0
Moisture Ratio %	99.5	109.0
Density Ratio %	101.0	98.0
Compaction Method	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-3  
**Issue Number:** 1  
**Date Issued:** 02/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7165  
**Date Sampled:** 15/07/2022  
**Dates Tested:** 18/07/2022 - 01/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Approved Signatory: Loky Maynard

Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-5	41183-6	41183-7
Date Tested	15/07/2022	15/07/2022	15/07/2022
Time Tested	14:49	15:00	15:16
Test Request #/Location	Lot 645	Lot 648	Lot 651
Line / Offset	6m N	4m N	5m N
Offset	11m W	15m W	12m W
Layer / Reduced Level	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	14	17	13
Oversize (dry basis) %	14	16	13
Curing Hours	2.0	2.0	2.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.17	2.21	2.24
Field Moisture Content %	9.7	8.5	8.0
Field Dry Density t/m <sup>3</sup>	1.98	2.04	2.07
Maximum Dry Density t/m <sup>3</sup>	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.00	2.12	2.15
Optimum Moisture Content (OMC) %	**	**	**
Adjusted Optimum Moisture Content (OMC) %	9.0	7.5	7.5
Moisture Variation %	-1.0	-1.0	-0.5
Moisture Ratio %	109.5	114.0	104.5
Density Ratio %	99.0	96.0	96.5
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-4  
**Issue Number:** 1  
**Date Issued:** 01/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7166  
**Date Sampled:** 15/07/2022  
**Dates Tested:** 18/07/2022 - 28/07/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-8	41183-9	41183-10	41183-11	41183-12	41183-13
Date Tested	15/07/2022	15/07/2022	15/07/2022	15/07/2022	15/07/2022	15/07/2022
Time Tested	08:25	15:32	15:38	15:47	15:55	16:07
Test Request #/Location	Lot 811	Lot 813	Lot 677	Lot 679	Lot 681	Lot 674
Line / Offset	10m N	6m N	8m N	4m N	6m N	21m N
Offset	18m W	16m W	14m W	11m W	14m W	4m W
Layer / Reduced Level	Subgrade	Subgrade	Subgrade	Subgrade	Subgrade	Subgrade
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**	**	**
Oversize (dry basis) %	**	**	**	**	**	**
Curing Hours	24.0	24.0	24.0	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.04	2.05	2.05	2.05	2.04	2.03
Field Moisture Content %	12.8	15.1	11.4	10.9	11.1	10.8
Field Dry Density t/m <sup>3</sup>	1.81	1.79	1.84	1.85	1.83	1.83
Maximum Dry Density t/m <sup>3</sup>	1.91	1.87	1.89	1.90	1.93	1.92
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**	**	**	**
Optimum Moisture Content (OMC) %	13.0	15.5	13.0	12.0	12.0	11.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Moisture Variation %	0.0	0.5	1.5	1.0	0.5	0.5
Moisture Ratio %	98.0	97.5	88.0	90.5	93.5	94.5
Density Ratio %	95.0	95.5	98.0	97.5	95.0	95.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-5  
**Issue Number:** 1  
**Date Issued:** 01/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7167  
**Date Sampled:** 15/07/2022  
**Dates Tested:** 18/07/2022 - 27/07/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1		
Sample Number	41183-14	
Date Tested	15/07/2022	
Time Tested	16:20	
Test Request #/Location	Lot 673	
Line / Offset	15m N	
Offset	8m W	
Layer / Reduced Level	Subgrade	
Thickness of Layer (mm)	200	
Soil Description	Sandy Clay	
Test Depth (mm)	150	
Fraction Tested (mm)	19.0	
Oversize (wet basis) %	**	
Oversize (dry basis) %	**	
Curing Hours	24.0	
Method used to Determine Plasticity	Visual/tactile	
Field Wet Density t/m <sup>3</sup>	2.06	
Field Moisture Content %	11.6	
Field Dry Density t/m <sup>3</sup>	1.84	
Maximum Dry Density t/m <sup>3</sup>	1.92	
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	
Optimum Moisture Content (OMC) %	11.5	
Adjusted Optimum Moisture Content (OMC) %	**	
Moisture Variation %	0.0	
Moisture Ratio %	99.0	
Density Ratio %	96.0	
Compaction Method	Standard	

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-6  
**Issue Number:** 1  
**Date Issued:** 02/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7218  
**Date Sampled:** 21/07/2022  
**Dates Tested:** 25/07/2022 - 30/07/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1				
Sample Number	41183-15	41183-16	41183-17	41183-18
Date Tested	21/07/2022	21/07/2022	21/07/2022	21/07/2022
Time Tested	16:10	16:18	16:24	16:34
Test Request #/Location	Lot 682	Lot 679	Lot 811	Lot 813
Line / Offset	10m N	6m N	8m N	6m N
Offset	11m W	14m W	14m W	15m W
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	150	150	150	150
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	125	125	125	125
Fraction Tested (mm)	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	**
Oversize (dry basis) %	**	**	**	**
Curing Hours	24.5	0.4	24.3	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.09	2.07	2.15	2.13
Field Moisture Content %	10.3	8.7	8.8	8.7
Field Dry Density t/m <sup>3</sup>	1.90	1.90	1.98	1.96
Maximum Dry Density t/m <sup>3</sup>	1.96	1.98	1.99	1.99
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**	**
Optimum Moisture Content (OMC) %	10.0	10.0	9.5	10.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**	**
Moisture Variation %	0.0	1.5	0.5	1.0
Moisture Ratio %	102.5	86.5	93.0	88.0
Density Ratio %	96.5	96.0	99.5	98.5
Compaction Method	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-7  
**Issue Number:** 1  
**Date Issued:** 02/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7219  
**Date Sampled:** 21/07/2022  
**Dates Tested:** 25/07/2022 - 02/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-19	41183-20	41183-21
Date Tested	21/07/2022	21/07/2022	21/07/2022
Time Tested	11:00	11:10	11:20
Test Request #/Location	Lot 653	Lot 656	Lot 658
Line / Offset	6m N	22m N	12m N
Offset	8m E	7m E	6m E
Layer / Reduced Level	Subgrade	Subgrade	Subgrade
Thickness of Layer (mm)	200	200	200
Soil Description	Sandy Clay	Sandy Clay	Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	17.5	17.5	17.5
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.12	2.08	2.13
Field Moisture Content %	7.7	8.4	9.5
Field Dry Density t/m <sup>3</sup>	1.97	1.92	1.94
Maximum Dry Density t/m <sup>3</sup>	2.01	1.99	2.00
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**
Optimum Moisture Content (OMC) %	9.5	9.5	10.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	2.0	1.0	1.0
Moisture Ratio %	80.5	91.0	91.0
Density Ratio %	<b>98.0</b>	<b>96.5</b>	<b>97.5</b>
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-8  
**Issue Number:** 1  
**Date Issued:** 02/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7231  
**Date Sampled:** 25/07/2022  
**Dates Tested:** 26/07/2022 - 04/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1					
Sample Number	41183-22	41183-23	41183-24	41183-25	41183-26
Date Tested	25/07/2022	25/07/2022	25/07/2022	25/07/2022	25/07/2022
Time Tested	10:00	10:08	10:14	13:00	13:12
Test Request #/Location	Lot 644	Lot 649	Lot 652	Lot 678	Lot 681
Line / Offset	10m W	8m W	5m W	4m W	10m W
Offset	2m N	4m N	5m N	2m N	4m N
Layer / Reduced Level	Layer 2				
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Gravelly Sandy Clay				
Test Depth (mm)	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	8	15	**	**	**
Oversize (dry basis) %	8	14	**	**	**
Curing Hours	24.0	24.0	24.5	116.0	116.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.14	2.15	2.11	2.21	2.19
Field Moisture Content %	11.6	10.3	7.6	12.1	7.9
Field Dry Density t/m <sup>3</sup>	1.92	1.95	1.96	1.97	2.03
Maximum Dry Density t/m <sup>3</sup>	**	**	2.06	1.97	1.99
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.02	2.04	**	**	**
Optimum Moisture Content (OMC) %	**	**	8.0	11.5	8.0
Adjusted Optimum Moisture Content (OMC) %	11.0	9.0	**	**	**
Moisture Variation %	-1.0	-1.0	0.5	-1.0	0.0
Moisture Ratio %	107.0	113.5	96.0	107.0	98.5
Density Ratio %	<b>95.0</b>	<b>96.0</b>	<b>95.0</b>	<b>100.0</b>	<b>101.5</b>
Compaction Method	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-9  
**Issue Number:** 1  
**Date Issued:** 02/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7235  
**Date Sampled:** 26/07/2022  
**Dates Tested:** 26/07/2022 - 04/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-27	41183-28	41183-29
Date Tested	26/07/2022	26/07/2022	26/07/2022
Time Tested	13:00	13:15	13:25
Test Request #/Location	Lot 675	Lot 682	Lot 679
Line / Offset	4m W	10m W	8m W
Offset	4m N	6m N	5m N
Layer / Reduced Level	Layer 3	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	8	15	**
Oversize (dry basis) %	8	15	**
Curing Hours	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.11	2.13	2.10
Field Moisture Content %	6.9	7.8	8.1
Field Dry Density t/m <sup>3</sup>	1.97	1.97	1.94
Maximum Dry Density t/m <sup>3</sup>	**	**	2.04
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.04	2.08	**
Optimum Moisture Content (OMC) %	**	**	9.5
Adjusted Optimum Moisture Content (OMC) %	8.0	8.0	**
Moisture Variation %	1.0	0.0	1.5
Moisture Ratio %	85.0	97.5	84.5
Density Ratio %	96.5	95.0	95.0
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-10  
**Issue Number:** 1  
**Date Issued:** 02/09/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7251  
**Date Sampled:** 27/07/2022  
**Dates Tested:** 28/07/2022 - 09/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-30	41183-31	41183-32	41183-33	41183-34	41183-35
Date Tested	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022	27/07/2022
Time Tested	08:20	08:26	08:34	09:30	09:39	09:48
Test Request #/Location	Lot 646	Lot 649	Lot 651	Lot 682	Lot 679	Lot 675
Line / Offset	6m W	8m W	5m W	8m W	10m W	5m W
Offset	4m N	5m N	2m N	4m N	3m N	2m N
Layer / Reduced Level	Layer 3	Layer 3	Layer 3	Layer 4	Layer 4	Layer 4
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Gravelly Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	17	16	16	16	17	18
Oversize (dry basis) %	15	15	15	15	16	17
Curing Hours	20.5	20.5	20.5	20.5	19.2	43.2
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.09	2.22	2.18	2.19	2.09	2.16
Field Moisture Content %	8.0	8.9	8.3	9.0	8.4	8.7
Field Dry Density t/m <sup>3</sup>	1.93	2.04	2.01	2.01	1.92	1.99
Maximum Dry Density t/m <sup>3</sup>	**	**	**	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.04	2.06	2.08	2.05	2.03	2.05
Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Adjusted Optimum Moisture Content (OMC) %	7.0	8.0	7.0	8.0	7.5	7.5
Moisture Variation %	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Moisture Ratio %	111.0	113.5	116.0	112.0	112.0	114.5
Density Ratio %	95.0	99.0	97.0	98.0	95.0	97.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-11  
**Issue Number:** 1  
**Date Issued:** 04/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7286  
**Date Sampled:** 29/07/2022  
**Dates Tested:** 29/07/2022 - 09/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Approved Signatory: Loky Maynard

Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-36	41183-37	41183-38
Date Tested	29/07/2022	29/07/2022	29/07/2022
Time Tested	10:30	10:40	10:50
Test Request #/Location	Lot 672	Lot 670	Lot 668
Line / Offset	10m W	6m W	8m W
Offset	4m N	3m N	5m N
Layer / Reduced Level	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	200	200	200
Soil Description	Sandy Clay	Sandy Clay	Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	26.5	26.5	26.5
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.07	2.11	2.18
Field Moisture Content %	8.7	7.7	7.9
Field Dry Density t/m <sup>3</sup>	1.91	1.96	2.02
Maximum Dry Density t/m <sup>3</sup>	2.01	2.00	2.02
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**
Optimum Moisture Content (OMC) %	9.0	9.5	8.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	0.5	2.0	0.0
Moisture Ratio %	96.5	79.0	99.0
Density Ratio %	<b>95.0</b>	<b>97.5</b>	<b>100.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-12  
**Issue Number:** 1  
**Date Issued:** 05/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7314  
**Date Sampled:** 01/08/2022  
**Dates Tested:** 02/08/2022 - 11/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-39	41183-40	41183-41
Date Tested	01/08/2022	01/08/2022	01/08/2022
Time Tested	13:00	13:10	13:20
Test Request #/Location	Lot 672	Lot 669	Lot 815
Line / Offset	12m W	8m W	10m W
Offset	4m N	6m N	3m N
Layer / Reduced Level	Subgrade	Subgrade	Subgrade
Thickness of Layer (mm)	200	200	200
Soil Description	Sandy Clay	Sandy Clay	Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	17	16	16
Oversize (dry basis) %	16	15	15
Curing Hours	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.06	2.19	2.17
Field Moisture Content %	7.4	8.6	8.3
Field Dry Density t/m <sup>3</sup>	1.92	2.02	2.00
Maximum Dry Density t/m <sup>3</sup>	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.02	2.07	2.08
Optimum Moisture Content (OMC) %	**	**	**
Adjusted Optimum Moisture Content (OMC) %	7.0	8.0	7.5
Moisture Variation %	-0.5	-1.0	-0.5
Moisture Ratio %	106.0	110.5	108.0
Density Ratio %	95.0	97.5	96.5
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-13  
**Issue Number:** 1  
**Date Issued:** 05/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7326  
**Date Sampled:** 02/08/2022  
**Dates Tested:** 03/08/2022 - 12/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1		
Sample Number	41183-42	
Date Tested	02/08/2022	
Time Tested	11:14	
Test Request #/Location	Lot 818	
Line / Offset	6m W	
Offset	4m N	
Layer / Reduced Level	Subgrade	
Thickness of Layer (mm)	200	
Soil Description	Sandy Clay	
Test Depth (mm)	150	
Fraction Tested (mm)	19.0	
Oversize (wet basis) %	7	
Oversize (dry basis) %	7	
Curing Hours	2.5	
Method used to Determine Plasticity	Visual/tactile	
Field Wet Density t/m <sup>3</sup>	2.09	
Field Moisture Content %	7.8	
Field Dry Density t/m <sup>3</sup>	1.94	
Maximum Dry Density t/m <sup>3</sup>	**	
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.04	
Optimum Moisture Content (OMC) %	**	
Adjusted Optimum Moisture Content (OMC) %	9.0	
Moisture Variation %	1.0	
Moisture Ratio %	87.5	
Density Ratio %	95.0	
Compaction Method	Standard	

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-14  
**Issue Number:** 1  
**Date Issued:** 05/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7328  
**Date Sampled:** 02/08/2022  
**Dates Tested:** 03/08/2022 - 13/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1				
Sample Number	41183-43	41183-44	41183-45	41183-46
Date Tested	02/08/2022	02/08/2022	02/08/2022	02/08/2022
Time Tested	12:00	12:05	12:15	12:30
Test Request #/Location	Lot 813	Lot 811	Lot 818	Lot 815
Line / Offset	8m W	11m W	9m W	5m W
Offset	1m N	3m N	6m N	5m N
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	200	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0
Oversize (wet basis) %	19	18	20	20
Oversize (dry basis) %	18	18	19	19
Curing Hours	72.2	72.3	72.3	72.3
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.21	2.20	2.22	2.23
Field Moisture Content %	8.3	8.7	8.5	8.2
Field Dry Density t/m <sup>3</sup>	2.04	2.02	2.05	2.06
Maximum Dry Density t/m <sup>3</sup>	**	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.13	2.13	2.14	2.14
Optimum Moisture Content (OMC) %	**	**	**	**
Adjusted Optimum Moisture Content (OMC) %	7.5	8.0	7.5	7.5
Moisture Variation %	-1.0	-0.5	-1.0	-0.5
Moisture Ratio %	110.0	109.0	111.0	109.0
Density Ratio %	96.0	95.0	95.5	96.0
Compaction Method	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-15  
**Issue Number:** 1  
**Date Issued:** 05/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7341  
**Date Sampled:** 03/08/2022  
**Dates Tested:** 04/08/2022 - 09/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-47	41183-48	41183-49
Date Tested	03/08/2022	03/08/2022	03/08/2022
Time Tested	15:00	15:08	15:14
Test Request #/Location	Lot 650	Lot 647	Lot 644
Line / Offset	10m W	8m W	14m W
Offset	6m N	4m N	2m N
Layer / Reduced Level	Layer 4	Layer 4	Layer 4
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.24	2.31	2.34
Field Moisture Content %	8.3	9.0	9.1
Field Dry Density t/m <sup>3</sup>	2.07	2.12	2.14
Maximum Dry Density t/m <sup>3</sup>	2.06	2.09	2.13
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**
Optimum Moisture Content (OMC) %	10.0	9.5	10.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	2.0	0.5	1.5
Moisture Ratio %	81.0	92.5	85.0
Density Ratio %	<b>100.5</b>	<b>101.5</b>	<b>101.0</b>
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-16  
**Issue Number:** 1  
**Date Issued:** 05/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7357  
**Date Sampled:** 05/08/2022  
**Dates Tested:** 05/08/2022 - 15/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-50	41183-51	41183-52
Date Tested	05/08/2022	05/08/2022	05/08/2022
Time Tested	08:00	08:05	08:10
Test Request #/Location	Lot 811	Lot 813	Lot 817
Line / Offset	6m W	8m W	10m W
Offset	4m N	6m N	5m N
Layer / Reduced Level	Layer 2	Layer 2	Layer 2
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	8	11	9
Oversize (dry basis) %	7	10	8
Curing Hours	48.9	49.1	49.4
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.19	2.23	2.15
Field Moisture Content %	10.0	9.3	10.3
Field Dry Density t/m <sup>3</sup>	1.99	2.04	1.95
Maximum Dry Density t/m <sup>3</sup>	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.10	2.13	2.04
Optimum Moisture Content (OMC) %	**	**	**
Adjusted Optimum Moisture Content (OMC) %	8.0	7.5	10.5
Moisture Variation %	-2.0	-2.0	0.0
Moisture Ratio %	123.0	123.5	99.5
Density Ratio %	<b>95.0</b>	<b>95.5</b>	<b>96.0</b>
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-17  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7370  
**Date Sampled:** 09/08/2022  
**Dates Tested:** 09/08/2022 - 10/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-53	41183-54	41183-55	41183-56	41183-57	41183-58
Date Tested	09/08/2022	09/08/2022	09/08/2022	09/08/2022	09/08/2022	09/08/2022
Time Tested	07:53	07:59	08:06	08:14	08:21	08:30
Test Request #/Location	Lot 678	Lot 676	Lot 680	Lot 674	Lot 814	Lot 812
Line / Offset	6m W	10m W	8m W	11m W	10m W	13m W
Offset	4m N	5m N	6m N	5m N	2m N	3m N
Layer / Reduced Level	Layer 5	Layer 5	Layer 5	Layer 5	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Gravelly Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**	10	**	**
Oversize (dry basis) %	**	**	**	10	**	**
Curing Hours	2.5	2.5	2.5	2.5	72.2	72.2
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.16	2.22	2.23	2.14	2.05	2.18
Field Moisture Content %	9.7	9.0	10.4	9.1	8.9	10.0
Field Dry Density t/m <sup>3</sup>	1.97	2.03	2.02	1.96	1.89	1.98
Maximum Dry Density t/m <sup>3</sup>	2.00	2.02	2.01	**	1.99	2.02
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**	2.05	**	**
Optimum Moisture Content (OMC) %	9.0	8.5	9.5	**	9.0	9.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**	8.5	**	**
Moisture Variation %	-1.0	-0.5	-1.0	-0.5	0.5	-0.5
Moisture Ratio %	110.5	105.0	109.0	107.5	96.5	104.0
Density Ratio %	98.5	100.5	100.5	95.5	95.0	98.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-18  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7404  
**Date Sampled:** 10/08/2022  
**Dates Tested:** 10/08/2022 - 18/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-59	41183-60	41183-61
Date Tested	10/08/2022	10/08/2022	10/08/2022
Time Tested	11:20	11:30	11:40
Test Request #/Location	Lot 645	Lot 649	Lot 652
Line / Offset	8m W	14m W	10m W
Offset	4m N	3m N	5m N
Layer / Reduced Level	Layer 5	Layer 5	Layer 5
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	19	14	12
Oversize (dry basis) %	18	14	12
Curing Hours	**	48.5	43.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.17	2.13	2.14
Field Moisture Content %	10.9	10.5	10.9
Field Dry Density t/m <sup>3</sup>	1.95	1.93	1.93
Maximum Dry Density t/m <sup>3</sup>	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.05	2.03	2.03
Optimum Moisture Content (OMC) %	**	**	**
Adjusted Optimum Moisture Content (OMC) %	9.0	10.5	10.0
Moisture Variation %	-2.0	0.0	-1.0
Moisture Ratio %	119.5	102.5	107.5
Density Ratio %	95.0	95.0	95.0
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-19  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7421  
**Date Sampled:** 11/08/2022  
**Dates Tested:** 12/08/2022 - 18/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-62	41183-63	41183-64	41183-65	41183-66	41183-67
Date Tested	11/08/2022	11/08/2022	11/08/2022	11/08/2022	11/08/2022	11/08/2022
Time Tested	05:28	07:28	07:06	05:03	04:55	05:01
Test Request #/Location	Lot 671	Lot 668	Lot 667	Lot 672	Lot 669	Lot 667
Line / Offset	6m W	11m W	9m W	4m W	8m W	13m W
Offset	4m N	6m N	8m N	5m N	4m N	2m N
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 2	Layer 2	Layer 2
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Gravelly Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	21	20	21	21	22	24
Oversize (dry basis) %	21	19	21	18	22	23
Curing Hours	44.8	68.0	68.0	68.0	68.0	68.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.21	2.33	2.31	2.18	2.18	2.18
Field Moisture Content %	7.9	9.0	8.6	10.0	8.6	8.8
Field Dry Density t/m <sup>3</sup>	2.05	2.14	2.12	1.98	2.00	2.01
Maximum Dry Density t/m <sup>3</sup>	**	**	**	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.04	2.08	2.07	2.04	2.03	2.05
Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Adjusted Optimum Moisture Content (OMC) %	7.0	7.5	7.5	8.0	7.0	7.5
Moisture Variation %	-1.0	-1.0	-1.0	-2.0	-2.0	-1.5
Moisture Ratio %	111.0	116.0	111.5	123.5	127.5	119.0
Density Ratio %	100.0	102.5	102.5	97.5	98.5	97.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-20  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7425  
**Date Sampled:** 12/08/2022  
**Dates Tested:** 12/08/2022 - 19/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Approved Signatory: Loky Maynard

Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1		
Sample Number	41183-68	41183-69
Date Tested	12/08/2022	12/08/2022
Time Tested	09:00	09:10
Test Request #/Location	Lot - 681	Lot - 678
Line / Offset	14m W	8m W
Offset	6m N	4m N
Layer / Reduced Level	Layer 5	Layer 5
Thickness of Layer (mm)	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150
Fraction Tested (mm)	19.0	19.0
Oversize (wet basis) %	19	19
Oversize (dry basis) %	18	18
Curing Hours	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.15	2.18
Field Moisture Content %	7.7	8.0
Field Dry Density t/m <sup>3</sup>	2.00	2.02
Maximum Dry Density t/m <sup>3</sup>	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.04	2.09
Optimum Moisture Content (OMC) %	**	**
Adjusted Optimum Moisture Content (OMC) %	6.5	7.0
Moisture Variation %	-1.0	-1.0
Moisture Ratio %	117.0	114.0
Density Ratio %	98.0	96.5
Compaction Method	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-21  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7464  
**Date Sampled:** 17/08/2022  
**Dates Tested:** 18/08/2022 - 19/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-70	41183-71	41183-72	41183-73	41183-74	41183-75
Date Tested	17/08/2022	17/08/2022	17/08/2022	17/08/2022	17/08/2022	17/08/2022
Time Tested	08:38	08:45	14:30	14:35	14:40	14:45
Test Request #/Location	Lot 814	Lot 812	Lot 681	Lot 679	Lot 675	Lot 677
Line / Offset	8m W	6m W	14m W	10m W	12m W	4m W
Offset	4m N	2m N	3m N	2m N	3m N	5m N
Layer / Reduced Level	Layer 4	Layer 4	Layer 6	Layer 6	Layer 6	Layer 6
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Gravelly Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	19	10	18	19	20	18
Oversize (dry basis) %	18	9	18	17	20	17
Curing Hours	31.5	27.0	98.5	99.0	100.0	101.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.14	2.22	2.18	2.19	2.17	2.19
Field Moisture Content %	10.0	10.3	10.6	10.4	10.5	10.7
Field Dry Density t/m <sup>3</sup>	1.94	2.02	1.97	1.99	1.96	1.98
Maximum Dry Density t/m <sup>3</sup>	**	**	**	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.04	2.06	2.06	2.02	2.06	2.01
Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Adjusted Optimum Moisture Content (OMC) %	8.5	8.0	8.5	8.0	8.5	9.0
Moisture Variation %	-1.5	-2.0	-2.0	-2.0	-2.0	-1.5
Moisture Ratio %	120.5	127.5	125.5	126.0	127.0	117.0
Density Ratio %	95.5	98.0	95.5	98.5	95.0	98.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-22  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7465  
**Date Sampled:** 17/08/2022  
**Dates Tested:** 18/08/2022 - 23/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-76	41183-77	41183-78
Date Tested	17/08/2022	17/08/2022	17/08/2022
Time Tested	15:00	15:10	15:20
Test Request #/Location	Lot 672	Lot 669	Lot 667
Line / Offset	10m W	8m W	8m W
Offset	4m N	3m N	5m N
Layer / Reduced Level	Layer 3	Layer 3	Layer 3
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	19	19	19
Oversize (dry basis) %	18	18	17
Curing Hours	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.16	2.13	2.12
Field Moisture Content %	10.4	9.6	10.1
Field Dry Density t/m <sup>3</sup>	1.96	1.94	1.93
Maximum Dry Density t/m <sup>3</sup>	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.03	2.02	2.03
Optimum Moisture Content (OMC) %	**	**	**
Adjusted Optimum Moisture Content (OMC) %	9.0	8.0	8.5
Moisture Variation %	-1.0	-1.5	-1.5
Moisture Ratio %	113.5	121.5	118.5
Density Ratio %	96.5	96.0	95.0
Compaction Method	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-23  
**Issue Number:** 1  
**Date Issued:** 12/10/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7488  
**Date Sampled:** 19/08/2022  
**Dates Tested:** 19/08/2022 - 24/08/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-79	41183-80	41183-81
Date Tested	19/08/2022	19/08/2022	19/08/2022
Time Tested	13:00	13:10	13:20
Test Request #/Location	Lot 671	Lot 667	Lot 816
Line / Offset	2m W	13m W	10m W
Offset	4m N	3m N	4m N
Layer / Reduced Level	Layer 4	Layer 4	Layer 4
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	14	**	12
Oversize (dry basis) %	13	**	12
Curing Hours	24.0	24.0	24.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.21	2.19	2.16
Field Moisture Content %	11.0	12.1	10.7
Field Dry Density t/m <sup>3</sup>	1.99	1.95	1.95
Maximum Dry Density t/m <sup>3</sup>	**	1.97	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.02	**	2.01
Optimum Moisture Content (OMC) %	**	11.0	**
Adjusted Optimum Moisture Content (OMC) %	9.0	**	8.5
Moisture Variation %	-2.0	-1.0	-2.0
Moisture Ratio %	119.0	109.5	122.0
Density Ratio %	<b>98.5</b>	<b>99.5</b>	<b>97.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-39  
**Issue Number:** 1  
**Date Issued:** 23/11/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7903  
**Date Sampled:** 11/10/2022  
**Dates Tested:** 11/10/2022 - 12/10/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Approved Signatory: Loky Maynard  
 Laboratory Manager - Adelaide  
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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-133	41183-134	41183-135	41183-136	41183-137	41183-138
Date Tested	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022	11/10/2022
Time Tested	08:40	08:45	08:50	08:55	09:05	09:10
Test Request #/Location	Lot 653	Lot 655	Lot 657	Lot 658	Lot 656	Lot 654
Line / Offset	4m W	5m W	7m W	7m W	5m W	4m W
Offset	10m N	16m N	5m N	16m N	10m N	15m N
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 2	Layer 2	Layer 2
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Gravelly Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	20	21	18	16	19	19
Oversize (dry basis) %	20	21	18	16	19	19
Curing Hours	3.0	3.0	3.0	3.0	4.0	3.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.25	2.27	2.26	2.28	2.28	2.29
Field Moisture Content %	5.9	6.1	5.9	5.9	6.5	6.1
Field Dry Density t/m <sup>3</sup>	2.12	2.14	2.13	2.15	2.14	2.16
Maximum Dry Density t/m <sup>3</sup>	**	**	**	**	**	**
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.18	2.19	2.22	2.21	2.23	2.25
Optimum Moisture Content (OMC) %	**	**	**	**	**	**
Adjusted Optimum Moisture Content (OMC) %	5.5	6.0	5.5	6.5	6.5	6.0
Moisture Variation %	-0.5	0.0	0.0	1.0	0.0	0.0
Moisture Ratio %	106.5	98.5	103.5	87.5	103.0	100.0
Density Ratio %	97.5	97.5	96.0	97.5	96.0	96.0
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-40  
**Issue Number:** 1  
**Date Issued:** 23/11/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7977  
**Date Sampled:** 18/10/2022  
**Dates Tested:** 18/10/2022 - 28/10/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Laboratory Manager - Adelaide

NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-139	41183-140	41183-141
Date Tested	18/10/2022	18/10/2022	18/10/2022
Time Tested	12:15	12:22	12:29
Test Request #/Location	Lot 668	Lot 670	Lot 812
Line / Offset	5m W	3m W	7m W
Offset	4m N	5m N	4m N
Layer / Reduced Level	Layer 2	Layer 2	Layer 5
Thickness of Layer (mm)	200	200	200
Soil Description	Sandy Gravelly Clay	Sandy Gravelly Clay	Sandy Gravelly Clay
Test Depth (mm)	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	24.0	24.0	48.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.21	2.20	2.20
Field Moisture Content %	12.2	9.6	12.2
Field Dry Density t/m <sup>3</sup>	1.97	2.01	1.96
Maximum Dry Density t/m <sup>3</sup>	1.96	2.05	1.92
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**
Optimum Moisture Content (OMC) %	12.0	9.5	13.0
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	-0.5	0.0	1.0
Moisture Ratio %	103.5	101.0	93.5
Density Ratio %	<b>101.0</b>	<b>98.5</b>	<b>102.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-41  
**Issue Number:** 1  
**Date Issued:** 23/11/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 7992  
**Date Sampled:** 20/10/2022  
**Dates Tested:** 20/10/2022 - 02/11/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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NATA Accredited Laboratory Number: 20247

Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1						
Sample Number	41183-142	41183-143	41183-144	41183-145	41183-146	41183-147
Date Tested	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022	20/10/2022
Time Tested	09:35	09:40	09:45	09:50	09:55	10:00
Test Request #/Location	Lot 671	Lot 668	Lot 815	Lot 667	Lot 670	Lot 672
Line / Offset	10m W	14m W	8m W	18m W	14m W	10m W
Offset	6m N	3m N	7m N	8m N	6m N	7m N
Layer / Reduced Level	Layer 7	Layer 7	Layer 7	Layer 8	Layer 8	Layer 8
Thickness of Layer (mm)	200	200	200	200	200	200
Soil Description	Gravelly Sandy Clay					
Test Depth (mm)	150	150	150	150	150	150
Fraction Tested (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize (wet basis) %	14	9	13	16	14	**
Oversize (dry basis) %	14	9	13	17	14	**
Curing Hours	2.0	2.0	2.0	2.0	2.0	2.0
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.23	2.27	2.27	2.27	2.25	2.27
Field Moisture Content %	6.6	7.9	10.0	8.6	8.3	9.0
Field Dry Density t/m <sup>3</sup>	2.09	2.11	2.06	2.09	2.08	2.08
Maximum Dry Density t/m <sup>3</sup>	**	**	**	**	**	2.05
Adjusted Maximum Dry Density t/m <sup>3</sup>	2.18	2.14	2.17	2.15	2.15	**
Optimum Moisture Content (OMC) %	**	**	**	**	**	10.0
Adjusted Optimum Moisture Content (OMC) %	7.0	8.5	8.5	7.0	7.0	**
Moisture Variation %	0.5	0.5	-1.5	-1.5	-1.0	1.0
Moisture Ratio %	96.0	93.5	121.0	120.5	118.0	91.0
Density Ratio %	96.0	98.5	95.0	97.5	96.5	101.5
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

# Material Test Report

**Report Number:** AGT41183-44  
**Issue Number:** 1  
**Date Issued:** 23/11/2022  
**Client:** NEO Infrastructure  
 25 Liston Rd, Lonsdale SA  
**Project Number:** AGT41183  
**Project Name:** Miravale Stage 6  
**Project Location:** Angle Vale  
**Work Request:** 8074  
**Date Sampled:** 28/10/2022  
**Dates Tested:** 29/10/2022 - 29/11/2022  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Specification:** 95% Standard AS1289 5.1.1  
**Site Selection:** Selected by Client  
**Location:** Angle Vale



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Compaction Control AS 1289 5.1.1 & 5.4.1 & 5.8.1 & 2.1.1			
Sample Number	41183-157	41183-158	41183-159
Date Tested	28/10/2022	28/10/2022	28/10/2022
Time Tested	13:10	13:13	13:17
Test Request #/Location	Lot 670	Lot 667	Lot 816
Line / Offset	6m W	8m W	3m W
Offset	4m N	2m N	6m N
Layer / Reduced Level	Layer 9	Layer 9	Layer 1
Thickness of Layer (mm)	200	200	200
Soil Description	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay
Test Depth (mm)	175	175	175
Fraction Tested (mm)	19.0	19.0	19.0
Oversize (wet basis) %	**	**	**
Oversize (dry basis) %	**	**	**
Curing Hours	4.0	4.2	4.3
Method used to Determine Plasticity	Visual/tactile	Visual/tactile	Visual/tactile
Field Wet Density t/m <sup>3</sup>	2.23	2.26	2.25
Field Moisture Content %	8.4	8.6	8.9
Field Dry Density t/m <sup>3</sup>	2.06	2.08	2.06
Maximum Dry Density t/m <sup>3</sup>	2.08	2.09	2.06
Adjusted Maximum Dry Density t/m <sup>3</sup>	**	**	**
Optimum Moisture Content (OMC) %	8.0	8.5	8.5
Adjusted Optimum Moisture Content (OMC) %	**	**	**
Moisture Variation %	-0.5	0.0	0.0
Moisture Ratio %	105.5	101.5	102.5
Density Ratio %	<b>98.5</b>	<b>99.5</b>	<b>100.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>

## Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC