Construction Sciences

Level 1 Supervision & Inspection Report

OLIVINE ESTATE STAGE 29

Prepared for Winslow Constructors Pty Ltd

21 August 2025

Document Information	
Prepared for	Winslow Constructors Pty Ltd
Proposal Name	Olivine Estate Stage 29
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Date	21 August 2025
Version Number	1

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Effective date: 13/08/2025

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Date approved: 13/08/2025

DOCUMENT HISTORY

Version	Effective Date	Revision	Author	Reviewer	Recipient
1	13/08/2025	01	Luke Mission	Bob Harris	Alex Dao

Contents

Appendices

Introduction

Construction Sciences is the largest private provider of construction materials testing services across Australia. We have a total staff of over 600 staff in 48 permanent offices/laboratories.

We have provided QA testing services to some of the largest road and mining infrastructure projects in these states, as well as overseas.

Over the last 3 to 4 years, Construction Sciences has established more site laboratories for road, rail, mining, and other large infrastructure projects than any other company.

We benefit our clients with the following clear differentiators;

- **Staff Mobilisation:** Construction Sciences' geographic expansion and mobility allow for teams to be available when required, and currently we have the lion's share of major projects in Australia.
- **Quality Management:** Construction Sciences' purpose-built software, COMPLY provides our clients with confidence, by knowing project data is securely stored. COMPLY has a built-in secure audit trail and a fully tracked Quality system. We are also ISO9001 compliant and certified.
- **Client Relationships:** We listen to your needs and respond with innovative solutions that are tailored for your business. We believe in building relationships with our staff and local community.
- **Safety:** At Construction Sciences we embrace a 'safety' culture and it is a key consideration with every project. Currently we are over 2 years LTI (lost time injury) free.

Construction Sciences Pty Ltd was commissioned by Winslow Constructors Pty Ltd to provide Level 1 inspection and testing services for the placement of fill at the proposed residential development: Lots 2003 - 2006

PROJECT: Olivine Estate Stage 29

ADDRESS: North of Igneous Wy, Donnybrook VIC 3064

The earthworks were carried out from 7/08/2025 to 12/08/2025.

The material used as structural fill was bought in externally and a total of approximately under 500m^3 of structural fill has been implemented and was being placed and compacted as at 7th of August 2025. The fill volume has been determined from site supervision records and supported information provided by the civil contractor Winslow Constructors Pty.

Specification Requirements

Filling was carried out in accordance with AS3798-2007 *'Guidelines on earthworks for commercial and residential developments'* and with the project specification prepared for the project.

The specification requirements were that all compacted fill must be placed and compacted in layers to a density ratio of not less than 95% of the maximum wet density as determined by AS1289.5.7.1 (standard compaction).

Existing Surface Assessments

Prior to commencement of filling, Construction Sciences confirmed that all unsuitable and weaker material such as topsoil, silt, uncontrolled or loose soil, organic effected material and other wet areas had been appropriately stripped in accordance with AS 3798-2007. The exposed surface after removal of unsuitable material was compacted by 12 Ton pad foot roller and checked for soft areas to see if any ground movement occurred beneath the wheels as it was driven along the pad at walking space.

Where no movement or vertical deflection was detected, the stripped surface was assessed to be suitable for the placement of fill.

Fill Placement -Structural Fill

The structural fill works begun on the 7th of August 2025 and fill was placed as the backfill layer initially. All fill material on site was inspected and deemed to be acceptable.

The fill material typically comprised of:

- Onsite Clay: Dark Brown/Black, High plasticity

Placement of fill was carried out using the following plant:

- Excavator
- CAT Pad foot Roller
- Water Truck
- Moxie Truck

The fill material was spread in near-horizontal layers and compacted in successive layers to a maximum compacted thickness of 200mm, using a 12 Ton pad-foot Roller & compactor.

Fill Works

Level 1 Supervision was carried out in the period between 7th to 12th of August 2025 which included earthworks for Olivine Estate Stage 29. Subgrade material consisted of highly plastic clay was sourced from the onsite cut areas and reconditioned onsite by a sieve bucket.

Topsoil was removed and stockpiled on site at the location approved by Winslow Constructors. Following the removal of topsoil and uncontrolled fill, the design subgrade was assessed and prepared for fill works. The area to be filled was stripped in accordance with the specification requirements provided by the client. Uncontrolled fill, natural soil and weathered rock generated from excavations on site was reconditioned and assessed by Construction Sciences before use. All the oversize rocks generated from the natural subgrade was sieved and stockpiled away from the work zone.

The field inspections were carried out regularly with observations made and recorded accordingly.

Site Works

Supervision for this project was carried out in the period between 7th to 12th of August 2025. Fill material consisted of high plastic clay mainly sourced from onsite spoil, conditioned onsite and compacted in place for the structural fill placements in the designated areas marked out on the plans.

Following the removal of uncontrolled fill, the design subgrade was assessed and prepared for fill works. The area to be filled was stripped and compacted by using a pad foot roller in accordance with the specification requirements provided by the client.

The approximate location of the site is shown outlined in figure 1 below:

Figure 1. Level 1 supervision fill areas highlighted

Compaction Control Testing

Compaction control tests were carried out at regular intervals throughout the placement of fill in accordance with the minimum test frequency recommendations included in AS3798-2007 *'Guidelines on earthworks for commercial and residential developments'*. All test results are included in the Appendix B.

Disturbed samples taken from each density test site were tested at Construction Sciences' NATA accredited soil laboratory, using the HILF rapid compaction method, in accordance with AS 1289 5.7.1.

Date	Sample No.	Report No	Density Ratio %	Moisture Ratio %	Layer number
07/08/2025	S/25-70394	R/25-24479-1	98.0	107.5	1
07/08/2025	S/25-70395	R/25-24479-1	98.0	102.5	1
07/08/2025	S/25-70396	R/25-24479-1	101.5	103.5	1
07/08/2025	S/25-70397	R/25-24479-1	98.5	100.0	1
08/08/2025	S/25-70887	R/25-24818-1	104.0	99.5	2
08/08/2025	S/25-70888	R/25-24818-1	102.0	98.0	2
08/08/2025	S/25-70889	R/25-24818-1	102.0	100.5	2
08/08/2025	S/25-70890	R/25-24818-1	103.5	100.5	2
11/08/2025	S/25-72179	R/25-25061-1	96.0	89.5	1
11/08/2025	S/25-72180	R/25-25061-1	97.5	90.5	1
11/08/2025	S/25-72181	R/25-25061-1	101.0	92.0	1
11/08/2025	S/25-72182	R/25-25061-1	99.0	97.5	1
11/08/2025	S/25-72183	R/25-25061-1	97.5	91.0	1
12/08/2025	S/25-72234	R/25-25064-1	98.5	91.0	2
12/08/2025	S/25-72235	R/25-25064-1	97.5	90.5	2
12/08/2025	S/25-72236	R/25-25064-1	99.5	91.5	2

- **Mean Density Ratio** = 99.6%
- **Mean Moisture Ratio** = 95.6%
- **Density Standard Deviation** = 2.31%
- **Moisture Standard Deviation** = 5.5%

A summary of the test results is included as Table 1 &. A total of 16 field density tests were carried out throughout the period of fill placement. The average density ratio of **99.6%** with a standard deviation of **2.31%** and average moisture ratio of **95.6%** with a standard deviation of **5.5%**

Site Investigations

Site investigations for Olivine Estate Stage 29 were conducted in accordance with AS 3798, which stipulates that specific unsuitable materials must not be incorporated into structural fills. The images below illustrate stockpiles containing materials observed on site.

Oversize aggregates:

Figure 2. Oversize Aggregates on stockpile

During site visits conducted between August 7, 2025, and August 12, 2025, oversized aggregates or boulders were observed in structural fill areas. These aggregates were sourced from Onsite – Clay Insitu Locations.

In accordance with AS 3798, the presence of boulders in sufficient proportions is not permitted in fills, as they may adversely impact compaction, moisture content for testing, and the overall quality of earthworks fills.

Discussions with the Foreman and Dozer operator, focused on the extraction of oversized boulders from the fill. The operator confirmed that he separates the boulders and oversize aggregates away from the designated structural fill and will not be included in the designated fill locations.

Conclusion

It is considered that the placement of fill at North of Igneous Wy, Donnybrook VIC 3064 was carried out in a controlled manner and the fill was compacted to a wet density ratio not less than the specified requirement. It is concluded that the fill may be deemed to be *'controlled fill'* in accordance with AS2870 – 2011 *'Residential Slabs & Footings'*. This report includes compaction and moisture control results for Olivine Estate Stage 29.

General Statement of Compliance

It is considered that the fill material placed at North of Igneous Wy, Donnybrook VIC 3064 between the dates of 7th to 12st of August 2025 were carried out in accordance with AS3798-2007 "*Guidelines on earthworks for commercial and residential developments*".

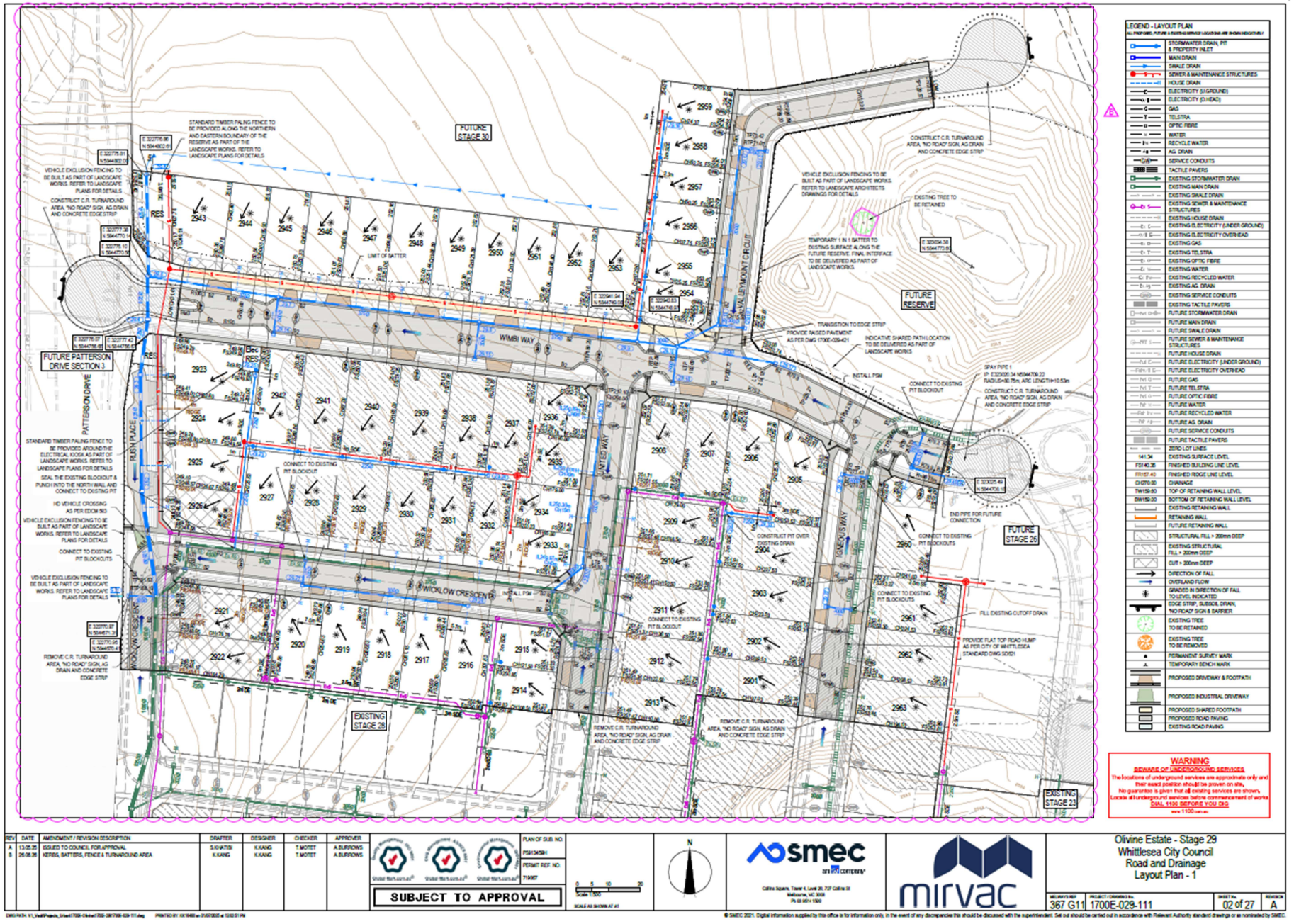
Limit of Liability

This report has been produced for, and is the property of our client Winslow Constructors PTY.

Construction Sciences accepts no liability to any third party and will not enter any communication with a third party regarding this report.

Appendix A

Layout Plan


LEGEND - LAYOUT PLAN
FUTURE STAGE 30
FUTURE RESERVE
FUTURE STAGE 26
EXISTING STAGE 28
EXISTING STAGE 23
WIMBI WAY
WICKLOW CRESCENT
PATTERSON DRIVE
FUTURE PATTERSON DRIVE SECTION 3
WARNING
REMOVE C.R. TURNAROUND AREA, "NO ROAD" SIGN, AG DRAIN AND CONCRETE EDGE STRIP
SUBJECT TO APPROVAL
Olivine Estate - Stage 29
Whittlesea City Council
Road and Drainage
Layout Plan - 1
367 G11
1700E-029-111
02 of 27
A

Appendix B

Field Density Test Results

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LOT REPORT - WET DENSITY RATIO

Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-24479-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/a
Location:	Various	Internal Test Request:	14874/T/25-9838
Component:	Lots 2923, 2942, 2936	Client Reference/s:	Level 1 Supervision 7/8/25
Area Description:	R.T.M	Report Date / Page:	12/08/2025 Page 1 of 2

Test Procedures:	AS1289.5.7.1, RC301.01, AS1289.5.8.1, AS1289.2.1.1

Sample Number	14874/S/25-70394	14874/S/25-70395	14874/S/25-70396	14874/S/25-70397
ID / Client ID	Level 1 Supervision 7/8/25	Level 1 Supervision 7/8/25	Level 1 Supervision 7/8/25	Level 1 Supervision 7/8/25
Lot Number	n/a	n/a	n/a	n/a
Date / Time Tested	7/08/2025 15:15	7/08/2025 15:15	7/08/2025 15:15	7/08/2025 15:15
Material Source	Onsite	Onsite	Onsite	Onsite
Material Type	Clay	Clay	Clay	Clay
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / -	175 / 200 / -	175 / 200 / -
Standard or Modified	Standard	Standard	Standard	Standard
Layer Number	Layer 1	Layer 1	Layer 1	Layer 1
Location Number	1	2	3	4
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	7	7	10
Compaction Sample Number	14874/S/25-70394	14874/S/25-70395	14874/S/25-70396	14874/S/25-70397
Sample Description	Clay	Clay	Clay Liner	Clay Liner
Moisture Test Results:				
Field Moisture Content (%)	24.2	20.8	25.0	20.9
Adjusted / Moist. Variation (%)	**-1.5**	**-0.5**	**-1.0**	**0.0**
Optimum Moisture Content (%)	22.5	20.5	24.0	21.0
Moisture Variation from OMC	(Wetter than OMC)	(Wetter than OMC)	(Wetter than OMC)	(at OMC)
Moisture Ratio (%)	**107.5**	**102.5**	**103.5**	**100.0**
Density Test Results:				
Field Wet Density (t/m³)	1.94	1.95	2.01	1.95
Adj/Peak Conv Wet Density (t/m³)	1.98	1.98	1.99	1.98
Density Ratio Required (%)	95	95	95	95
Hilf Density Ratio (%)	**98.0**	**98.0**	**101.5**	**98.5**

Remarks

NATA

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 1986
Corporate Site Number: 14874

Approved Signatory: Nawin Dahal
Form ID: W5ASMRRepSum Rev 4

Construction Sciences
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Construction Sciences Pty Ltd
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Laboratory: Melbourne Laboratory
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Email: Melbourne@constructionsciences.net

LOT REPORT - WET DENSITY RATIO

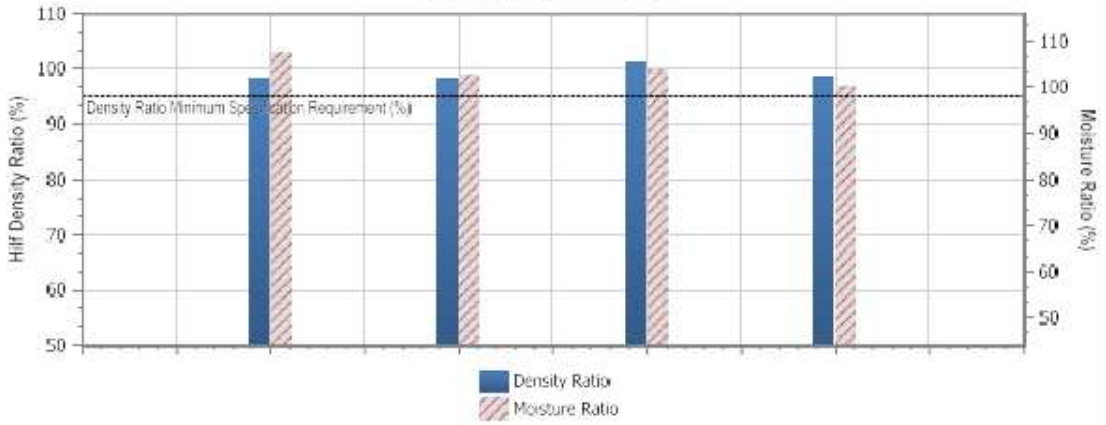
Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-24479-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/a
Location:	Various	Internal Test Request:	14874/T/25-9838
Component:	Lots 2923, 2942, 2936	Client Reference/s:	Level 1 Supervision 7/8/25
Area Description:	R.T.M	Report Date / Page:	12/08/2025 Page 2 of 2

Test Procedures:	AS1289.5.7.1, RC301.01, AS1289.5.8.1, AS1289.2.1.1
Statistical Analysis Test Method:	Vic Roads RC316.00

Nuclear Gauge Calibration Details

Calibration Number	-	Material Source	-
Calibration Last Updated	-	Material Type	-
Nominated Calibration Layer Depth (mm)	-	-	

LOT TEST RESULT SUMMARY



Tests in Lot = 4	Lot Minimum	Lot Maximum	Lot Mean	Standard Deviation
Moisture Ratio (%)	100.1	107.4	103.4	3.032
Hilf Density Ratio (%)	98.1	101.3	99.0	1.544

Lot Number:	**n/a**
Mean Moisture Ratio (%):	**103.4**
Mean Density Ratio (%):	**99.0**

Remarks

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Corporate Site Number: 14874

Approved Signatory: Nawin Dahal
Form ID: WSASMRRepSum Rev 4

Construction Sciences

Not to Scale
Dimensions in Approx. Metres

Site Location Sketch

Test site locations only
NOT TO SCALE

Client: Winslow Constructors
Job No. P/3155
Test Request No. T/
Date Tested: 07/08/2025

Construction Sciences
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Laboratory: Melbourne Laboratory
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Fax: 03 9338 3255
Email: Melbourne@constructionsciences.net

LOT REPORT - WET DENSITY RATIO

Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-24818-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/a
Location:	Various	Internal Test Request:	14874/T/25-9885
Component:	Lots 2923, 2942-2935	Client Reference/s:	Level 1 Supervision 8/8/25
Area Description:	Refer To Map	Report Date / Page:	14/08/2025 Page 1 of 2

Test Procedures:	AS1289.5.7.1, AS1289.1.1, AS1289.5.8.1, AS1289.2.1.1

Sample Number	14874/S/25-70887	14874/S/25-70888	14874/S/25-70889	14874/S/25-70890
ID / Client ID	Level 1 Supervision 8/8/25	Level 1 Supervision 8/8/25	Level 1 Supervision 8/8/25	Level 1 Supervision 8/8/25
Lot Number	n/a	n/a	n/a	n/a
Date / Time Tested	8/08/2025 14:00	8/08/2025 14:00	8/08/2025 14:00	8/08/2025 14:00
Material Source	Onsite	Onsite	Onsite	Onsite
Material Type	Clay	Clay	Clay	Clay
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / -	175 / 200 / -	175 / 200 / -
Standard or Modified	Standard	Standard	Standard	Standard
Layer Number	2	2	2	2
Location Number	1	2	3	4
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	9	14	12	10
Compaction Sample Number	14874/S/25-70887	14874/S/25-70888	14874/S/25-70889	14874/S/25-70890
Sample Description	Clay	Clay	Clay	Clay
Moisture Test Results:				
Field Moisture Content (%)	19.6	20.4	21.2	22.5
Adjusted / Moist. Variation (%)	**0.0**	**0.5**	**0.0**	**0.0**
Optimum Moisture Content (%)	19.5	21.0	21.0	22.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Wetter than OMC)	(Wetter than OMC)
Moisture Ratio (%)	**99.5**	**98.0**	**100.5**	**100.5**
Density Test Results:				
Field Wet Density (t/m³)	2.14	2.15	2.12	2.11
Adj/Peak Conv Wet Density (t/m³)	2.05	2.10	2.08	2.06
Density Ratio Required (%)	95	95	95	95
Hilf Density Ratio (%)	**104.0**	**102.0**	**102.0**	**103.0**

Remarks

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Fax: 03 9338 3255
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LOT REPORT - WET DENSITY RATIO

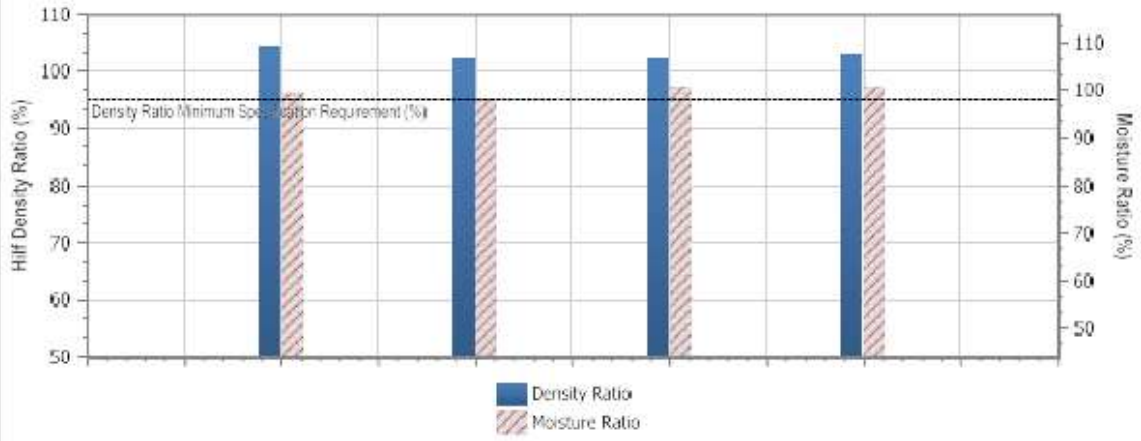
Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-24818-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/a
Location:	Various	Internal Test Request:	14874/T/25-9885
Component:	Lots 2923, 2942-2935	Client Reference/s:	Level 1 Supervision 8/8/25
Area Description:	Refer To Map	Report Date / Page:	14/08/2025 Page 2 of 2

Test Procedures:	AS1289.5.7.1, AS1289.1.1, AS1289.5.8.1, AS1289.2.1.1
Statistical Analysis Test Method:	Lot Average (Lot average calculations are not covered by endorsement)

Nuclear Gauge Calibration Details

Calibration Number	-	Material Source	-
Calibration Last Updated	-	Material Type	-
Nominated Calibration Layer Depth (mm)	-	-	

LOT TEST RESULT SUMMARY



Tests in Lot = 4	Lot Minimum	Lot Maximum	Lot Mean	Standard Deviation
Moisture Ratio (%)	97.9	100.6	99.6	1.278
Hilf Density Ratio (%)	102.1	104.1	102.8	0.947

Lot Number:	n/a
Mean Moisture Ratio (%):	**99.6**
Mean Density Ratio (%):	**102.8**

Remarks

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NATA

Accreditation Number: 1986
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Approved Signatory: Nawin Dahal
Form ID: WSASMRRepSum Rev 4

Construction Sciences

Not to Scale
Dimensions in Approx. Metres

Site Location Sketch

Test site locations only
NOT TO SCALE

Client: Winslow Constructors
Job No. P/3155
Test Request No. T/
Date Tested: 08/08/2025

25-9685

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LOT REPORT - WET DENSITY RATIO

Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-25061-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/s
Location:	Various	Internal Test Request:	14874/T/25-10063
Component:	Lots 2927 - 2932	Client Reference/s:	Level 1 Supervision 11/8/25
Area Description:	Refer To Map	Report Date / Page:	15/08/2025 Page 1 of 3

Test Procedures:	AS1289.5.7.1, AS1289.1.1, AS1289.5.8.1, AS1289.2.1.1

Sample Number	14874/S/25-72179	14874/S/25-72180	14874/S/25-72181	14874/S/25-72182
ID / Client ID	Level 1 Supervision 11/8/25	Level 1 Supervision 11/8/25	Level 1 Supervision 11/8/25	Level 1 Supervision 11/8/25
Lot Number	n/s	n/s	n/s	n/s
Date / Time Tested	11/08/2025 11:40	11/08/2025 11:40	11/08/2025 11:40	11/08/2025 11:40
Material Source	Onsite	Onsite	Onsite	Onsite
Material Type	Clay	Clay	Clay	Clay
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / -	175 / 200 / -	175 / 200 / -
Standard or Modified	Standard	Standard	Standard	Standard
Layer Number	1	1	1	1
Location Number	1	2	3	4
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	9	12	4	6
Compaction Sample Number	14874/S/25-72179	14874/S/25-72180	14874/S/25-72181	14874/S/25-72182
Sample Description	Clay	Clay	Clay	Clay
Moisture Test Results:				
Field Moisture Content (%)	16.6	19.1	20.8	22.9
Adjusted / Moist. Variation (%)	**2.0**	**2.0**	**2.0**	**2.0**
Optimum Moisture Content (%)	18.5	21.0	22.5	25.0
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
Moisture Ratio (%)	**89.5**	**90.5**	**92.0**	**91.5**
Density Test Results:				
Field Wet Density (t/m³)	1.92	1.92	1.97	1.95
Adj/Peak Conv Wet Density (t/m³)	2.00	1.97	1.95	1.96
Density Ratio Required (%)	95	95	95	95
Hilf Density Ratio (%)	**96.0**	**97.5**	**101.0**	**99.0**

Remarks

Accredited for compliance with ISO/IEC 17025 – Testing

NATA

Accreditation Number: 1986
Corporate Site Number: 14874

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LOT REPORT - WET DENSITY RATIO

Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-25061-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/s
Location:	Various	Internal Test Request:	14874/T/25-10063
Component:	Lots 2927 - 2932	Client Reference/s:	Level 1 Supervision 11/8/25
Area Description:	Refer To Map	Report Date / Page:	15/08/2025 Page 2 of 3

Test Procedures:	AS1289.5.7.1, AS1289.1.1, AS1289.5.8.1, AS1289.2.1.1

Sample Number	14874/S/25-72183			
ID / Client ID	Level 1 Supervision 11/8/25			
Lot Number	n/s			
Date / Time Tested	11/08/2025 11:40			
Material Source	Onsite			
Material Type	Clay			
Sampling Method	AS1289.1.2.1 Cl 6.4b			
Depths: Test / Nom / Actual (mm)	175 / 200 / -			
Standard or Modified	Standard			
Layer Number	1			
Location Number	5			
Test Fraction (mm)	< 19.0 mm			
Sample Oversize (%)	6			
Compaction Sample Number	14874/S/25-72183			
Sample Description	Clay			
Moisture Test Results:				
Field Moisture Content (%)	19.3			
Adjusted / Moist. Variation (%)	**2.0**			
Optimum Moisture Content (%)	21.0			
Moisture Variation from OMC	(Drier than OMC)			
Moisture Ratio (%)	**91.0**			
Density Test Results:				
Field Wet Density (t/m³)	1.88			
Adj/Peak Conv Wet Density (t/m³)	1.92			
Density Ratio Required (%)	95			
Hilf Density Ratio (%)	**97.5**			

Remarks

Accredited for compliance with ISO/IEC 17025 – Testing

NATA

Accreditation Number: 1986
Corporate Site Number: 14874

Approved Signatory: Nawin Dahal
Form ID: WSASMRRepSum Rev 4

Construction Sciences
a kiwa company

Construction Sciences Pty Ltd
ABN: 74 128 806 735

Address:
60 - 64 Vella Drive,
Sunshine West VIC 3020

Laboratory: Melbourne Laboratory
Phone: 03 9364 9301
Fax: 03 9338 3255
Email: Melbourne@constructionsciences.net

LOT REPORT - WET DENSITY RATIO

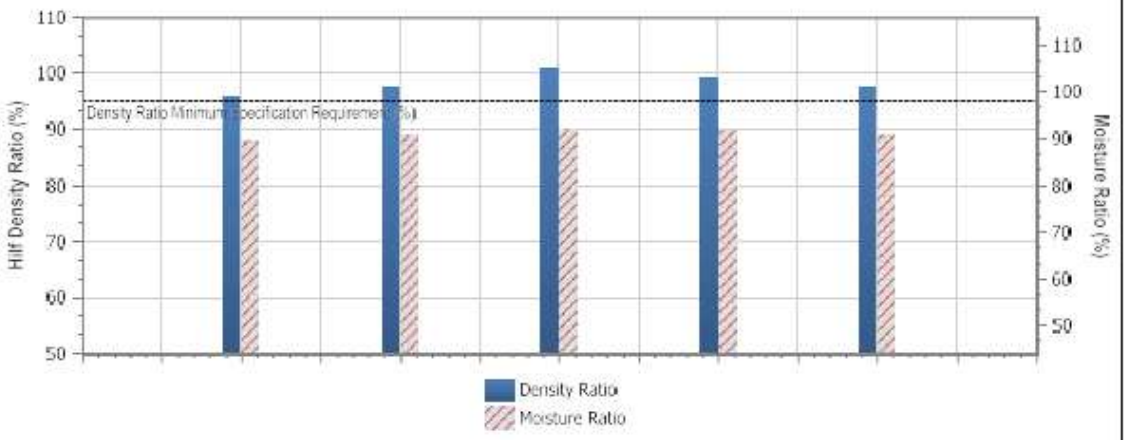
Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-25061-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	n/s
Location:	Various	Internal Test Request:	14874/T/25-10063
Component:	Lots 2927 - 2932	Client Reference/s:	Level 1 Supervision 11/8/25
Area Description:	Refer To Map	Report Date / Page:	15/08/2025 Page 3 of 3

Test Procedures:	AS1289.5.7.1, AS1289.1.1, AS1289.5.8.1, AS1289.2.1.1
Statistical Analysis Test Method:	Lot Average (Lot average calculations are not covered by endorsement)

Nuclear Gauge Calibration Details

Calibration Number	-	Material Source	-
Calibration Last Updated	-	Material Type	-
Nominated Calibration Layer Depth (mm)	-	-	

LOT TEST RESULT SUMMARY



Tests in Lot = 5	Lot Minimum	Lot Maximum	Lot Mean	Standard Deviation
Moisture Ratio (%)	89.5	91.8	90.9	0.929
Hilf Density Ratio (%)	95.8	101.0	98.2	1.965

Lot Number:	**n/s**
Mean Moisture Ratio (%):	**90.9**
Mean Density Ratio (%):	**98.2**

Remarks

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NATA

Accreditation Number: 1986
Corporate Site Number: 14874

Approved Signatory: Nawin Dahal
Form ID: W5ASMRRepSum Rev 4

Construction Sciences

Not to Scale
Dimensions in Approx. Metres

Site Location Sketch

Test site locations only
NOT TO SCALE

Client: Winslow Constructors
Job No. P/3155
Test Request No. T/ 25 - 10063
Date Tested: 11/08/2025

Construction Sciences
a kiwa company

Construction Sciences Pty Ltd
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60 - 64 Vella Drive,
Sunshine West VIC 3020

Laboratory: Melbourne Laboratory
Phone: 03 9364 9301
Fax: 03 9336 3255
Email: Melbourne@constructionsciences.net

LOT REPORT - WET DENSITY RATIO

Client:	Winslow Infrastructure Pty Ltd	Report Number:	14874/R/25-25064-1
Client Address:	2 Central Blvd, Port Melbourne	Project Number:	14874/P/3155
Project:	Olivine Estate - Stage 29	Lot Number:	-
Location:	Various	Internal Test Request:	14874/T/25-10074
Component:	Lots 2927 - 2932	Client Reference/s:	level 1 Supervision 12/8/25
Area Description:	Refer To Map	Report Date / Page:	15/08/2025 Page 1 of 2

Test Procedures:	AS1289.5.7.1, RC301.01, AS1289.5.8.1, AS1289.2.1.1

Sample Number	14874/S/25-72234	14874/S/25-72235	14874/S/25-72236	
ID / Client ID	level 1 Supervision 12/8/25	level 1 Supervision 12/8/25	level 1 Supervision 12/8/25	
Lot Number	-	-	-	
Date / Time Tested	12/08/2025 11:00	12/08/2025 11:00	12/08/2025 11:00	
Material Source	Onsite	Onsite	Onsite	
Material Type	Clay	Clay	Clay	
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / -	175 / 200 / -	
Standard or Modified	Standard	Standard	Standard	
Layer Number	2	2	2	
Location Number	1	2	3	
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	
Sample Oversize (%)	9	8	0	
Compaction Sample Number	14874/S/25-72234	14874/S/25-72235	14874/S/25-72236	
Sample Description	Clay	Clay	Clay	
Moisture Test Results:				
Field Moisture Content (%)	20.0	19.4	23.7	
Adjusted / Moist. Variation (%)	**2.0**	**2.0**	**2.0**	
Optimum Moisture Content (%)	22.0	21.5	26.0	
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	
Moisture Ratio (%)	**91.0**	**90.5**	**91.5**	
Density Test Results:				
Field Wet Density (t/m³)	1.93	1.91	1.93	
Adj/Peak Conv Wet Density (t/m³)	1.96	1.96	1.94	
Density Ratio Required (%)	95	95	95	
Hilf Density Ratio (%)	**98.5**	**97.5**	**99.5**	

Remarks

Accredited for compliance with ISO/IEC 17025 – Testing

Accreditation Number: 1986
Corporate Site Number: 14874

Approved Signatory: Nawin Dahal
Form ID: W5ASMRRepSum Rev 4

Construction Sciences

Not to Scale
Dimensions in Approx. Metres

Site Location Sketch

Test site locations only
NOT TO SCALE

Client: Winslow Constructors
Job No. P/3155
Test Request No. T/
Date Tested: 12/08/2025

Appendix C

Site Visit Records and Photos

Figure 3. Site Photo – Olivine Estate Stage 29

Figure 4. Site Photo – Olivine Estate Stage 29

Figure 5. Site Photo – Olivine Estate Stage 29

Figure 6. Site Photo – Olivine Estate Stage 29

Figure 7. Site Photo – Olivine Estate Stage 29

Figure 8. Site Photo – Olivine Estate Stage 29

Located across Australia and New Zealand

QLD
Airlie
Beenleigh
Brisbane (Acacia Ridge)
Brisbane (Beenleigh)
Brisbane (Brendale)
Brisbane (Petrie)
Cairns
Emerald
Gladstone
Gold Coast
Mackay
Moranbah
Rockhampton
Petrie
Sunshine Coast
Toowoomba
Townsville

NSW
Ballina
Coffs Harbour
Grafton
Lynwood
Newcastle
Sydney (Glendenning)
Sydney (Seven Hills)
Sydney (St Peters)
Taree
Wollongong

VIC
Ararat
Bendigo
Echuca
Melbourne (Chadstone)
Melbourne (Keysborough)
Melbourne (Pakenham)
Melbourne (Oaklands Junction)
Melbourne (Sunshine West)
Traralgon

WA
Bunbury
Kalgoorlie
Newman
Perth
Port Hedland

SA
Adelaide
Port Augusta

NT
Darwin

ACT
Canberra

NZ
Wellington

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