44 Smiths Lane Stage 44 and Future 7R

GITA Inspection Verification Report

Prepared For:	Streetworks Pty Ltd
Report Number	P252349A V1
Version Release Date	4 Feb 2026
Report Released By	C Caulfield
Title	Laboratory Manager
Signature	

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Appendices

1 Introduction

Terra Firma Laboratories was engaged by Streetworks Pty Ltd as the Geotechnical Inspection and Testing Authority (GITA) to provide Level 1 supervision and testing works on the earthworks component for 44 Smiths Lane Stage 44 and Future 7R. This work was conducted over the period of 15/10/2025 to 25/11/2025.

This report presents that the allotment earthworks was carried out in accordance with AS3798-2007 *Guidelines for Earthworks for Commercial and Residential Development* and in compliance with the compaction control specifications established by the contractor.

2 Scope of Work

2.1 Area of Work

The areas of work included lots 4401 to 4444 and future stage 7R, bounded by streets Flock Crescent, Labota Street, Kumi Street, Waring Street and Arub Road. The site will be a Residential development.

The area on which fill was placed is shown on site plan (Appendix 1: *Test Location Plan*) based on drawings prepared by Beveridge Williams (Drawing Reference: 1101438 44 010 A) and provided by Streetworks Pty Ltd.

The supervision work by the GITA involved both inspection of sub grade preparation work and full time inspection and testing of fill placement.

2.2 Specification

The technical specification (Reference from Drawings) for compaction control requirements was provided by Streetworks Pty Ltd and established that:

Test Rolling is required for all layers of structural fill and materials within 150mm of permanent subgrade level so as to withstand test rolling without visible deformation or springing. Corrective action is required where unstable areas exceed 20% of the area being considered by test rolling.

Section 5.2 of AS3798-2007 (Section 5.2) establishes a specification requirement for a minimum density ratio of not less than 95% noting that soils containing more than 20% of particles coarser than 37.5mm cannot be tested for relative compaction using the procedures of AS1289 5.1.1 and AS1289 5.2.1.

In accordance with Table 8.1 (AS3798), for large scale operations, (greater than 1500m^2), the minimum testing frequency is 1 test per layer per material type per 2500m^2 or 1 test per 500m^3 distributed reasonable evenly throughout full depth and area or 3 tests per lot. AS3798 defines a lot as "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work". All three of these test frequencies must be achieved and this is typically confirmed to have been achieved when 3 tests per visit (day) have been completed.

2.3 Limitations

Terra Firma Laboratories cannot verify any works completed by others outside of the time period specified in the introduction. Uncontrolled works may include, but are not limited to trenching for services, cut and fill works for slab preparation or subsequent removal of vegetation and back fill of holes unless specified in section 2.1 of this report.

Terra Firma Laboratories cannot verify that the material used as a filling medium is free from chemical or other contamination. The scope and the period of Terra Firma Laboratories as described in the introduction are subject to restrictions and limitations. Terra Firma Laboratories did not perform a complete assessment of all possible conditions and circumstances that may exist at the site. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Terra Firma Laboratories.

Verification of finished surface level to design levels is outside of the scope of the GITA report.

Any drawings or marked locations presented in this report should be considered only as pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions should not be used for accurate calculations or dimensioning.

Where data has been supplied by the client or a third party, it is assumed that the information is correct unless otherwise stated. No responsibility is accepted by Terra Firma Laboratories for incomplete or inaccurate data supplied by others.

3 Construction Method

3.1 Subgrade Preparation

At the time of subgrade inspection the following was observed:

- Subgrade preparation involved stripping the site of topsoil, vegetation and organic matter to a depth of approximately 200mm below existing levels.
- The site was cleared of all trees and stumps to the extent necessary for the fill placement to proceed
- The roots of all trees and any debris was removed from site prior to any fill placement

The sub-grade area was then proof-rolled to confirm it was capable of withstanding test rolling without visible deformation or springing and any areas observed to be soft or otherwise unsuitable were rectified. The sub-grade was watered and scarified prior to fill placement to aid layer bonding.

3.2 Fill Placement

The contractor was observed to have suitable construction equipment and plant available on-site during the construction period for use in the fill placement.

All fill was placed in layers of thicknesses not exceeding 300mm. At the completion of a placed layer, compaction testing was performed to confirm appropriate compaction had been achieved and supported the observations made. It should be noted that the compaction tests are representative samples of the fill placed and support the visual assessment of the works completed. Each house lot does not necessarily require a compaction test to to have been conducted within the house allotment but may have been verified by testing conducted within up to a 2500m^2 area of the house lot.

Final fill placement levels were verified against design level by others. For the purposes of this report, it was observed that finished levels were in accordance with levels marked on site by survey markers.

The final 200mm of material placed across the site was placed as a topsoil layer or growing medium and should be considered as non-structural, as it was placed in an uncontrolled manner, as allowed by specifications and placement of the final 200mm of material was not observed by the GITA.

4 Construction Verification

Compaction Verification testing is summarized in a detailed test register with test certificates attached provided in Appendix 2: *Compaction Test Register and Test Certificates*. A test location

plan (P252349D1, Appendix 1) providing a schematic of test locations across the extent of scope of works for every placed layer of fill is also documented.

A total of 48 density tests (Hilf method in accordance with 1289 5.7.1) were undertaken with 2 failed results. The contractor was notified of any failed tests and the failed areas were ripped, watered, compacted and then re-tested to confirm compliance with the specification. The results summarised in the compaction test register (Appendix 2) confirm that for every layer of fill placed in a specific work area, satisfactory testing was completed.

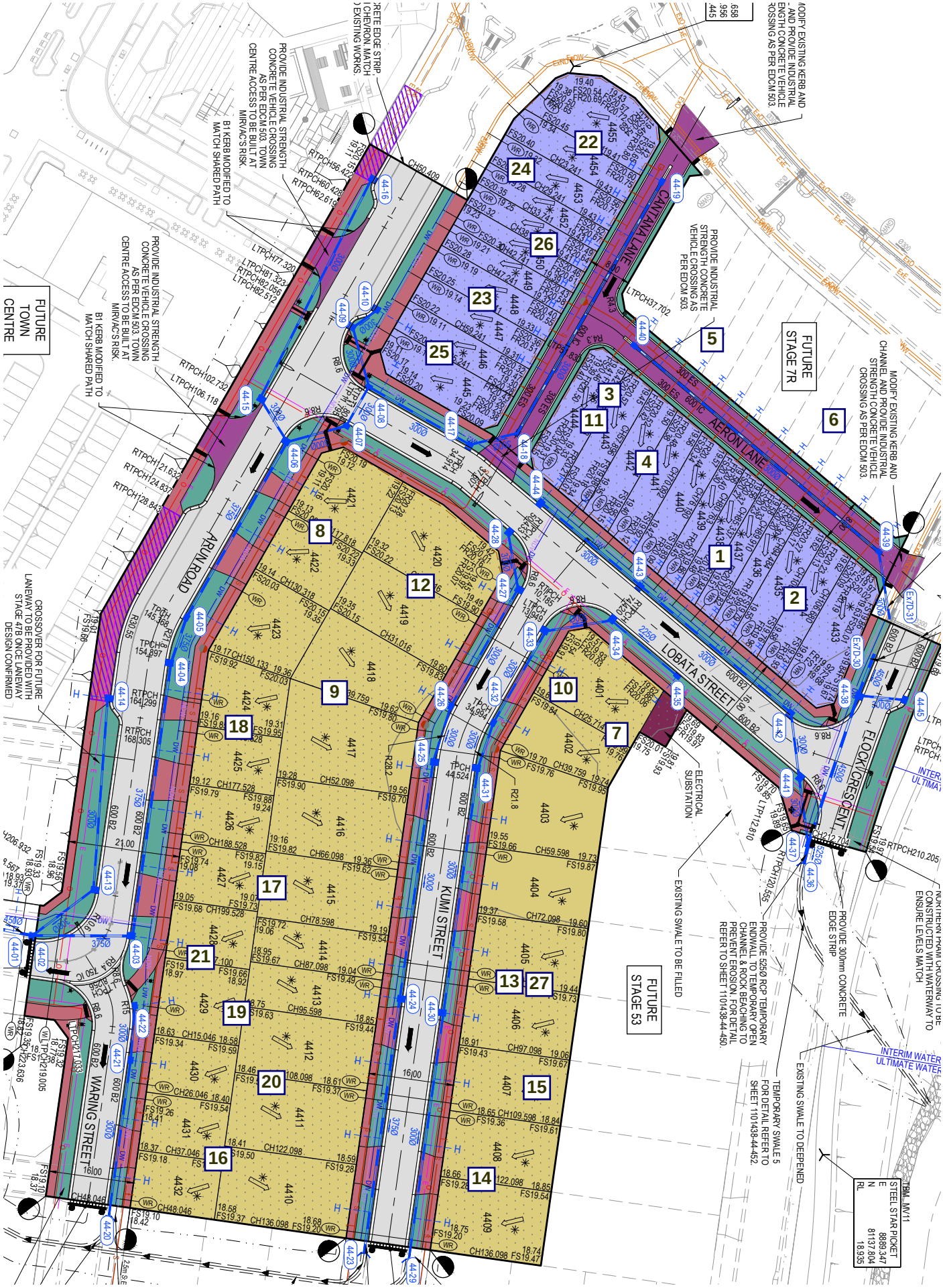
5 Statement of Compliance

The intention of this report is to provide a description of the earthworks construction for Stage 44 and Future 7R at 44 Smiths Lane. For completed fill areas of greater than 300mm, and for works completed between 15/10/2025 and 25/11/2025, earthworks construction activities were conducted under the full time supervision of the Geotechnical Inspection and Testing Authority. Inspections and testing of the fill areas at this site indicate that both sub grade preparation and fill placement have been conducted in accordance with the specification. The earthworks construction for Stage 44 and Future 7R of44 Smiths Lane was observed to be constructed in compliance with the requirements of the Technical Specification.

Appendix 1: Test Location Plan

Our Head Office
47 National Ave
Pakenham, VIC 3810

Our Laboratories
Pakenham 03 9769 5799
Deer Park 03 8348 5596
Bibra Lake 08 9395 7220



terra firma laboratories

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47 National Ave
Pakenham, VIC 3810

Our Laboratories
Pakenham 03 9769 5799
Deer Park 03 8348 5596
Bibra Lake 08 9395 7220

Test Location Plan

not to scale

Client: Streetworks Pty Ltd

Project: Smiths Lane Stage 44 and Future Stage 7R

Reference: P252349 D1

Appendix 2: Compaction Test Register and Test Certificates

Compaction Test Register

Client: Streetworks Pty Ltd
Project: 44 Smiths Lane and Future Stage 7R
Project No: P252349
Specification: 95%

Date:	Test No:	Layer:	Retest of:	Density:	Pass/Fail:	Lot No:	Report No:
15/10/2025	1	Layer 1		97.5%	Pass	Refer to Plan	P252349-1
15/10/2025	2	Layer 2		96.5%	Pass	Refer to Plan	P252349-1
15/10/2025	3	Layer 2		94.5%	Fail	Refer to Plan	P252349-1
17/10/2025	4	Layer 3		100.5%	Pass	Refer to Plan	P252349-2
17/10/2025	5	Layer 3		101.5%	Pass	Refer to Plan	P252349-2
17/10/2025	6	Layer 3		102.0%	Pass	Refer to Plan	P252349-2
17/10/2025	7	Layer 1		100.5%	Pass	Refer to Plan	P252349-2
17/10/2025	8	Layer 1		100.0%	Pass	Refer to Plan	P252349-2
17/10/2025	9	Layer 2		101.0%	Pass	Refer to Plan	P252349-2
20/10/2025	10	Layer 3		97.5%	Pass	Refer to Plan	P252349-3
20/10/2025	11	Layer 2	Test #3	96.5%	Pass	Refer to Plan	P252349-3
20/10/2025	12	FSL		97.5%	Pass	Refer to Plan	P252349-3
21/10/2025	13	Layer 1		94.0%	Fail	Refer to Plan	P252349-4
21/10/2025	14	Layer 1		99.5%	Pass	Refer to Plan	P252349-4
21/10/2025	15	Layer 2		96.5%	Pass	Refer to Plan	P252349-4
30/10/2025	16	Layer 1		97.0%	Pass	Refer to Plan	P252349-5
30/10/2025	17	Layer 1		95.5%	Pass	Refer to Plan	P252349-5
30/10/2025	18	Layer 2		95.5%	Pass	Refer to Plan	P252349-5
31/10/2025	19	Layer 2		96.0%	Pass	Refer to Plan	P252349-6
31/10/2025	20	FSL		99.0%	Pass	Refer to Plan	P252349-6
31/10/2025	21	FSL		103.0%	Pass	Refer to Plan	P252349-6
21/11/2025	22	Layer 1		96.0%	Pass	Refer to Plan	P252349-7
21/11/2025	23	Layer 1		102.5%	Pass	Refer to Plan	P252349-7
21/11/2025	24	Layer 2		100.0%	Pass	Refer to Plan	P252349-7
25/11/2025	25	Layer 2		102.5%	Pass	Refer to Plan	P252349-8
25/11/2025	26	FSL		100.5%	Pass	Refer to Plan	P252349-8
25/11/2025	27	Layer 1	Test #13	97.5%	Pass	Refer to Plan	P252349-8

Material Test Report

Report Number: P252349-1
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19265
Date Sampled: 15/10/2025
Dates Tested: 15/10/2025 - 23/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Smiths lane Stage 44- Level One
Material: CLAY
Material Source: Imported

terra firma laboratories
Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

NATA WORLD RECOGNISED ACCREDITATION
Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
Laboratory Manager
Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19265A	P25-19265B	P25-19265C
Test Number	1	2	3
Date Tested	15/10/2025	15/10/2025	15/10/2025
Time Tested	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	Layer 1	Layer 2	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m^3	1.84	1.83	1.85
Field Moisture Content %	18.8	18.0	18.7
Field Dry Density (FDD) t/m^3	1.55	1.55	1.56
Peak Converted Wet Density t/m^3	1.89	1.90	1.96
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	18.8	18.0	18.7
Moisture Ratio % (AS1289.5.4.1)	81.5	81.0	94.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	4.0	4.0	1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**97.5**	**96.5**	**94.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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

Material Test Report

Report Number: **P252349-2**
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19302
Date Sampled: 17/10/2025
Dates Tested: 17/10/2025 - 21/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Smith's Lane Stage 44 - Clyde North 17.10.2025
Material: Sandy silty CLAY

terra firma laboratories
Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
Laboratory Manager
Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1						
Sample Number	P25-19302A	P25-19302B	P25-19302C	P25-19302D	P25-19302E	P25-19302F
Test Number	4	5	6	7	8	9
Date Tested	17/10/2025	17/10/2025	17/10/2025	17/10/2025	17/10/2025	17/10/2025
Time Tested	**	**	**	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	Layer 3	Layer 3	Layer 3	Layer 1	Layer 1	Layer 2
Thickness of Layer (mm)	300	300	300	300	300	300
Soil Description	Sandy silty CLAY	Sandy silty CLAY	Sandy silty CLAY	Sandy silty CLAY	Sandy silty CLAY	Sandy silty CLAY
Test Depth (mm)	275	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	**	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**	**	**	**
Field Wet Density (FWD) t/m^3	1.94	1.92	2.03	2.02	1.92	1.92
Field Moisture Content %	19.2	16.5	17.6	14.4	17.8	17.8
Field Dry Density (FDD) t/m^3	1.63	1.65	1.72	1.76	1.63	1.63
Peak Converted Wet Density t/m^3	1.94	1.89	1.99	2.00	1.92	1.91
Adjusted Peak Converted Wet Density t/m^3	**	**	**	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	19.2	16.5	17.6	14.4	**	17.8
Moisture Ratio % (AS1289.5.4.1)	80.5	79.0	79.0	76.5	86.0	79.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**	**	**	**
Moisture Variation (Wv) %	4.5	4.5	4.5	4.5	3.0	4.5
Adjusted Moisture Variation %	**	**	**	**	**	**
Hilf Density Ratio (%)	**100.5**	**101.5**	**102.0**	**100.5**	**100.0**	**101.0**
Compaction Method	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**	**Standard**
Remarks	**	**	**	**	**	**

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

Material Test Report

Report Number: P252349-3
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19323
Date Sampled: 20/10/2025
Dates Tested: 20/10/2025 - 23/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Smith's Lane Stage 44 - Clyde North 20.10.2025
Material: Sandy CLAY
Material Source: Imported

Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Approved Signatory: Chris Caulfield
Laboratory Manager

Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19323A	P25-19323B	P25-19323C
Test Number	10	11	12
Date Tested	20/10/2025	20/10/2025	20/10/2025
Time Tested	14:30	14:40	14:50
Test Request #/Location	Refer to Plan	Refer to Plan Retest #3	Refer to Plan
Layer / Reduced Level	Layer 3	Layer 2	FSL
Thickness of Layer (mm)	300	300	300
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m^3	1.89	1.85	1.95
Field Moisture Content %	18.2	23.0	14.6
Field Dry Density (FDD) t/m^3	1.60	1.50	1.70
Peak Converted Wet Density t/m^3	1.94	1.91	2.00
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	18.2	23.0	14.6
Moisture Ratio % (AS1289.5.4.1)	88.0	88.5	84.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	2.5	3.0	2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**97.5**	**96.5**	**97.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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

Material Test Report

Report Number: **P252349-4**
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19333
Date Sampled: 21/10/2025
Dates Tested: 21/10/2025 - 22/10/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Smiths lane Stage 44- Level One
Material: Sandy CLAY
Material Source: Imported

terra firma laboratories
Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Accredited for compliance with ISO/IEC 17025 - Testing
Approved Signatory: Chris Caulfield
Laboratory Manager
Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19333A	P25-19333B	P25-19333C
Test Number	13	14	15
Date Tested	21/10/2025	21/10/2025	21/10/2025
Time Tested	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	Layer 1	Layer 1	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	Sandy CLAY	Sandy CLAY	Sandy CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m^3	1.85	1.89	1.84
Field Moisture Content %	15.4	18.8	17.7
Field Dry Density (FDD) t/m^3	1.61	1.59	1.56
Peak Converted Wet Density t/m^3	1.97	1.91	1.90
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	15.4	18.8	17.7
Moisture Ratio % (AS1289.5.4.1)	85.5	88.5	83.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	2.5	2.5	3.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**94.0**	**99.5**	**96.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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

Material Test Report

Report Number: **P252349-5**
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19422
Date Sampled: 30/10/2025
Dates Tested: 30/10/2025 - 03/11/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: smiths lane stage 44
Material: Clay

terra firma laboratories
Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Approved Signatory: Chris Caulfield
Laboratory Manager
Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19422A	P25-19422B	P25-19422C
Test Number	16	17	18
Date Tested	30/10/2025	30/10/2025	30/10/2025
Time Tested	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	Layer 1	Layer 1	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	0
Field Wet Density (FWD) t/m^3	1.97	1.88	1.94
Field Moisture Content %	17.7	20.2	18.7
Field Dry Density (FDD) t/m^3	1.68	1.56	1.64
Peak Converted Wet Density t/m^3	2.03	1.97	2.03
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	17.2	20.2	18.1
Adj. Field Moisture Content % (AS1289.5.4.1)	17.7	20.2	18.7
Moisture Ratio % (AS1289.5.4.1)	102.5	100.0	103.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-0.5	0.0	-0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**97.0**	**95.5**	**95.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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

Material Test Report

Report Number: **P252349-6**
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19435
Date Sampled: 31/10/2025
Dates Tested: 31/10/2025 - 03/11/2025
Location: Smiths Lane stage 44

terra firma laboratories

Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Approved Signatory: Chris Caulfield
Laboratory Manager

Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19435A	P25-19435B	P25-19435C
Test Number	19	20	21
Date Tested	31/10/2025	31/10/2025	31/10/2025
Time Tested	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	Layer 2	FSL	FSL
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	**	**	**
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m^3	1.86	1.82	1.91
Field Moisture Content %	18.6	16.6	16.1
Field Dry Density (FDD) t/m^3	1.57	1.56	1.64
Peak Converted Wet Density t/m^3	1.94	1.83	1.85
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	18.6	16.6	16.1
Moisture Ratio % (AS1289.5.4.1)	92.0	78.5	79.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	1.5	4.5	4.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**96.0**	**99.0**	**103.0**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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

Material Test Report

Report Number: P252349-7
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19621
Date Sampled: 21/11/2025
Dates Tested: 21/11/2025 - 24/11/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Smiths Lane
Material: clay
Material Source: Onsite

terra firma laboratories
Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Accredited for compliance with ISO/IEC 17025 - Testing
Approved Signatory: Chris Caulfield
Laboratory Manager
Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19621A	P25-19621B	P25-19621C
Test Number	22	23	24
Date Tested	21/11/2025	21/11/2025	21/11/2025
Time Tested	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan
Layer / Reduced Level	Layer 1	Layer 1	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	4
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m^3	1.90	2.09	2.05
Field Moisture Content %	14.6	15.8	17.1
Field Dry Density (FDD) t/m^3	1.66	1.81	1.76
Peak Converted Wet Density t/m^3	1.98	2.04	**
Adjusted Peak Converted Wet Density t/m^3	**	**	2.05
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	17.1
Adj. Field Moisture Content % (AS1289.5.4.1)	14.6	15.8	16.4
Moisture Ratio % (AS1289.5.4.1)	83.5	96.5	**
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	96.0
Moisture Variation (Wv) %	3.0	0.5	**
Adjusted Moisture Variation %	**	**	0.5
Hilf Density Ratio (%)	**96.0**	**102.5**	**100.0**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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

Material Test Report

Report Number: P252349-8
Issue Number: 1
Date Issued: 04/02/2026
Client: Street Works Pty Ltd
45 Commercial Drive, Pakenham Vic 3810
Project Number: P252349
Project Name: Smith's Lane Stage 44
Project Location: Clyde North
Work Request: 19659
Date Sampled: 25/11/2025
Dates Tested: 25/11/2025 - 27/11/2025
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: smiths lane
Material: clay
Material Source: Imported

terra firma laboratories
Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au

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Approved Signatory: Chris Caulfield
Laboratory Manager
Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P25-19659A	P25-19659B	P25-19659C
Test Number	25	26	27
Date Tested	25/11/2025	25/11/2025	25/11/2025
Time Tested	**	**	**
Test Request #/Location	Refer to Plan	Refer to Plan	Refer to Plan Retest #13
Layer / Reduced Level	Layer 2	FSL	Layer 1
Thickness of Layer (mm)	300	300	300
Soil Description	Clay	Clay	Clay
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m^3	2.08	2.04	1.97
Field Moisture Content %	18.1	17.7	21.1
Field Dry Density (FDD) t/m^3	1.76	1.73	1.63
Peak Converted Wet Density t/m^3	2.03	2.03	2.02
Adjusted Peak Converted Wet Density t/m^3	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	18.1	17.7	21.1
Moisture Ratio % (AS1289.5.4.1)	102.5	96.0	101.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-0.5	0.5	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	**102.5**	**100.5**	**97.5**
Compaction Method	**Standard**	**Standard**	**Standard**
Remarks	**	**	**

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