

LEVEL ONE

Reference
No.: 9275-025

SURVEILLANCE

AND INSPECTION REPORT

*Carried Out
By*



PREPARED FOR: -

SYMON BROS. CONSTRUCTIONS PTY LTD



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Appendices

Appendix A Construction Drawings

Appendix B Daily Field Compaction Summary Results



Client Name: Symon Bros. Constructions Pty Ltd

Project Name: Maple Grove, Stage 4

Date: 15th of August 2025

Author: Mr. Thomas Crowe

Reference No.: 9275-025

Revision: 0

Project Manager: Mr. Vince Colubriale

1. Introduction & Scope

At the request of Symon Bros. Constructions Pty Ltd, Geotechnical Laboratories has carried out inspection and testing of the above-mentioned site from the 15th of January 2025 to the 16th of May 2025 where a residential development is being constructed. Inspection and testing of stripping, material quality and compaction control tests were carried out to comply with the requirements of AS 3798 Appendix B, Level 1.

The following documentation was submitted to Geotechnical Laboratories by Symon Bros. Constructions Pty Ltd and was used to determine compliance of earthworks in conjunction with the requirements of AS 3798 – 2007.

(1). Layout Plan Reference No.1701814 Drawing No. 010 (Rev. P4)

General site works involved the placement of fill, using on-site derived clay to bring the fill region to the required finished levels as indicated on the faceplan drawings.

2. Site Preparation

Initial site inspections were undertaken on the 14th of January 2025 and the 14th of May 2025 confirming that selected areas to be filled were completely stripped of topsoil prior to filling.

Proof roll inspections were performed throughout the project duration to ensure no significant soft areas were present prior to filling.

3. Fill Material

It is understood that the on-site fill material used was sourced from on-site excavations, mainly drainage trenches, road boxing and cut areas.



The fill material is best described as a silty CLAY, red brown, pale brown, slightly moist to moist, medium to high plasticity with gravels.

The fill material is consistent with the naturally occurring soils for this region.

Source material was deemed a **Suitable Material** in accordance with guidelines set out in AS 3798 - 2007 Section 4.4.

4. Fill Construction Procedure

The following plant (but not always limited to) were engaged in the fill placement process:

- Highway trucks / Dump trucks
- A watercart
- A padfoot roller
- An excavator
- A front-end loader

The excavator and front-end loader placed material in horizontal loose layers of approximately 250-300mm. The padfoot roller performed compaction of the clay fill operating in a criss-cross pattern where possible.

The moisture condition of the fill was closely monitored, and moisture conditioning procedures were applied to bring the material closer to its Standard Optimum Moisture Content (AS 1289 5.7.1).

5. Compaction Control Testing

Compaction control testing was performed on-site using a Nuclear Densometer in accordance with AS 1289 5.8.1. Laboratory reference densities were determined from material sampled at each test site location using the Hilf Rapid Compaction Method in accordance with AS 1289 5.7.1.

A total of twenty-seven compaction tests were performed on the fill construction. Results are presented in Appendix B of this report.

6. Testing Frequency

Testing frequencies were in accordance with **AS 3798 - 2007 Table 8.1 for Large Scale Operations.**

Acceptance of fill layers for compaction was based on the requirements of **AS 3798 - 2007 Table 5.1 Item 1. Residential.**

As a result, the compliance criteria adopted by Geotechnical Laboratories was a hilf density ratio not less than 95 percent of the maximum hilf density value as determined by the Standard Hilf Rapid Compaction Method in accordance with AS 1289 5.7.1.



Test results indicate that the above-mentioned requirements have been successfully achieved.

No moisture criterion was specified.

7. Statement of Compliance

So far as can be determined, Symon Bros. Constructions Pty Ltd has satisfactorily complied with the compaction and construction processes required for the structural filling of this site. As such, structural filling placed on this site by Symon Bros. Constructions Pty Ltd from the 15th of January 2025 to the 16th of May 2025 can be categorised as CONTROLLED FILL in accordance with AS 2870-2011.

8. Limitations and Liability of this Report

This report has been produced for and remains the property of Symon Bros. Constructions Pty Ltd.

The release of this report to a third party will only occur if Geotechnical Laboratories Pty Ltd has received, in writing, the authority to do so by our client.

Geotechnical Laboratories Pty Ltd will not engage in any third-party communication regarding this report.

Where information has been supplied by the client or third party, the assumption is made that this is correct. Geotechnical Laboratories Pty Ltd will not be held responsible for any inaccuracies supplied.

Test results and controlled fill compliance relates only to fill placed by Symon Bros. Constructions Pty Ltd and for earthworks completed at the time of inspection and testing. Any previous or subsequent earthworks will require a separate evaluation.

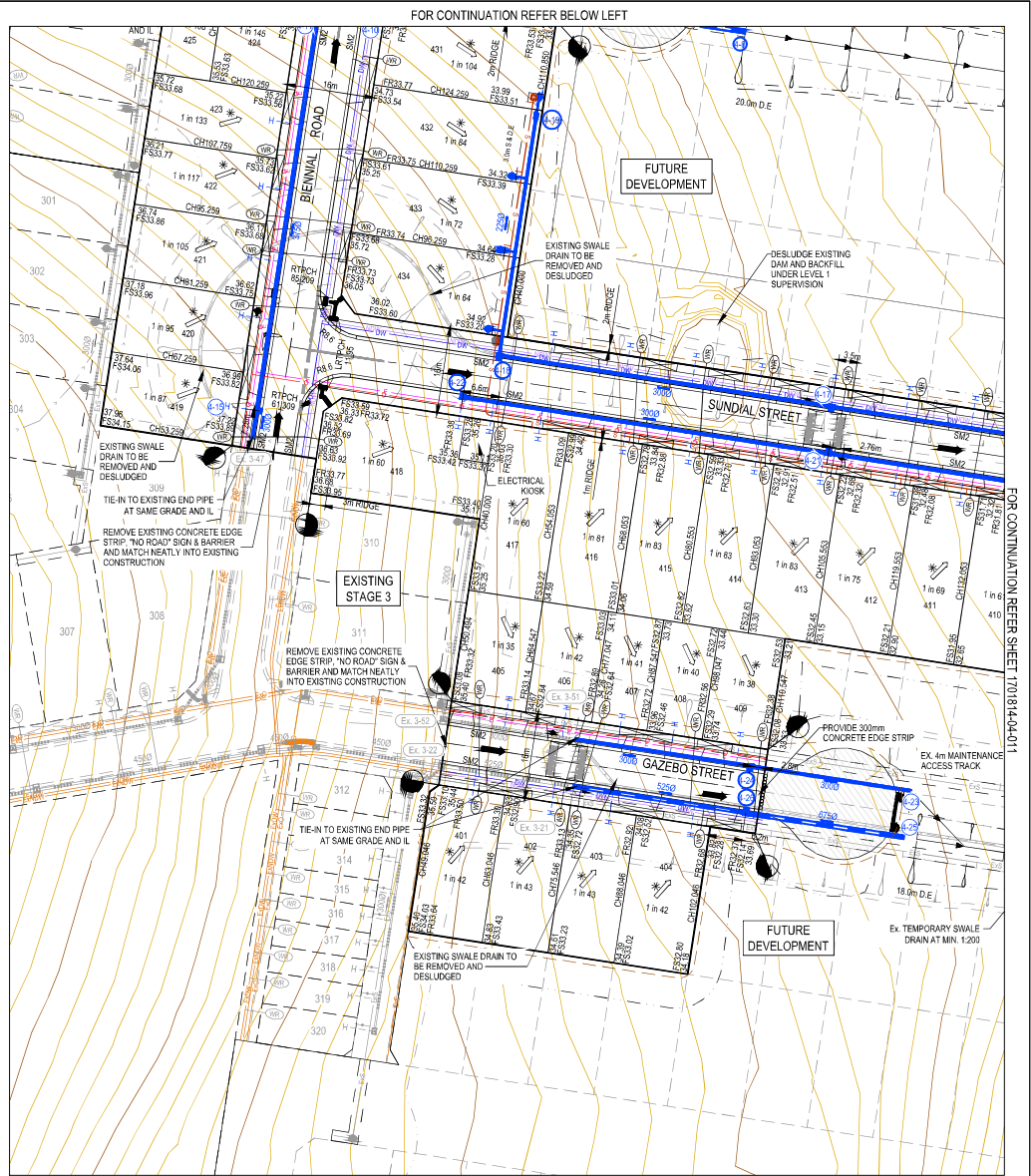
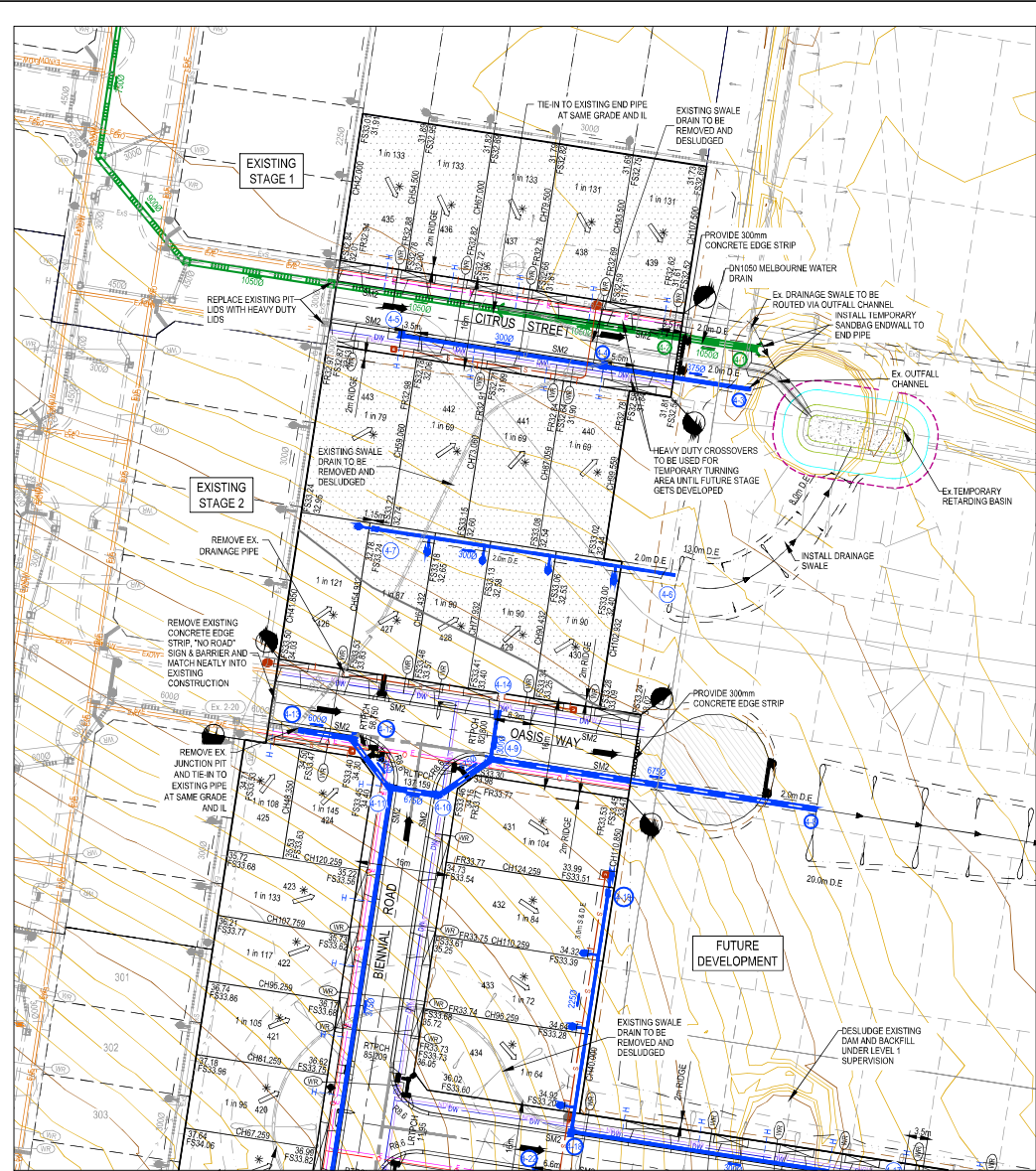
For & on behalf of
Geotechnical Laboratories Pty Ltd.

Thomas Crowe
Technical Manager



LEVEL ONE
SURVEILLANCE
AND INSPECTION REPORT

APPENDIX A



SERVICE OFFSET TABLE FOR CONTINUATION REFER ABOVE RIGHT

Location	ND - Water		Water		Electricity		Telecommunication		Sewer	
	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)	Side	Offset (m)
CITRUS STREET	S	2.30	S	2.80	N	2.40	N	1.80	N/S	1.0/1.0
OASIS WAY	N	2.30	N	2.80	S	2.40	S	1.80	N	1.0
BIENNIAL ROAD	E	2.30	E	2.80	W	2.40	W	1.80	-	-
SUNDIAL STREET	N	2.30	N	2.80	S	2.40	S	1.80	-	-
GAZEBO STREET	S	2.20	S	2.70	N	2.40	N	1.80	N/S	1.0/1.0

NOTE: STREET TREES ARE TO BE PLANTED IN THE CENTRE OF ALL NATURE STRIPS

FOR CONTINUATION REFER SHEET 1701814-04-011

FOR CONTINUATION REFER BELOW LEFT

FOR CONTINUATION REFER SHEET 1701814-04-011

LEGEND - FUNCTIONAL LAYOUT PLAN

- ELECTRICITY (UNDERGROUND)
- OPTIC FIBRE
- TELECOMMUNICATIONS
- GAS
- WATER
- STORMWATER DRAIN, PIT & PROPERTY INLET
- MELBOURNE WATER DRAIN & PIT
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- STRUCTURAL FILL > 200mm DEEP
- FACTILE PAVERS (INDICATIVE ONLY)
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING WATER
- EXISTING STORMWATER DRAIN
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING SEWER
- EXISTING HOUSE DRAIN
- EXISTING SWALE DRAIN
- TREE PROTECTION ZONE (TPZ)
- ZERO LOT LINES
- PAVEMENT TREATMENT
- DIRECTION OF FLOW
- OVERLAND FLOW
- ALLOTMENT TO BE GRADED EVENLY IN
- DIRECTION OF FALL TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOLL DRAIN
- "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- RIDGE LINE
- RETAINING WALL

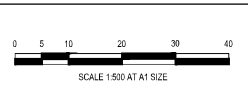
WARNING
BEWARE OF UNDERGROUND SERVICES

The locations of underground services are approximate only and their exact position should be proven on site.
No guarantee is given that all existing services are shown.
Locate all underground services before commencement of works

BEFORE YOU DIG
www.bydl.com.au

PRELIMINARY PRINT
NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	DRN	APP	REV	DESCRIPTION	DATE	DRN	APP
P4	COUNCIL COMMENTS ADDRESSED 22.10.24	29.10.24	HW	MF					
P3	CHANGE OF PAYMENT TYPES	17.09.2024	HW	NM					
P2	ISSUED FOR INFORMATION	28.08.2024	HW	NM					
P1	ISSUED FOR INFORMATION	16.08.2024	HW	NM					
P0	ISSUED FOR INFORMATION	30.07.2024	HW	NM					



Designed Date: 27.06.2024
 Drawn: M.F. JAURIGUE
 Checked: N. MARTENS
 Approved: N. MARTENS
 Reg. No: PE003672
 Date: 03.07.2024
 PS Number: PS918994G

BW Beveridge Williams
 Development & Infrastructure Consultants
 1 Glenferrie Road
 Malvern VIC 3144
 ph: 03 9554 8828
 www.beveridgewilliams.com.au

Project Details: MAPLE GROVE ESTATE STAGE 4 CARDNIA SHIRE COUNCIL
 Drawing Title: LAYOUT PLAN (SHEET 1 OF 2)

Sheet 04 of 24
 Scale: 1:500 @ A1
 Project Ref: 1701814 04
 Stage No: 010
 Drawing No: P4



LEVEL ONE
SURVEILLANCE
AND INSPECTION REPORT

APPENDIX B



**GEOTECHNICAL
LABORATORIES**

**GEOTECHNICAL LABORATORIES
ACN 102 571 077**

14 Ravenhall Way, Ravenhall, Vic 3023
Email: info@geolab.com.au PH: (03) 8361-9140

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 9275/004

LOCATION: SYMON BROS - Maple Grove, Stage 4

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m ³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)	
15/01/25	1	<i>Refer to #9275/005 for approx. test site locations.</i>	2.00	18.0	101.0	1.98	20.0	175	2.0 Drier	89.5	0	0	1000	
15/01/25	2		1.96	26.0	106.0	1.85	28.5	175	2.5 Drier	91.0	0	0	800	
15/01/25	3		1.86	26.5	102.0	1.82	29.0	175	3.0 Drier	90.5	0	0	600	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 10.00AM Finish Time: 12.30PM

A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1

Field Density, Nuclear Gauge: AS 1289 5.8.1

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)



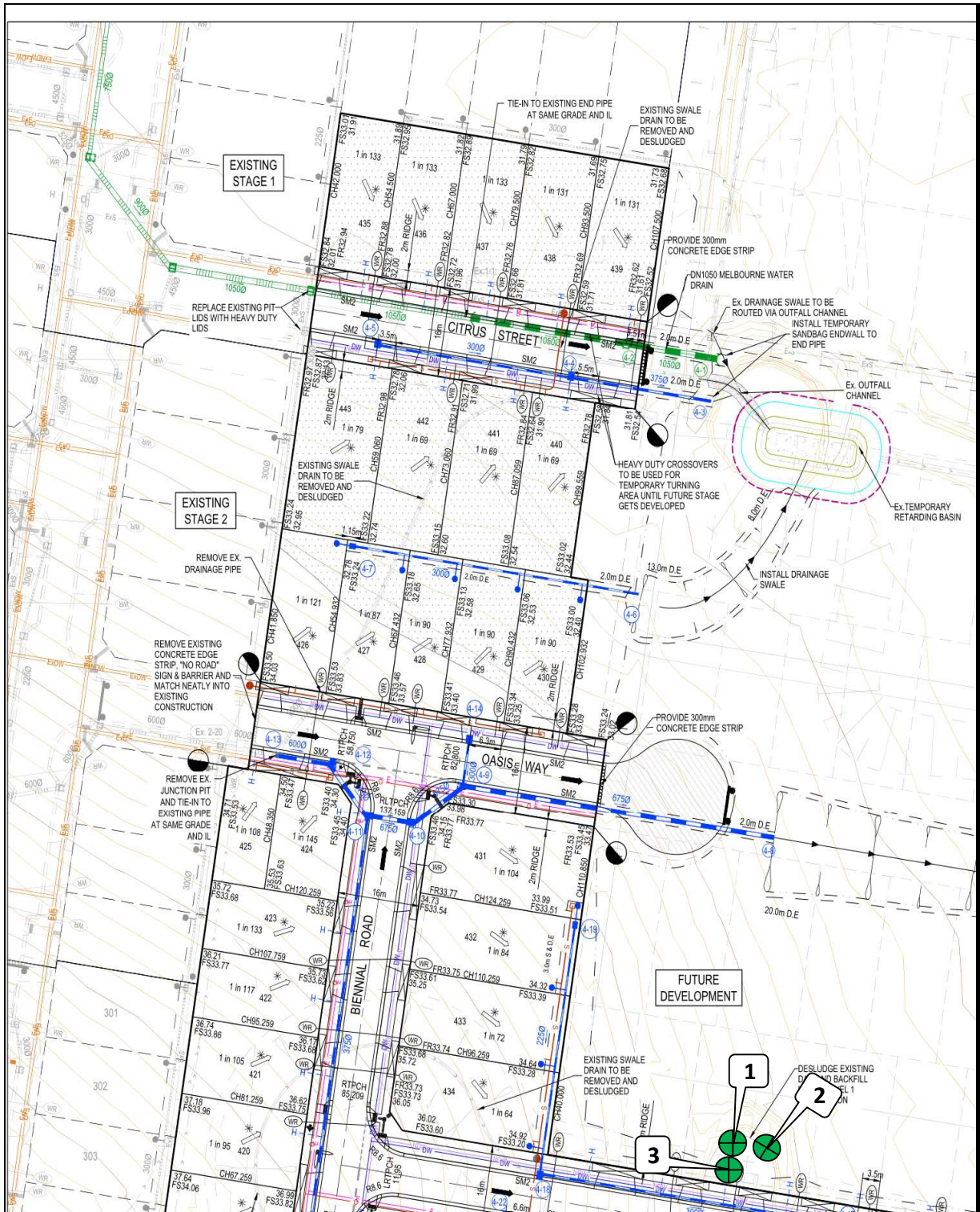
Accredited for compliance with ISO/IEC

17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 17/1/2025



**GEOTECHNICAL
LABORATORIES**

**GEOTECHNICAL LABORATORIES
ACN 102 571 077**

14 Ravenhall Way, Ravenhall, Vic 3023
Email: info@geolab.com.au PH: (03) 8361-9140

CLIENT: SYMON BROS

LOCATION: Maple Grove, Stage 4

Sketch indicating compaction test locations

DATE: 15/01/2025

OPERATOR: SG

SCALE: NTS

JOB No.: 9275/005

CHECKED: NF

FIGURE No: -



**GEOTECHNICAL
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ACN 102 571 077**

14 Ravenhall Way, Ravenhall, Vic 3023
Email: info@geolab.com.au PH: (03) 8361-9140

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 9275/006

LOCATION: SYMON BROS - Maple Grove, Stage 4

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m ³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
16/01/25	4	<i>Refer to #9275/007 for approx. test site locations.</i>	1.86	28.0	101.0	1.85	29.0	175	0.5 Drier	98.0	0	0	400
16/01/25	5		1.83	28.0	96.5	1.89	28.5	175	0.5 Drier	98.0	0	0	200
16/01/25	6		1.80	28.5	96.0	1.88	28.5	175	0.5 Drier	99.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 9.35AM Finish Time: 10.05AM

A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

Hilf Density Ratio and Hilf Moisture Variation ,Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1

Field Density, Nuclear Gauge: AS 1289 5.8.1

Materials Sampled : AS 1289 1.2.1 Clause 6.4(b)

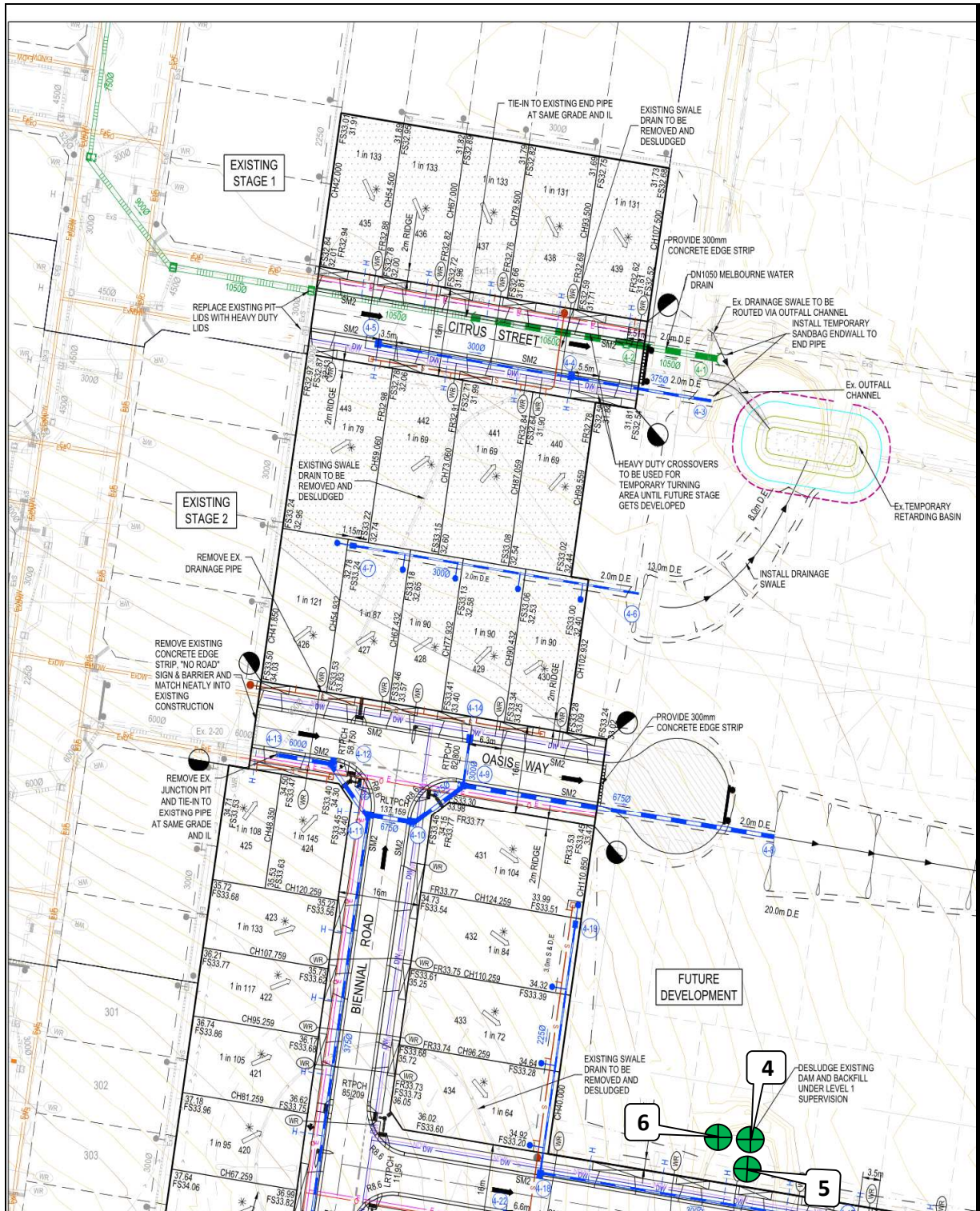


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17025 - Testing*

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 21/1/2025



**GEOTECHNICAL
LABORATORIES**

**GEOTECHNICAL LABORATORIES
ACN 102 571 077**

14 Ravenhall Way, Ravenhall, Vic 3023
Email: info@geolab.com.au PH: (03) 8361-9140

CLIENT: SYMON BROS

LOCATION: Maple Grove, Stage 4

Sketch indicating compaction test locations

DATE: 16/01/2025

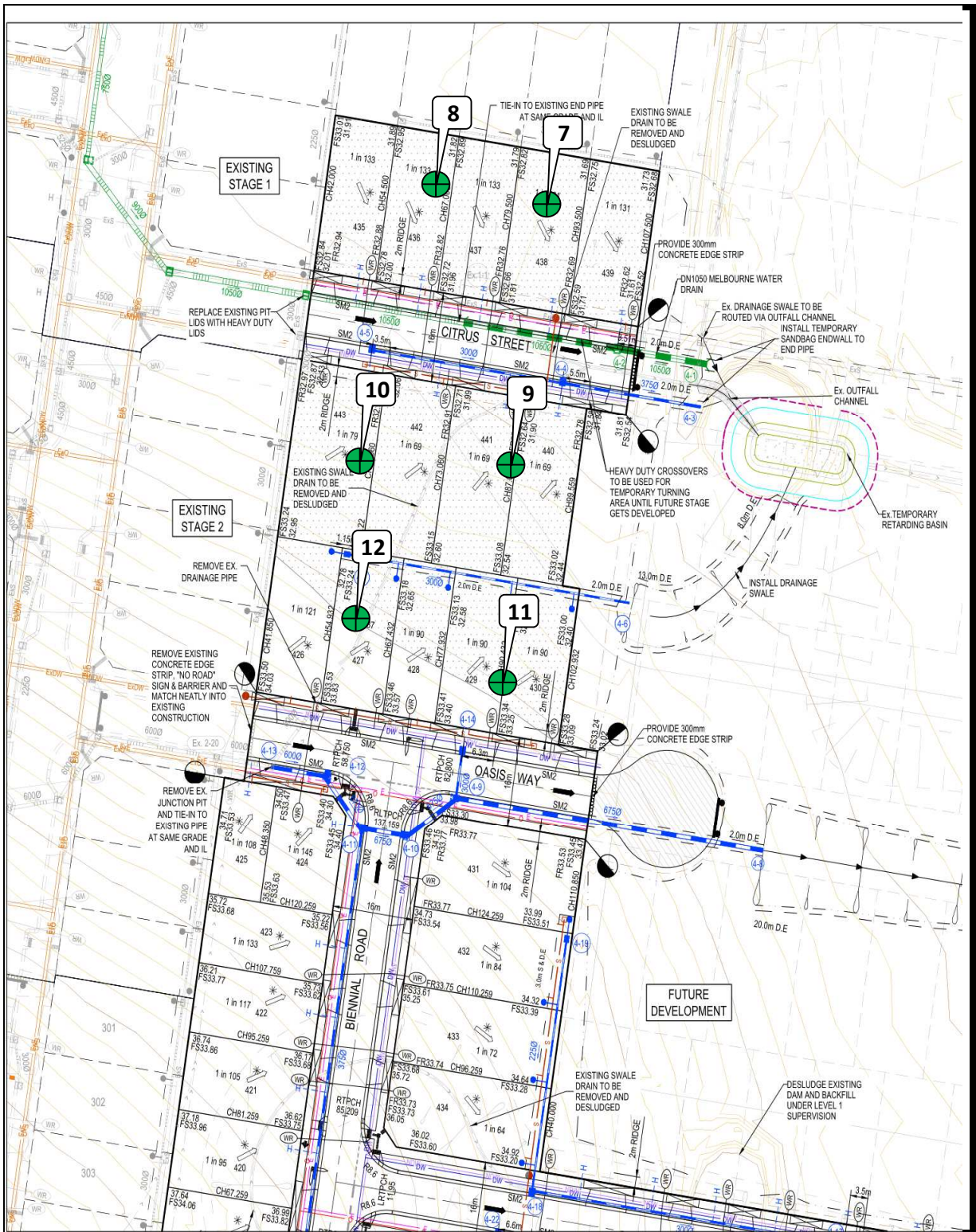
OPERATOR: SLI


SCALE: NTS

JOB No.: 9275/007

CHECKED: NF

FIGURE No: -



 GEOTECHNICAL LABORATORIES	GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au Phone: (03) 8361 9140	
	CLIENT: Symon Bros. Construction Pty Ltd LOCATION: Maple Grove, Stage 4 Sketch indicating compaction test locations	DATE: 30/01/2025 OPERATOR: SG SCALE: NTS

FIELD DENSITY TESTING SUMMARY
REPORT NO: 9275/012

PROJECT: SYMON BROS - Maple Grove, Stage 4

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m ³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)
31/01/25	13	<i>Refer to #9275/013 for approx. test site locations.</i>	2.03	20.0	102.5	1.98	21.5	175	1.5 Drier	93.5	0	0	150
31/01/25	14		1.92	22.0	100.5	1.91	24.0	175	2.0 Drier	92.0	0	0	150
31/01/25	15		1.93	22.0	97.0	1.99	21.5	175	0.5 Wetter	102.5	0	0	200
31/01/25	16		2.05	20.0	100.5	2.05	19.5	175	0.0 Wetter	101.0	0	0	200
31/01/25	17		1.92	21.5	95.5	2.01	21.5	175	0.0 Drier	99.0	0	0	200
31/01/25	18		1.91	23.0	96.5	1.98	22.0	175	1.0 Wetter	104.5	0	0	200

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 11:30am Finish Time: 12:45pm

A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1

Field Density, Nuclear Gauge: AS 1289 5.8.1

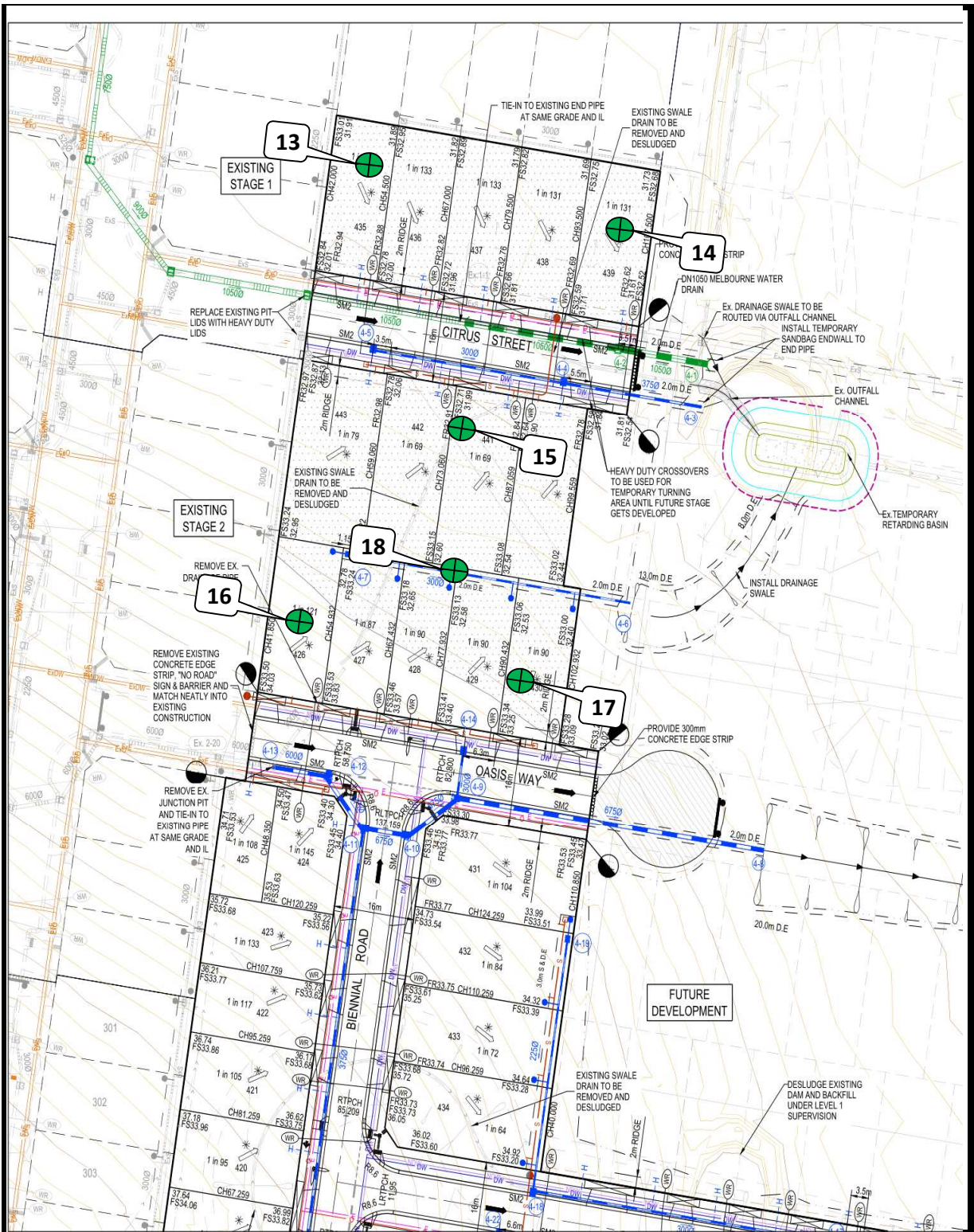
Materials Sampled: AS 1289 1.2.1 Clause 6.4(b)


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17025 - Testing
NATA Accredited Laboratory Number 14561


MICK CROWE

(Approved Signatory)

Issue Date: 5/2/2025



GEOTECHNICAL LABORATORIES
 ACN 102 571 077
 14 Ravenhall Way, Ravenhall, Vic 3023
 Email: info@geolab.com.au Phone: (03) 8361 9140

CLIENT: Symon Bros. Construction Pty Ltd
LOCATION: Maple Grove, Stage 4
Sketch indicating compaction test locations

DATE: 31/01/2025	JOB No: 9275/013
OPERATOR: SG	CHECKED: KK
SCALE: NTS	FIGURE No: -

FIELD DENSITY TESTING SUMMARY
REPORT NO: 9275/017

PROJECT: SYMON BROS - Maple Grove, Stage 4

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m ³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m ³)	STANDARD OPTIMUM MOISTURE CONTENT (%)	PROBE DEPTH SETTING (mm)	VARIATION FROM OPTIMUM MOISTURE CONTENT (%)	MOISTURE RATIO (%)	WET +19mm (%)	WET +37.5mm (%)	APPROX. DEPTH BELOW FINISH LEVEL (mm)	
14/05/25	19	<i>Refer to #9275/018 for approx. test site locations.</i>	1.88	25.0	95.0	1.98	25.0	175	0.5 Wetter	101.0	0	0	1200	
14/05/25	20		1.88	22.5	95.5	1.98	20.5	175	2.0 Wetter	109.5	0	0	800	
14/05/25	21		1.94	22.0	96.0	2.02	21.0	175	1.0 Wetter	106.0	0	0	800	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 9:00am Finish Time: 1:30pm

A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1

Compaction Test: AS 1289 5.7.1

Soil Layer thickness: 200mm

Hilf Density Ratio and Hilf Moisture Variation, Hilf Adjusted (APCWD) & Peak (PCWD) Converted Wet Density AS 1289 5.7.1

Field Density, Nuclear Gauge: AS 1289 5.8.1

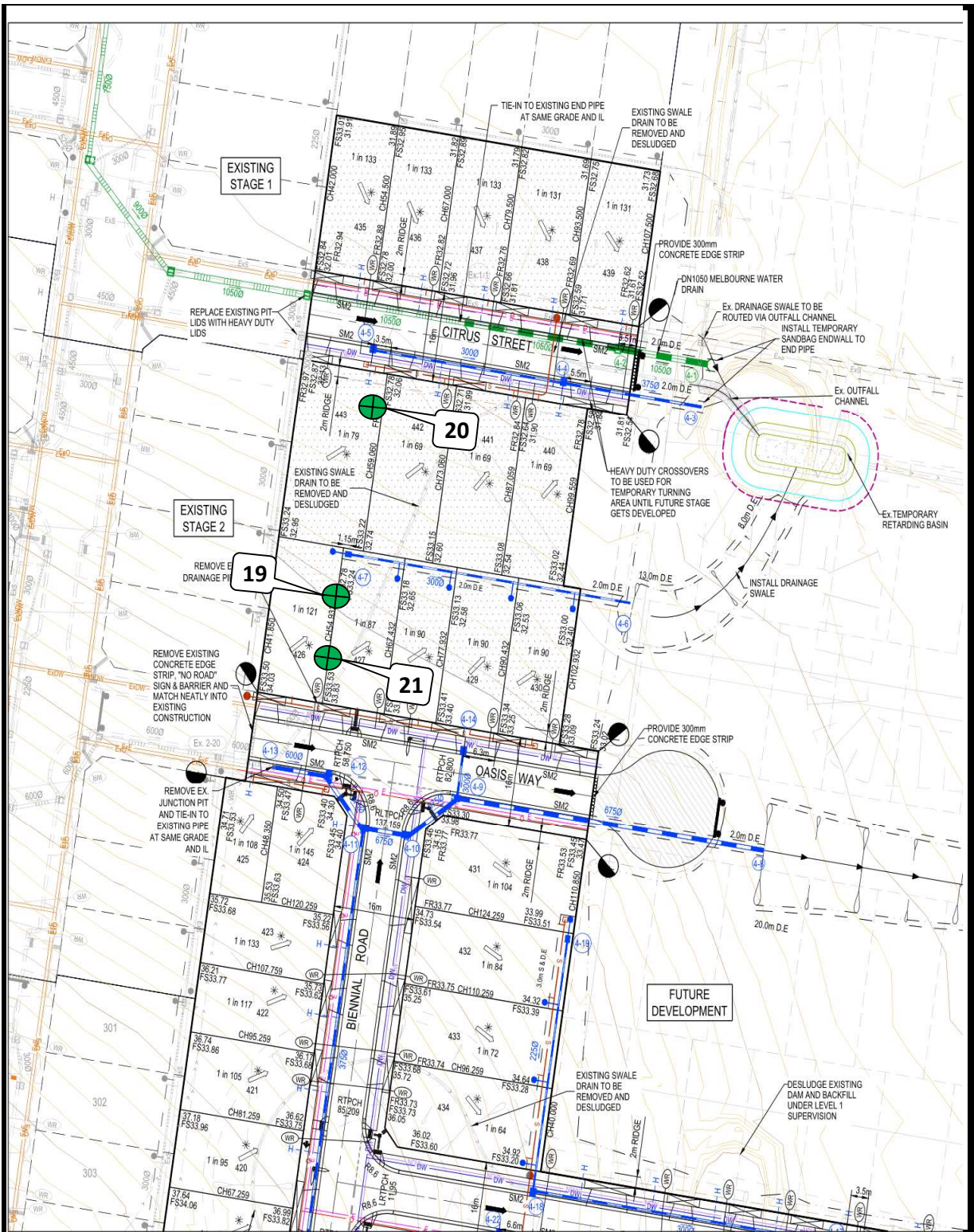
Materials Sampled: AS 1289 1.2.1 Clause 6.4(b)



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NATA Accredited Laboratory Number 14561

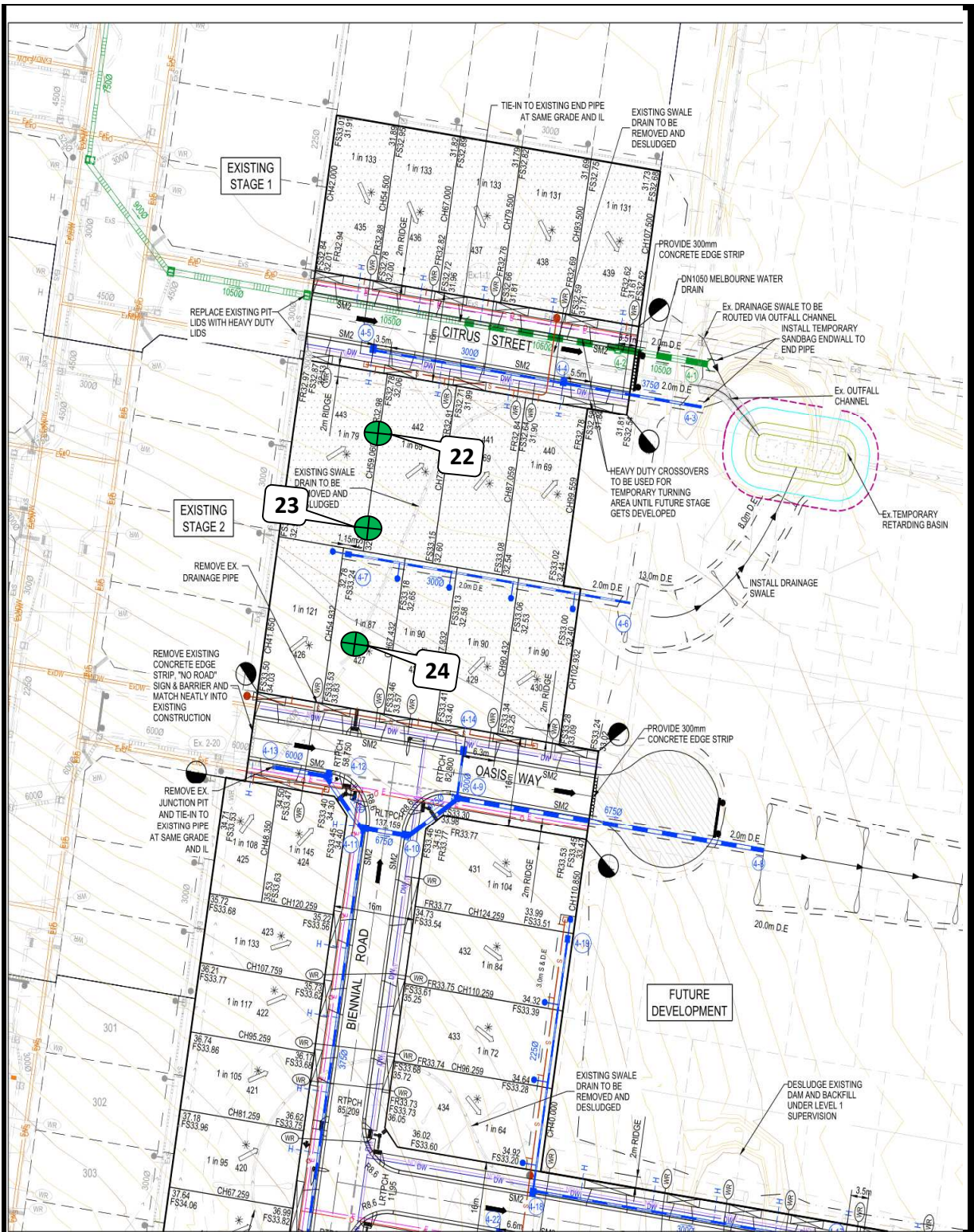

MICK CROWE

(Approved Signatory)

Issue Date: 20/5/2025



 GEOTECHNICAL LABORATORIES	GEOTECHNICAL LABORATORIES ACN 102 571 077 14 Ravenhall Way, Ravenhall, Vic 3023 Email: info@geolab.com.au Phone: (03) 8361 9140	
	CLIENT: Symon Bros. Construction Pty Ltd LOCATION: Maple Grove, Stage 4 Sketch indicating compaction test locations	DATE: 14/05/2025 OPERATOR: SG SCALE: NTS



GEOTECHNICAL LABORATORIES
ACN 102 571 077
 14 Ravenhall Way, Ravenhall, Vic 3023
 Email: info@geolab.com.au Phone: (03) 8361 9140

CLIENT: Symon Bros. Construction Pty Ltd
LOCATION: Maple Grove, Stage 4
Sketch indicating compaction test locations

DATE: 15/05/2025	JOB No: 9275/020
OPERATOR: SG	CHECKED: KK
SCALE: NTS	FIGURE No: -

