

Reference
No.: 9002-038

LEVEL ONE

SURVEILLANCE

AND INSPECTION REPORT

*Carried Out
By*



PREPARED FOR: -

SYMON BROS. CONSTRUCTIONS PTY LTD



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Appendix A Construction Drawings

Appendix B Daily Field Compaction Summary Results



Client Name: Symon Bros. Constructions Pty Ltd
Project Name: The Grove South West Precinct Stage 45
Date: 8th of June 2023
Author: Mr. Sam Loza
Reference No.: 9002-038
Revision: 0
Project Manager: Mr. George Dimopoulos

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 31st of May 2022 to the 13th of July 2022 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) Road & Drainage Layout Plan Drawing No. 2190E-045-111 Rev. 1.

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

Site inspections were undertaken on the 10th of May 2022 confirming that selected areas to be filled were completely stripped of topsoil prior to filling. The brown silty topsoils had been stockpiled around the site for later removal off-site.

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 fill material used was sourced from site cut areas.



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

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:

- Dump trucks & highway trucks
- A watercart
- A sheepsfoot compactor (815)
- A padfoot
- Scrapers

The sheepsfoot compactor placed material in horizontal loose layers of approximately 250-300mm. The sheepsfoot compactor also performed compaction of the clay fill operating in a criss-cross pattern.

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 nineteen 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 hilt density ratio not less than 95 percent of the maximum hilt density value as determined by the Standard Hilt 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 criteria 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 31st of May 2022 to the 13th of July 2022 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.

Sam Loza
Laboratory Manager.



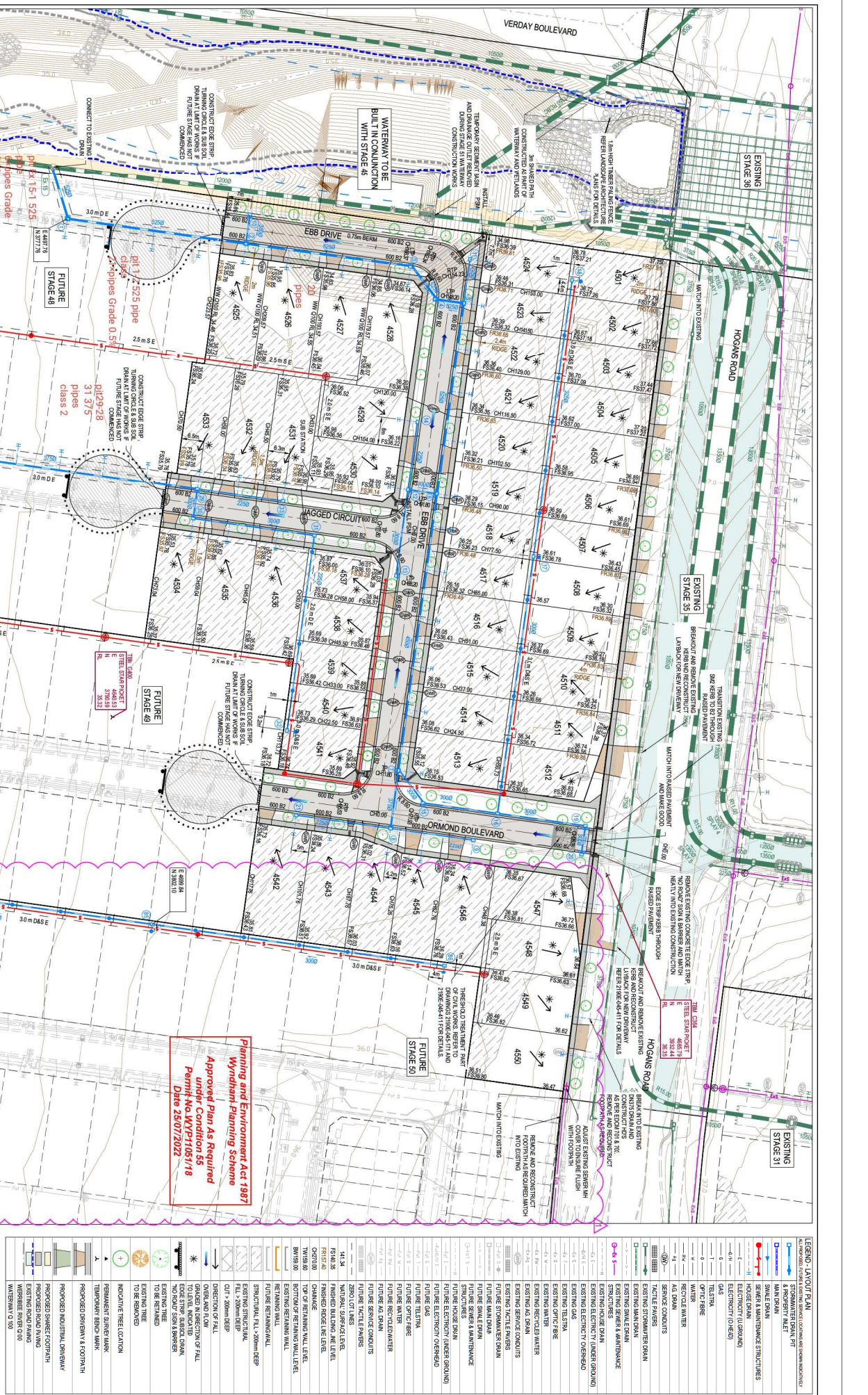
LEVEL ONE
SURVEILLANCE
AND INSPECTION REPORT

APPENDIX A

Table with columns: NO, DATE, AMENDMENT/REVISION DESCRIPTION, DRAWN BY, CHECKED BY, APPROVED BY, P/LIN OR SIB NO.

Issued for Construction. Logos for Council of the City of Wyndham, City of Wyndham, City of Geelong, City of Colac, City of Moorabool, City of Surf Coast, City of Colac Otway, City of Sutherland Shire, City of Shellharbour, City of Wollongong, City of Newcastle.

SMC Member of the Sutherland Shire Group. FRASERS PROPERTY. Planning and Environment Act 1987 Approved Plan As Required under Condition 55.



LEGEND - LAYOUT PLAN. Symbols and descriptions for various elements like Street Drains, Stormwater Services, Manholes, Trenches, Trenches, etc.

NOTE: LEVELS AND STRUCTURAL HATCHING DENOTED ON LOTS ARE DERIVED FROM THE NATURAL SURFACE CONTOURS SHOWN ON SHEET PLAN ARE FROM EXISTING SURFACE AFTER BUILT NETWORKS.



LEVEL ONE
SURVEILLANCE
AND INSPECTION REPORT

APPENDIX B



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.: # 9002/001

LOCATION: SYMON BROS - The Grove, South West Precinct, Stages 45 & 49

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)	
31/05/22	1	<i>Refer to #9002/002 for approx. test site locations.</i>	1.98	24.0	100.5	1.97	22.0	175	2.0 Wetter	109.0	0	0	0	
31/05/22	2		1.86	24.5	95.5	1.94	24.5	175	0.0 Wetter	101.0	0	0	200	
31/05/22	3		1.84	22.0	95.0	1.94	22.5	175	0.5 Drier	97.0	0	0	400	
31/05/22	4		1.96	21.0	100.0	1.96	23.0	175	1.5 Drier	92.5	0	0	500	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 1:15pm Finish Time: 1:50pm

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: 9/6/2022

PLAN NUMBER
PS 8441251

PLAN OF SUBDIVISION



REF: 8352/45	VERSION: 5	ORIGINAL SHEET SIZE A3
LICENSED SURVEYOR: SIMON COX		
SCALE 1:500		
BREESSE PILLIT DIXON PTY LTD 1719 CALD STREET HAWTHORN EAST VIC 3123 PH: 8623 2300 FAX: 8623 2310		



GEOTECHNICAL LABORATORIES

ACN 102 571 077

14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

CLIENT: SYMON BROS

DATE: 31/05/2022

JOB No.: 9002/002

LOCATION: The Grove South West Precinct, Stage 45 & 49

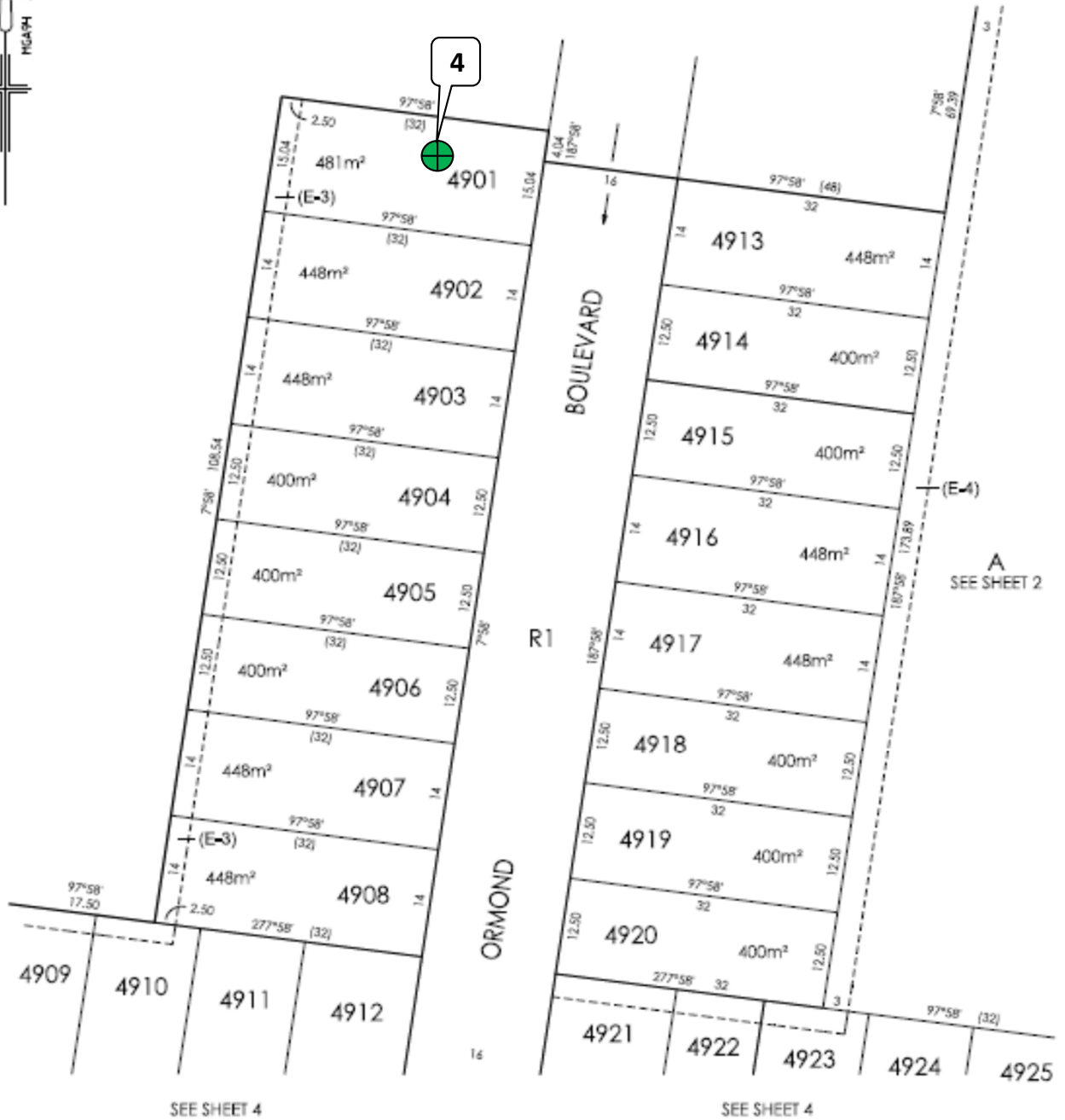
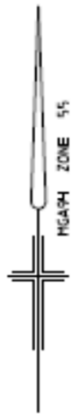
OPERATOR: AB

CHECKED: KK

Sketch indicating compaction test locations

SCALE: NTS

FIGURE No: 1 of 2



**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: The Grove South West Precinct, Stage 45 & 49

Sketch indicating compaction test locations

DATE: 31/05/2022

OPERATOR: AB

SCALE: NTS

JOB No.: 9002/002

CHECKED: KK

FIGURE No: 2 of 2



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.: # 9002/005

LOCATION: SYMON BROS - The Grove, South West Precinct, Stages 45

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)	
30/06/22	5	<i>Refer to #9002/006 for approx. test site locations.</i>	2.02	23.5	105.0	1.93	25.5	175	2.0 Drier	91.5	0	0	0	
30/06/22	6		1.89	27.5	98.5	1.92	26.5	175	1.0 Wetter	104.0	0	0	300	
30/06/22	7		1.88	30.0	95.0	1.97	26.5	175	3.5 Wetter	114.0	0	0	300	
30/06/22	8		1.92	25.5	98.0	✱ 1.96	25.0	175	1.0 Wetter	103.0	5	0	300	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 1:30pm Finish Time: 2:00pm

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)

✱ Indicates APCWD

❖



Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

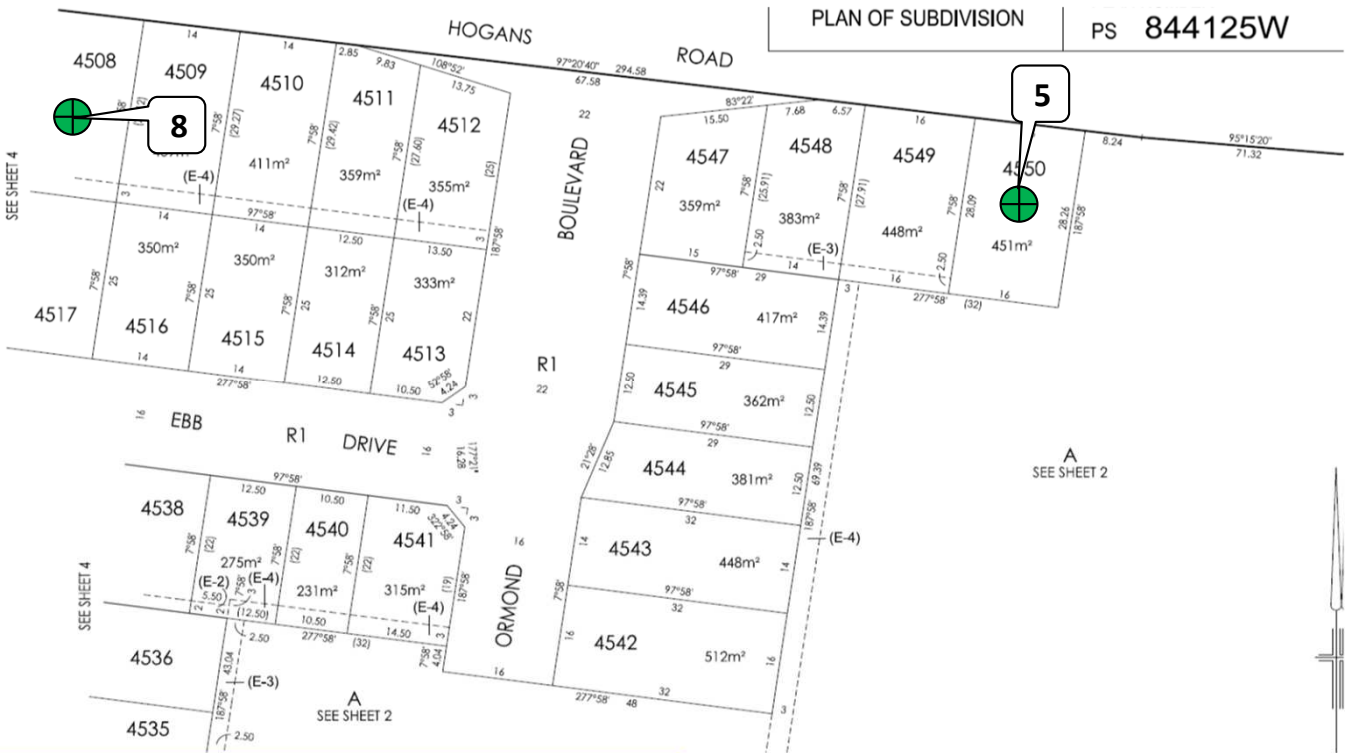
MICK CROWE
(Approved Signatory)

Issue Date: 6/7/2022



PLAN OF SUBDIVISION
 PLAN NUMBER
 PS 844125W

SEE SHEET 5
 MGA94 ZONE 55



PLAN OF SUBDIVISION
 PS 844125W

SEE SHEET 2



**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: The Grove South West Precinct, Stage 45 & 49

Sketch indicating compaction test locations

DATE: 30/6/2022

OPERATOR: PV

SCALE: NTS

JOB No.: 9002/006

CHECKED: MC

FIGURE No: 1 of 1



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.: # 9002/007

LOCATION: SYMON BROS - The Grove SWP - Stage 45

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)	
1/07/22	9	<i>Refer to #9002/008 for approx. test site locations.</i>	1.87	30.0	95.0	1.97	26.5	175	4.0 Wetter	115.0	0	0	0	
1/07/22	10		1.96	30.0	98.5	1.99	26.0	175	4.0 Wetter	115.0	0	0	0	
1/07/22	11		1.91	25.0	97.5	1.96	24.0	175	1.0 Wetter	104.0	0	0	0	
1/07/22	12		1.92	26.5	97.5	1.97	25.5	175	1.0 Wetter	104.0	0	0	0	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 10:00am Finish Time:10:30am

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: 7/7/2022

PLAN NUMBER
PS 8441251

PLAN OF SUBDIVISION



REF: 8352/45	VERSION: 5	ORIGINAL SHEET SIZE A3
LICENSED SURVEYOR: SIMON COX		
SCALE 1:500		
LENGTHS ARE IN METRES		



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

DATE: 01/07/2022

JOB No.: 9002/008

LOCATION: The Grove South West Precinct, Stage 45

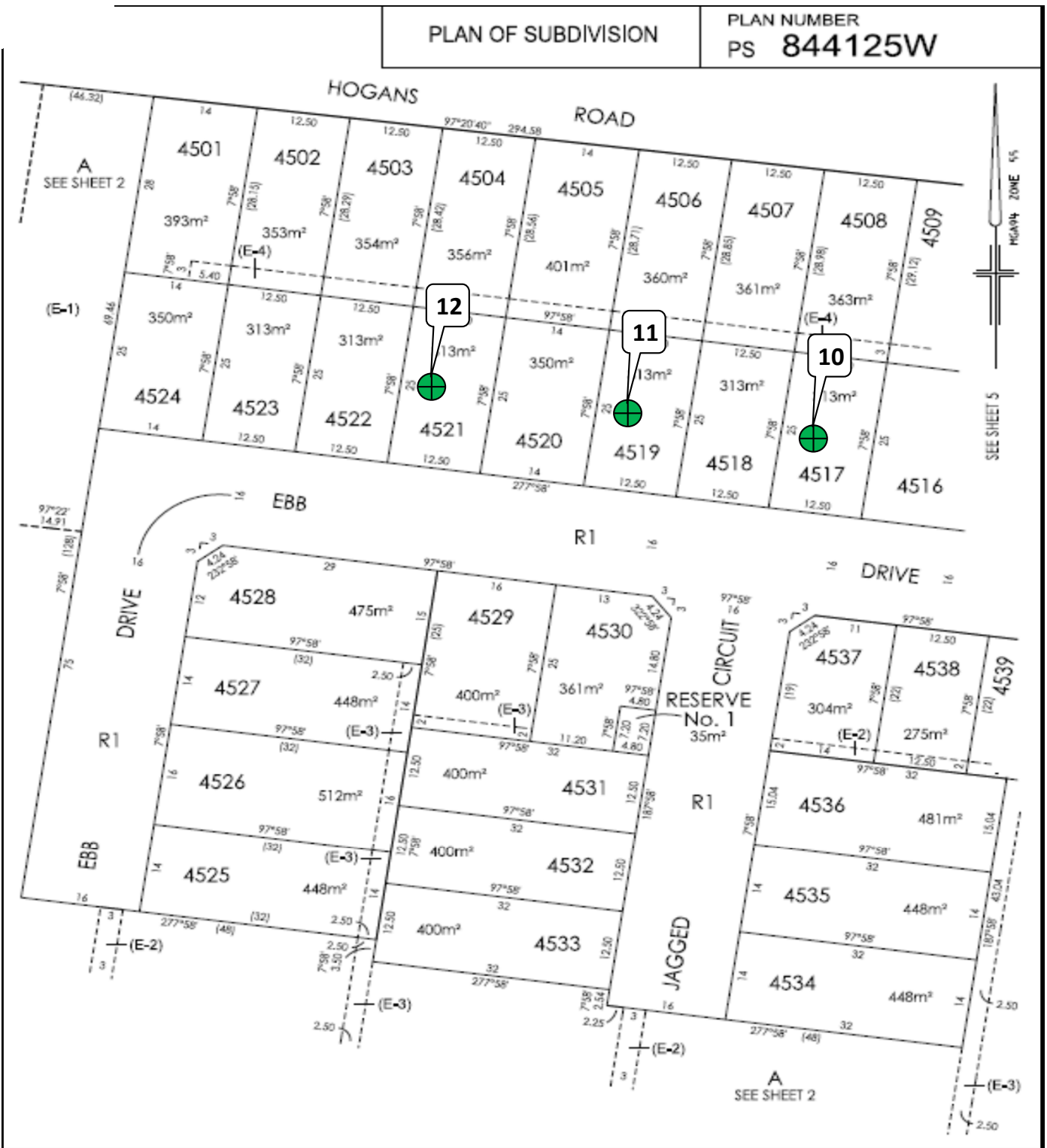
OPERATOR: PV


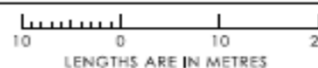
CHECKED: DM

Sketch indicating compaction test locations

SCALE: NTS

FIGURE No: 1 of 2



 <p>Breese Pitt Dixon Pty Ltd 1/19 Calo Street Hawthorn East Vic 3123 Ph: 8823 2300 Fax: 8823 2310 www.bpd.com.au info@bpd.com.au</p>	SCALE 1:500	 <p>LENGTHS ARE IN METRES</p>	ORIGINAL SHEET SIZE A3 REF: 8352/45	SHEET 4 VERSION: 5
	LICENSED SURVEYOR: SIMON COX			



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	DATE: 01/07/2022	JOB No.: 9002/008
LOCATION: The Grove South West Precinct, Stage 45	OPERATOR: PV	CHECKED: DM
Sketch indicating compaction test locations	SCALE: NTS	FIGURE No: 2 of 2



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.: # 9002/009

LOCATION: SYMON BROS - The Grove SWP - Stage 45

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)	
2/07/22	13	<i>Refer to #9002/010 for approx. test site locations.</i>	1.95	25.5	98.0	1.99	24.5	175	1.0 Wetter	104.0	0	0	0	
2/07/22	14		1.97	19.0	102.0	✘ 1.93	22.0	175	2.5 Drier	88.0	6	0	0	
2/07/22	15		1.94	24.5	96.0	✘ 2.01	23.0	175	1.5 Wetter	106.5	8	0	0	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 7:30am Finish Time:8:00am

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)

✘ Indicates APCWD



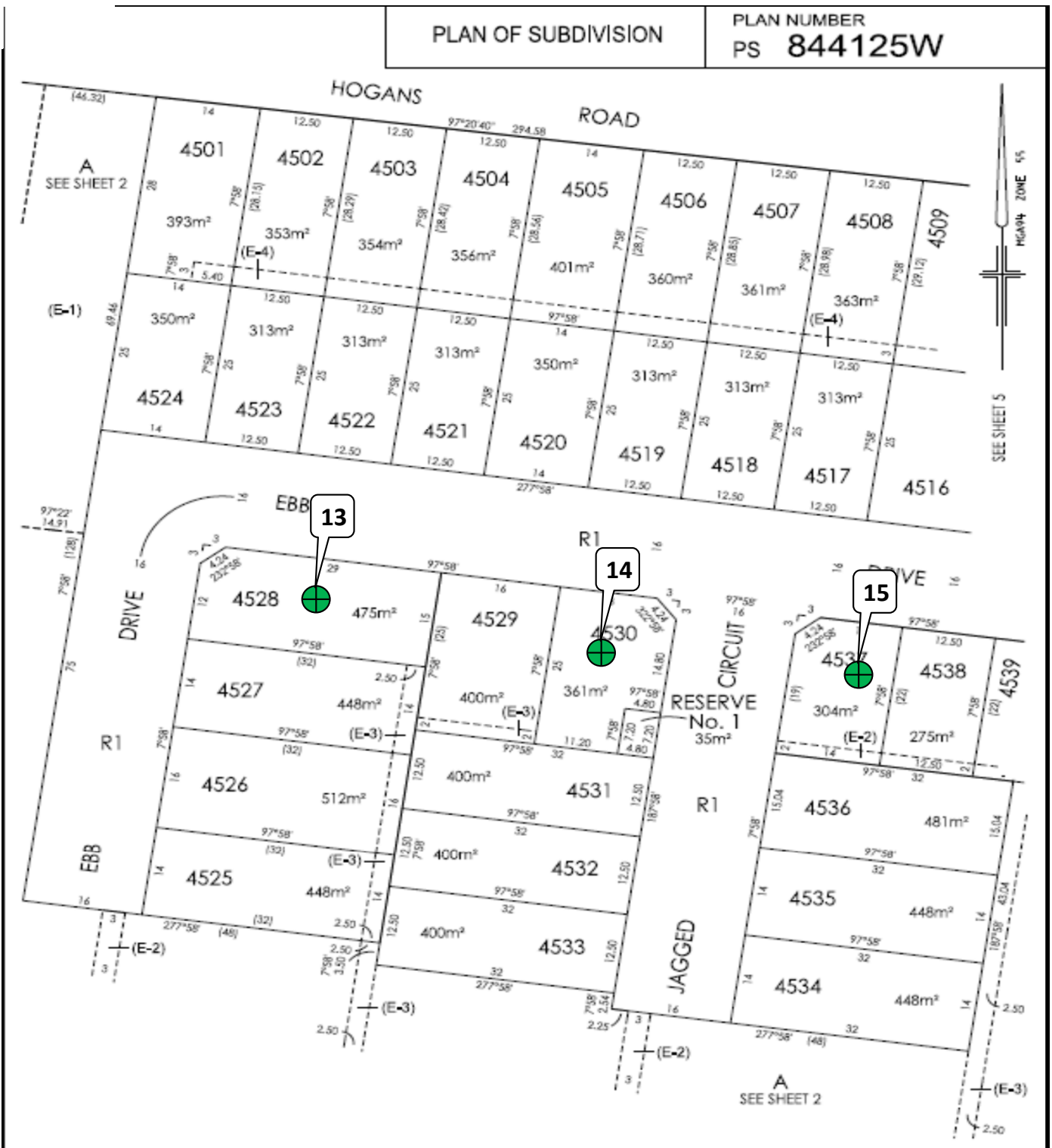
Accredited for compliance with ISO/IEC

17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 7/7/2022



Breese Pitt Dixon Pty Ltd
1/19 Calo Street
Hawthorn East Vic 3123
Ph: 8823 2300 Fax: 8823 2310
www.bpd.com.au info@bpd.com.au

SCALE

1:500



ORIGINAL SHEET SIZE A3
REF: 8352/45

SHEET 4
VERSION: 5

LICENSED SURVEYOR: SIMON COX



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

DATE: 02/07/2022

JOB No.: 9002/010

LOCATION: The Grove South West Precinct, Stage 45

OPERATOR: PV

CHECKED: DM

Sketch indicating compaction test locations

SCALE: NTS

FIGURE No: -



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.: # 9002/012

LOCATION: SYMON BROS - The Grove SWP - Stage 45 & 48

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)	
6/07/22	16	<i>Refer to #9002/013 for approx. test site locations.</i>	1.92	20.5	97.0	✘ 1.97	21.5	175	1.0 Drier	95.5	3	0	200	
6/07/22	17		1.87	24.0	96.5	✘ 1.94	23.0	175	1.0 Wetter	105.5	3	0	300	
6/07/22	18		1.99	22.5	101.0	1.97	22.5	175	0.0 Wetter	101.0	0	0	400	
6/07/22	19		2.02	20.5	104.0	1.94	22.5	175	2.0 Drier	91.5	0	0	600	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 9:45am Finish Time:11:10am

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)

✘ Indicates APCWD

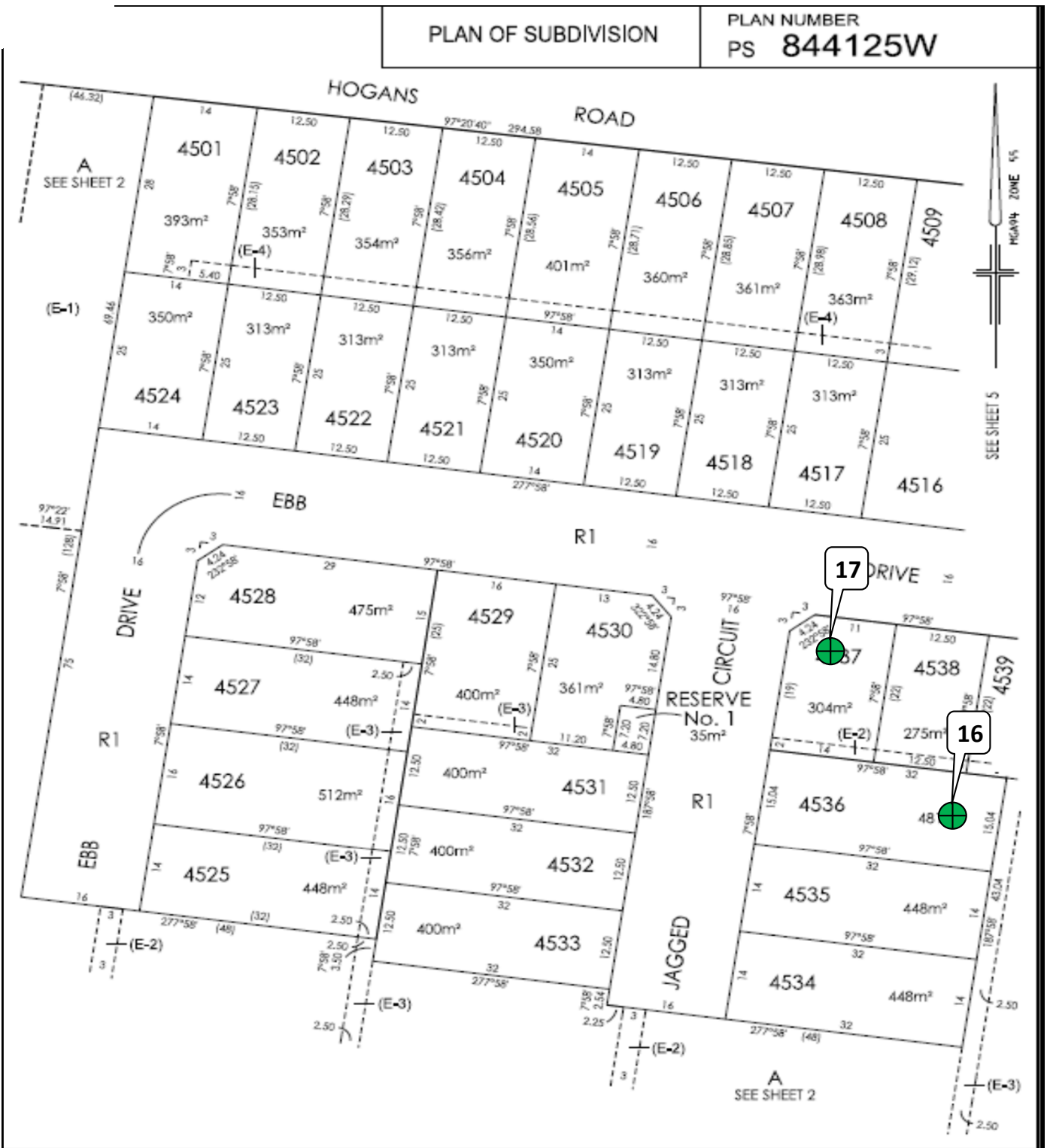


Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 12/7/2022



Breese Pitt Dixon Pty Ltd
1/19 Calo Street
Hawthorn East Vic 3123
Ph: 8823 2300 Fax: 8823 2310
www.bpd.com.au info@bpd.com.au

SCALE

1:500



ORIGINAL SHEET SIZE A3

SHEET 4

REF: 8352/45

VERSION: 5

LICENSED SURVEYOR: SIMON COX



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

DATE: 06/07/2022

JOB No.: 9002/013

LOCATION: The Grove South West Precinct, Stage 45 & 48

OPERATOR: AB

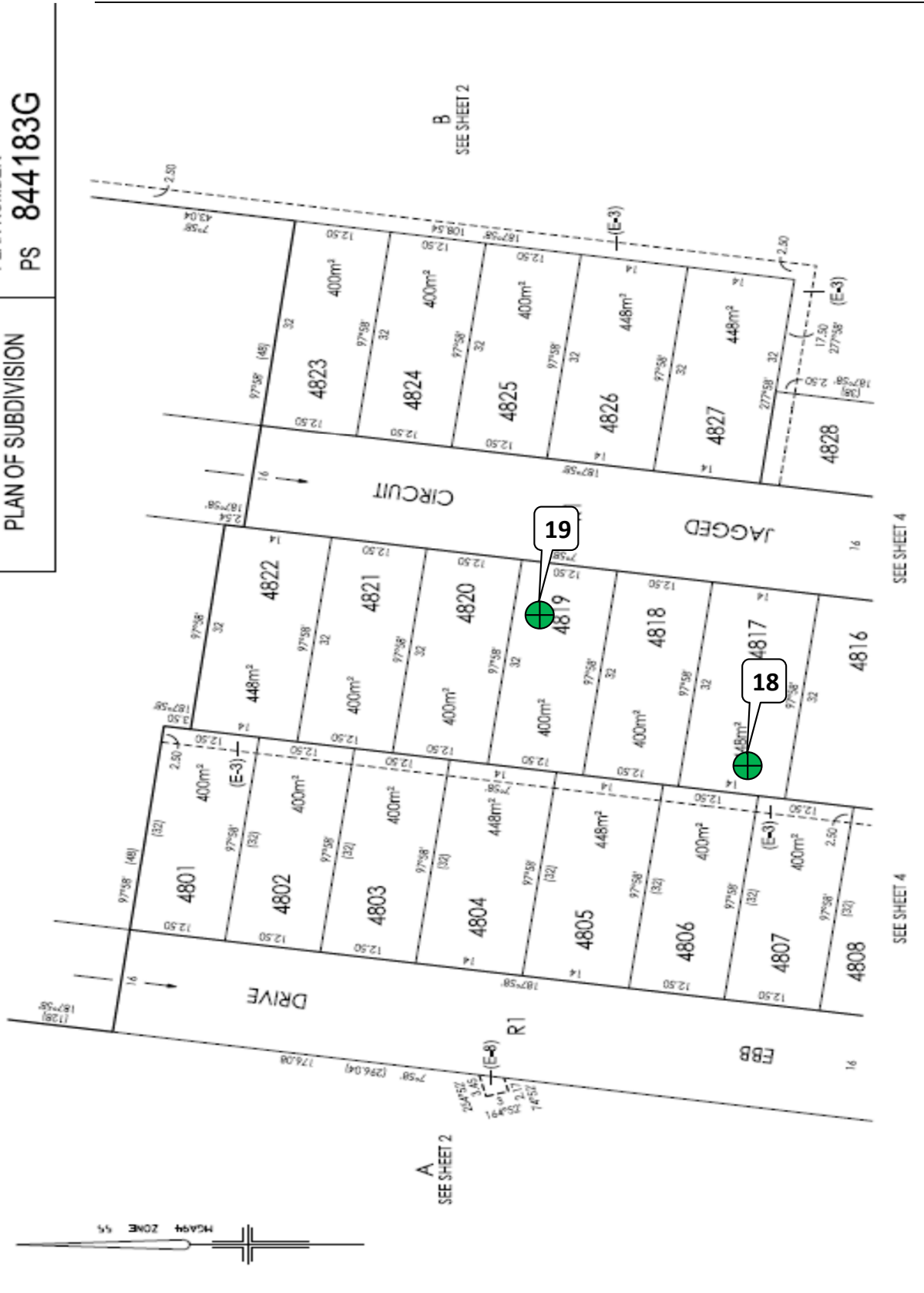
CHECKED: DM

Sketch indicating compaction test locations

SCALE: NTS

FIGURE No: 1 of 2

PLAN OF SUBDIVISION
 PLAN NUMBER
PS 844183G



REF: 8352/48	VERSION: 4	ORIGINAL SHEET SIZE A3	SHEET 3
SCALE		LICENSED SURVEYOR: SIMON COX	
1:500		www.epd.com.au info@epd.com.au	
BRESEE PITT DIXON Pty Ltd 1/19 Calio Street Hawthorn East, Vic. 3123 PH: 8823 2800 Fax: 8823 2810		LENGTHS ARE IN METRES	
SEE SHEET 4		SEE SHEET 4	



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: The Grove South West Precinct, Stage 45 & 48
 Sketch indicating compaction test locations

DATE: 06/07/2022
OPERATOR: AB
SCALE: NTS

JOB No.: 9002/013
CHECKED: DM
FIGURE No: 2 of 2



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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 9006/028

LOCATION: SYMON BROS - The Grove, South West Precinct, Stage 49 & 45

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)	
12/07/22	36	<i>Refer to #9006/029 for approx. test site locations.</i>	1.89	21.5	96.0	✘ 1.97	23.0	175	1.5 Drier	93.5	5	0	200	
12/07/22	37		2.00	22.0	98.5	✘ 2.03	21.0	175	0.5 Wetter	103.5	10	0	FSL	
12/07/22	38		1.99	26.0	102.5	1.94	24.5	175	1.5 Wetter	106.0	0	0	300	
12/07/22	39		1.89	24.5	100.0	1.89	22.5	175	2.0 Wetter	109.0	0	0	300	
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-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 11:00am Finish Time: 11:30am

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)

✘ Indicates APCWD

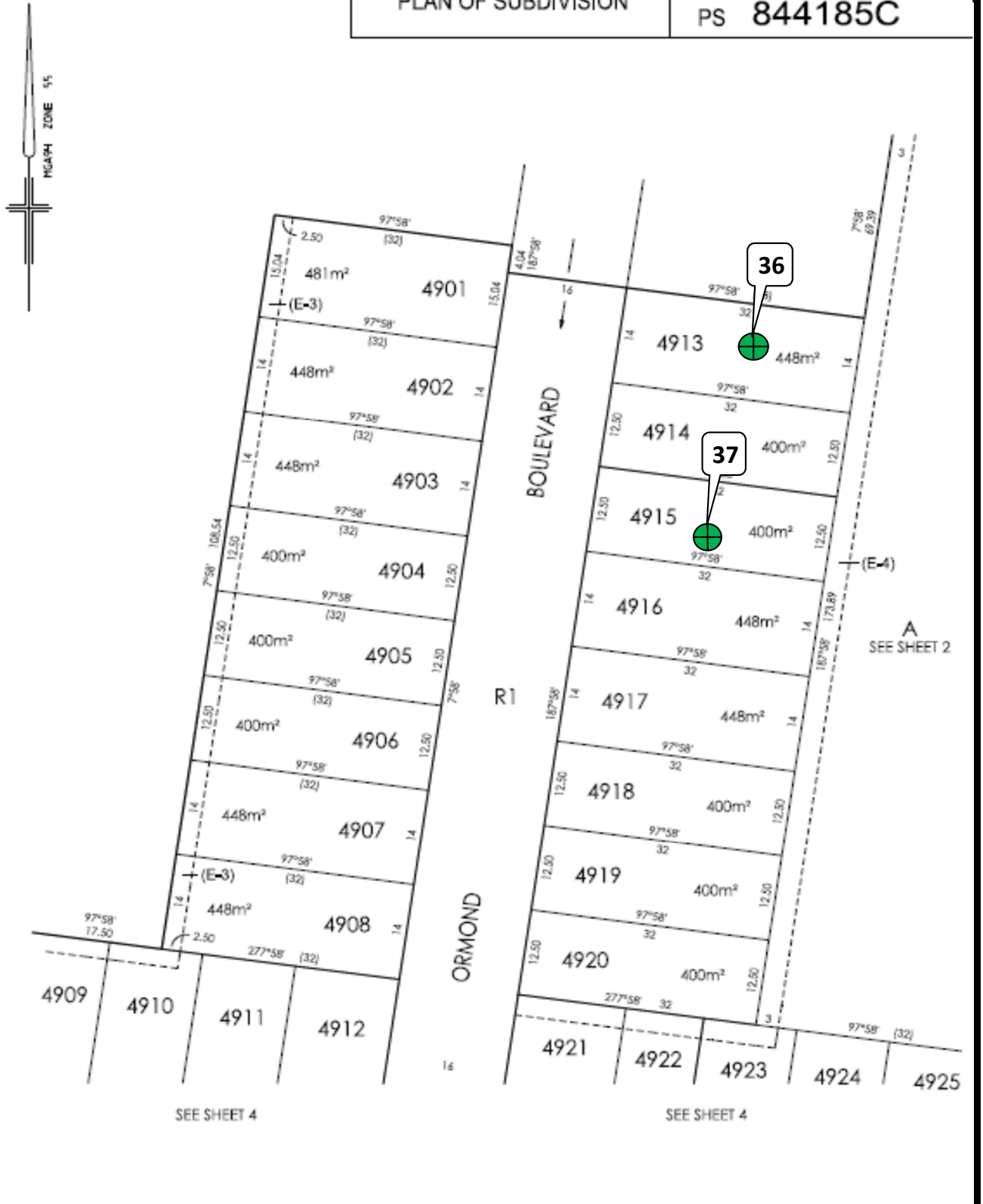


Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 19/7/2022



Breese Pitt Dixon Pty Ltd
1/19 Cato Street

SCALE
1:500



ORIGINAL SHEET SIZE A3 SHEET
REF: 8352/49 VERSION:



GEOTECHNICAL LABORATORIES

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14 Ravenhall Way, Ravenhall, Vic 3023

Email: info@geolab.com.au PH: (03) 8361-9140

CLIENT: SYMON BROS

DATE: 12/07/2022

JOB No.: 9006/029

LOCATION: The Grove South West Precinct, Stage 49 & 45

OPERATOR: PV

CHECKED: KK

Sketch indicating compaction test locations

SCALE: NTS

FIGURE No: 1 of 2

PLAN OF SUBDIVISION

PLAN NUMBER
PS 844125W



**GEOTECHNICAL
LABORATORIES**

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CLIENT: SYMON BROS

LOCATION: The Grove South West Precinct, Stage 49 & 45

Sketch indicating compaction test locations

DATE: 12/07/2022

OPERATOR: PV

SCALE: NTS

JOB No.: 9006/029

CHECKED: KK

FIGURE No: 2 of 2



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.: # 9002/022

LOCATION: SYMON BROS - The Grove, South West Precinct, Stage 45

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)	
13/07/22	20	<i>Refer to #9002/023 for approx. test site locations.</i>	2.09	28.5	103.0	✘ 2.03	28.5	175	0.5 Drier	99.0	17	0	500	
13/07/22	21		2.03	22.5	104.0	✘ 1.95	24.0	175	1.5 Drier	94.0	6	0	1500	
13/07/22	22		1.92	30.5	101.0	1.90	29.5	175	1.5 Wetter	104.5	0	0	500	
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 1:10pm Finish Time: 1:45pm

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)

✘ Indicates APCWD



Accredited for compliance with ISO/IEC

17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 20/7/2022



Breese Pitt Dixon Pty Ltd
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Hawthorn East Vic 3123
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SCALE
1:500



ORIGINAL SHEET SIZE A3
REF: 8352/45

SHEET 4
VERSION: 5

LICENSED SURVEYOR: SIMON COX



GEOTECHNICAL LABORATORIES

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ACN 102 571 077

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

CLIENT: SYMON BROS

DATE: 13/07/2022

JOB No.: 9002/023

LOCATION: The Grove South West Precinct, Stage 45

OPERATOR: BM

CHECKED: KK

Sketch indicating compaction test locations

SCALE: NTS

FIGURE No: -