Reference
No.: 1892-463

LEVEL ONE

SURVEILLANCE

AND INSPECTION REPORT

Carried Out
By

GEOTECHNICAL LABORATORIES

PREPARED FOR: -

SYMON BROS CONSTRUCTION PTY LTD

Table of Contents

Appendices

Client Name: Symon Bros Constructions Pty Ltd

Project Name: Arcadia Estate Stage 18

Date: 17th of February 2020

Author: Mr. Sam Loza

Reference No.: 1892-463

Revision: 0

Project Manager: Mr. Vince Colubriale

1. Introduction & Scope

At the request of Symon Bros. Construction Pty Ltd, Geotechnical Laboratories has carried out inspection and testing of the above-mentioned site from the 14th of January 2019 to the 1st of August 2019 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. Construction Pty Ltd and was used to determine compliance of earthworks in conjunction with the requirements of AS 3798 – 2007 (See Appendix A).

(1). Early Bulk Earthworks Plan Drawing No. 303063BE01 Rev. A.
(2). R & D Layout Plan Drawing No. 30489CR204 Rev 3.

General site works involved the placement of fill, using mainly imported material, 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 11th of January 2019 and 14th of January 2019 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 various locations within the outer south-eastern suburbs of Melbourne.

Additional material was also sourced from on-site excavations, mainly drainage trenches and road boxing.

The imported fill material was a clayey SAND and clayey SILTSTONE, pale brown, orange brown, slightly moist to moist, medium plasticity with fine to course gravel.

The on-site fill material is best described as silty CLAY brown, grey-brown, slightly moist to moist, medium to high plasticity with fine to course 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:

- Several dump trucks and highway trucks
- A watercart
- A sheepsfoot compactor (815)

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 seventy-two 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 criteria was specified.

7. Statement of Compliance

So far as can be determined, Symon Bros. Construction 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. Construction Pty Ltd from the 14th of January 2019 to the 1st of August 2019 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 Construction 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. Construction 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.

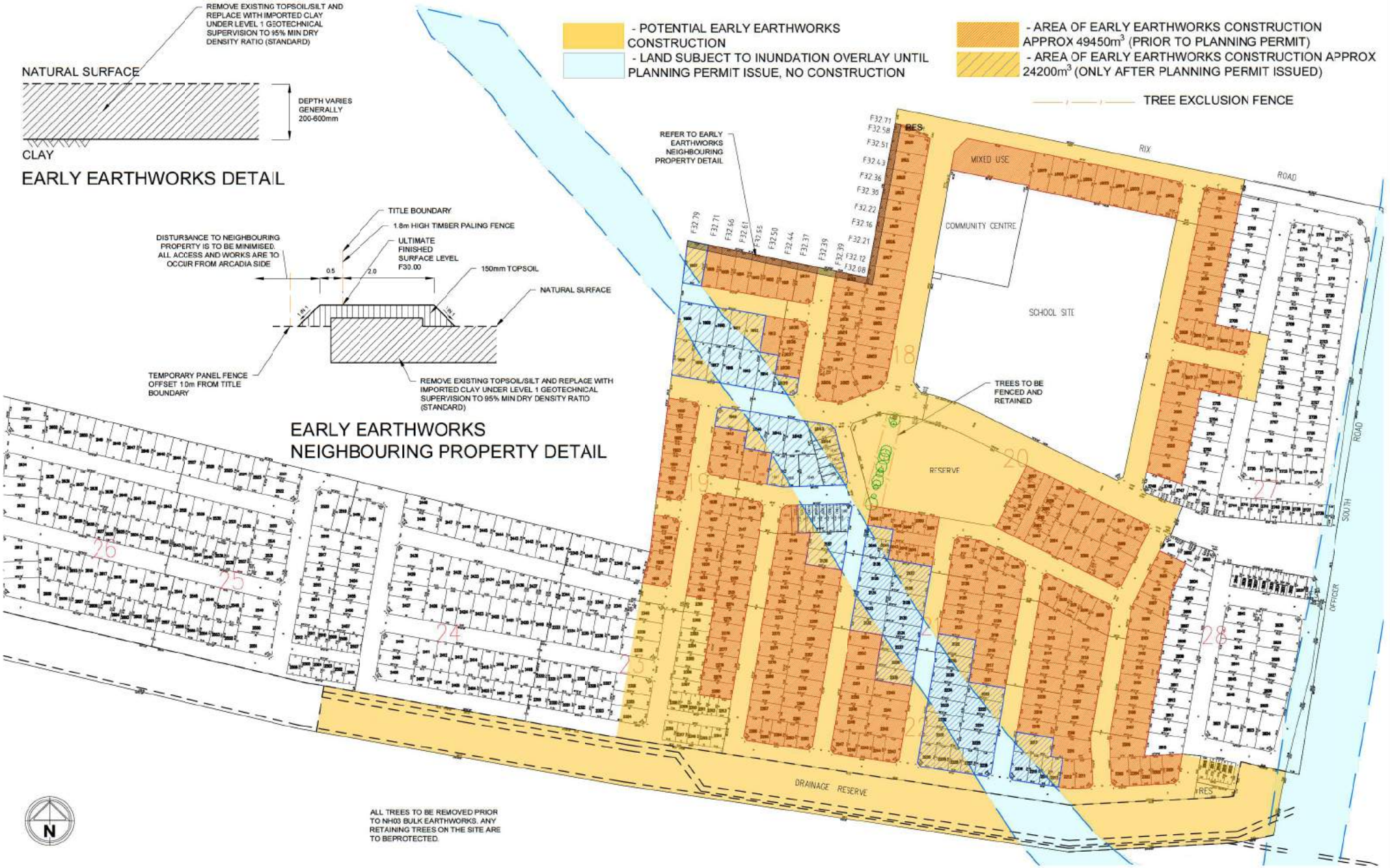
Sam Loza
Laboratory Manager.

LEVEL ONE

SURVEILLANCE

AND INSPECTION REPORT

APPENDIX A



Rev	Amendments	Approved	Date
A	FOR INFORMATION ONLY	P.C	10-07-18

Scale
H 1:1500 0 15 30 45 60 75
SCALE @ A1

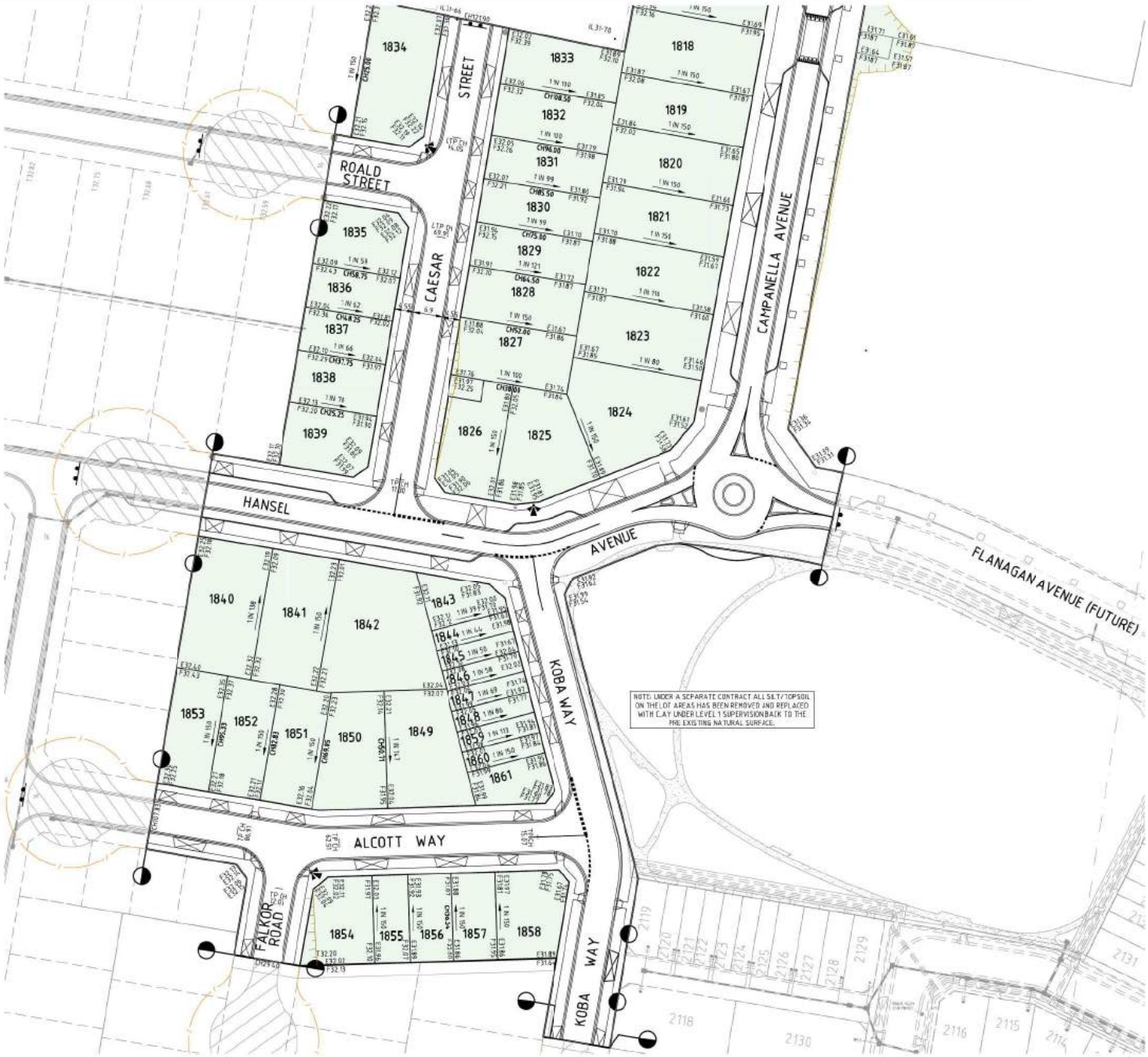
spiire
469 La Trobe Street PO Box 16084 Melbourne
Victoria 8007 Australia T 61 3 9993 7888
spiire.com.au ABN 55 050 029 635

Designed J.DOHERTY
Checked P.CURNOW
Authorised P.CURNOW
Date 10-07-18

ARCADIA NH03
EARLY BULK EARTHWORKS

EARLY BULK EARTHWORKS
CARDINIA SHIRE COUNCIL
SATTERLEY PROPERTY GROUP

CONSTRUCTION Drg No 303063BE01 Rev A



Rev	Amendments	Approved	Date
3	LOT 1854 LEVEL AMENDMENTS	P.C.	28-08-09
2	ADDED BATTER TO LOT 1854	P. C.	21-08-19
1	ADDED LOT LEVELS	P. C.	26-07-19
0	ISSUED FOR CONSTRUCTION	P.C	12-06-19
B	ADDED LOT AREA, FUTURE KERBS	B. L	14-05-19
A	PRELIMINARY ISSUE	B. L	14-03-19

H 1:500
SCALE @ A1
0 5 10 15 20 25
N
MGA 94
ZONE 55

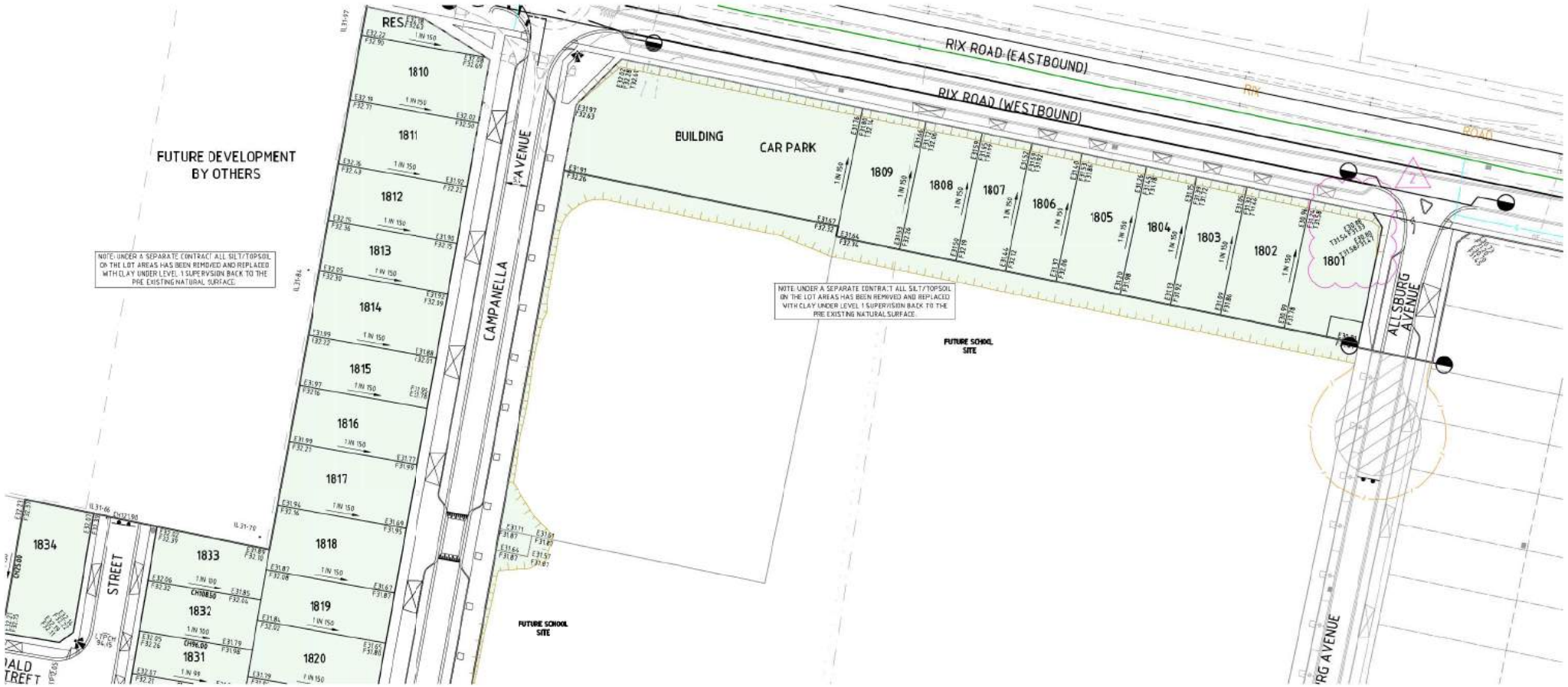
spiire
414 La Trobe Street PO Box 16084 Melbourne
Victoria 8007 Australia T 61 3 9993 7888
spiire.com.au ABN 55 050 029 635

Satterley

Designed H. OAKLEY-WARREN
Checked T. ZAHLE
Authorised P. CURNOW
Date 17-05-19

ARCADIA ESTATE
STAGE 18
ROAD & DRAINAGE LAYOUT PLAN
EARTHWORKS PLAN
CARDINIA SHIRE COUNCIL
SATTERLEY PROPERTY GROUP

CONSTRUCTION
Drg No 304809CR204
Rev 3



LEGEND

- EXCAVATION GREATER THAN 200mm
- FILLING GREATER THAN 200mm
- FS XXXXX — FINISHED SURFACE LEVELS (AT BOUNDARY)
- ES XXXXX — EXISTING SURFACE LEVELS (AT BOUNDARY)
- 96.00 — EXISTING SURFACE CONTOUR (MAJOR)
- EXISTING SURFACE CONTOUR (MINOR) CONTOURS SHOWN AT 250mm INTERVAL)

Rev	Amendments	Approved	Date
A	PRELIMINARY ISSUE	B. L	14-03-19
B	ADDED LOT AREA, FUTURE KERBS	B. L	14-05-19
0	ISSUED FOR CONSTRUCTION	P.C	12-06-19
1	AMENDED LOT LEVELS FACING RIX RD	P. C.	09-08-19
2	AMENDED LEVELS OF SPLAY	P. C.	20-08-19

H 1:500 SCALE @ A1
0 5 10 15 20 25

N
MGA 94 ZONE 55

spiire
414 La Trobe Street PO Box 16084 Melbourne
Victoria 8007 Australia T 61 3 9993 7888
spiire.com.au ABN 55 050 029 635

Satterley

Designed: H. OAKLEY-WARREN
Checked: T. ZAHLE
Authorised: P. CURNOW
Date: 17-05-19

ARCADIA ESTATE
STAGE 18
ROAD & DRAINAGE LAYOUT PLAN
EARTHWORKS PLAN
CARDINIA SHIRE COUNCIL
SATTERLEY PROPERTY GROUP

CONSTRUCTION Drg No **304809CR205** Rev **2**

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.: # 1891/742
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
14/01/19	1	***Refer to #1891/744 for approx. test site locations.***	2.03	15.5	96.0	2.11	15.5	175	0.0 Drier	98.5	0	0	600
14/01/19	2		2.08	15.0	98.5	2.10	14.5	175	0.0 Wetter	101.5	0	0	1200
14/01/19	3		2.05	18.5	100.0	2.05	18.0	175	0.5 Wetter	104.0	0	0	1200
14/01/19	4		2.14	16.5	100.5	2.13	16.0	175	0.5 Wetter	103.0	0	0	0
14/01/19	5		2.06	10.0	101.0	2.04	14.5	175	5.0 Drier	67.0	0	0	0
14/01/19	6		2.09	6.5	102.0	2.05	11.0	175	4.5 Drier	60.5	0	0	0

NOTES: Onsite Clayey Fill
Test sites located - Geolab Procedure 4, Part 4.4.
Compaction specimens sampled after compaction.
Start Time: 10.35am 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.

Soil Layer thickness: 200mm
Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1
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)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 21/1/2019

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.: # 1891/743
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
14/01/19	7	***Refer to #1891/744 for approx. test site locations.***	2.06	14.5	97.5	2.11	15.0	175	0.0 Drier	98.5	0	0	0
14/01/19	8		2.09	16.0	100.0	2.09	16.0	175	0.0 Drier	100.0	0	0	0
14/01/19	9		2.11	17.5	102.0	2.06	17.5	175	0.0 Drier	100.0	0	0	0
14/01/19	10		2.11	13.0	102.5	2.05	14.5	175	1.0 Drier	92.0	0	0	0
14/01/19	11		2.05	16.0	97.5	2.10	15.5	175	0.5 Wetter	104.5	0	0	0
14/01/19	12		2.13	11.5	102.5	✠ 2.08	15.0	175	3.5 Drier	77.5	18	0	0

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 10.35am 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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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

✣

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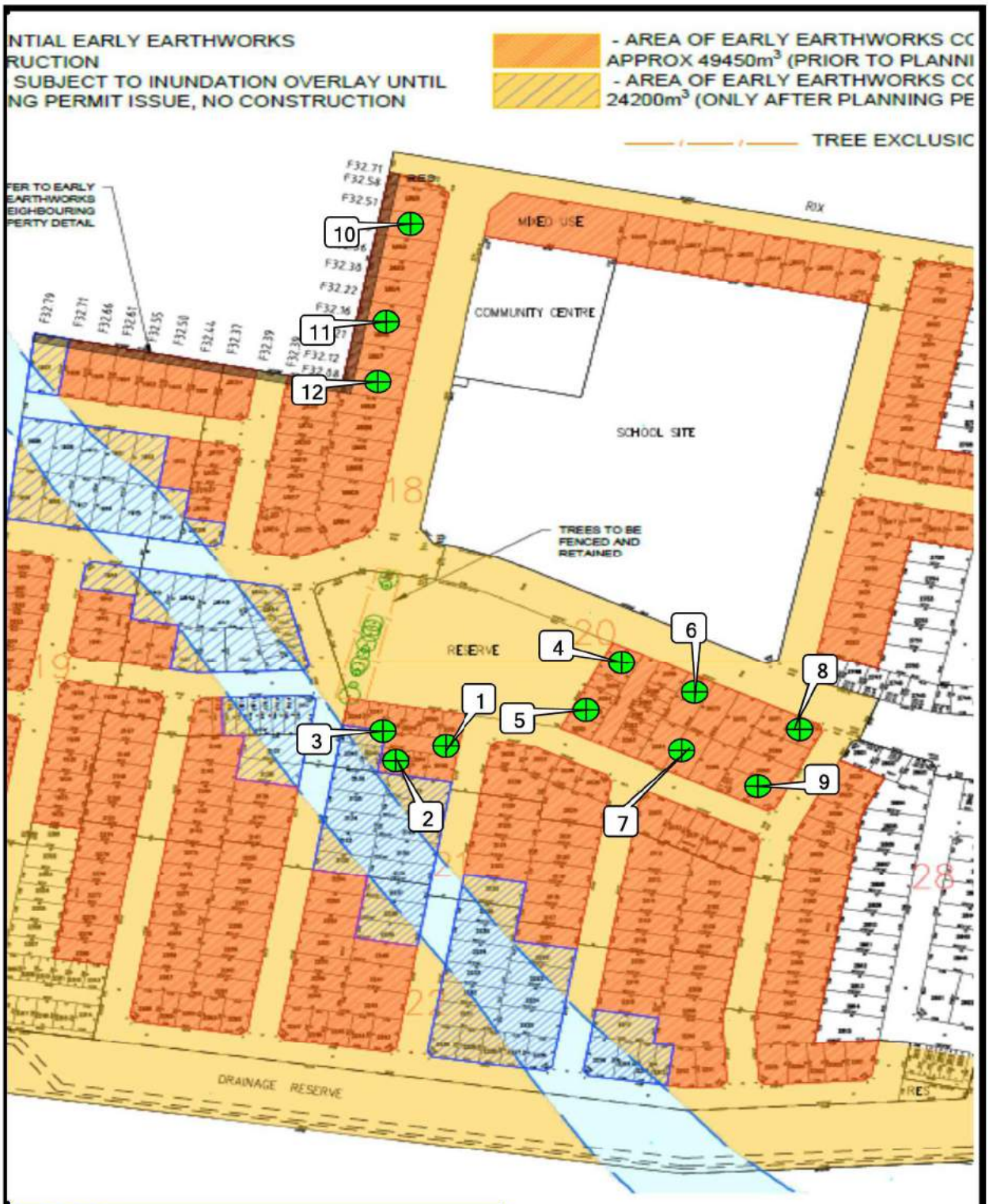
MICK CROWE
(Approved Signatory)

Issue Date: 21/1/2019



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: 14/1/19**	**JOB No.: 1891/744**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: RW**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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.: # 1891/747
LOCATION: SYMON BROS - Arcadia Neighbourhood Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
16/01/19	1	***Refer to #1891/748 for approx. test site locations.***	2.05	14.0	100.0	2.05	15.0	175	1.0 Drier	94.0	0	0	200
16/01/19	2		2.06	13.5	100.0	2.06	14.5	175	1.0 Drier	93.5	0	0	200
16/01/19	3		2.06	16.5	98.5	2.10	16.0	175	0.5 Wetter	104.5	0	0	200
16/01/19	4		2.05	15.0	100.0	2.05	15.5	175	0.5 Drier	95.5	0	0	200
16/01/19	5		2.09	18.5	100.5	2.08	16.5	175	1.5 Wetter	110.0	0	0	200
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 9.40am Finish Time: 10.10am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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)

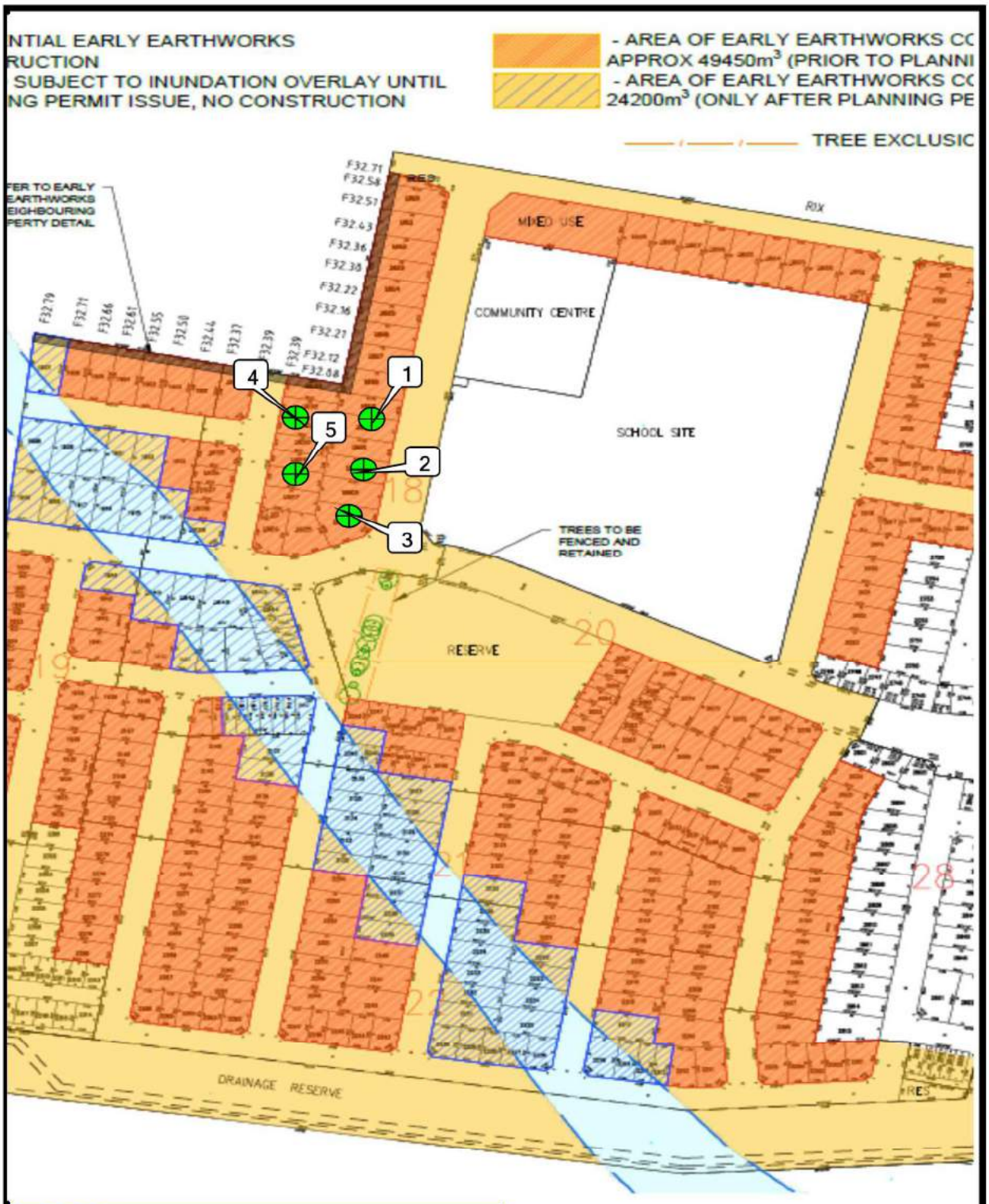
NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 21/1/2019



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: 16/1/19**	**JOB No.: 1891/748**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: RW**	**CHECKED: EG**
Sketch indicating approx. 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.: # 1891/749

LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
17/01/19	1	*Refer to #1891/750 for approx. test site locations.*	2.09	12.0	99.0	2.11	12.5	175	0.0 Drier	98.0	0	0	0
17/01/19	2		2.09	17.0	100.0	2.09	17.0	175	0.5 Wetter	103.0	0	0	0
17/01/19	3		2.06	18.0	101.0	2.05	15.5	175	2.5 Wetter	115.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Onsite Clayey Fill
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 11.30am Finish Time: 11.45am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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)

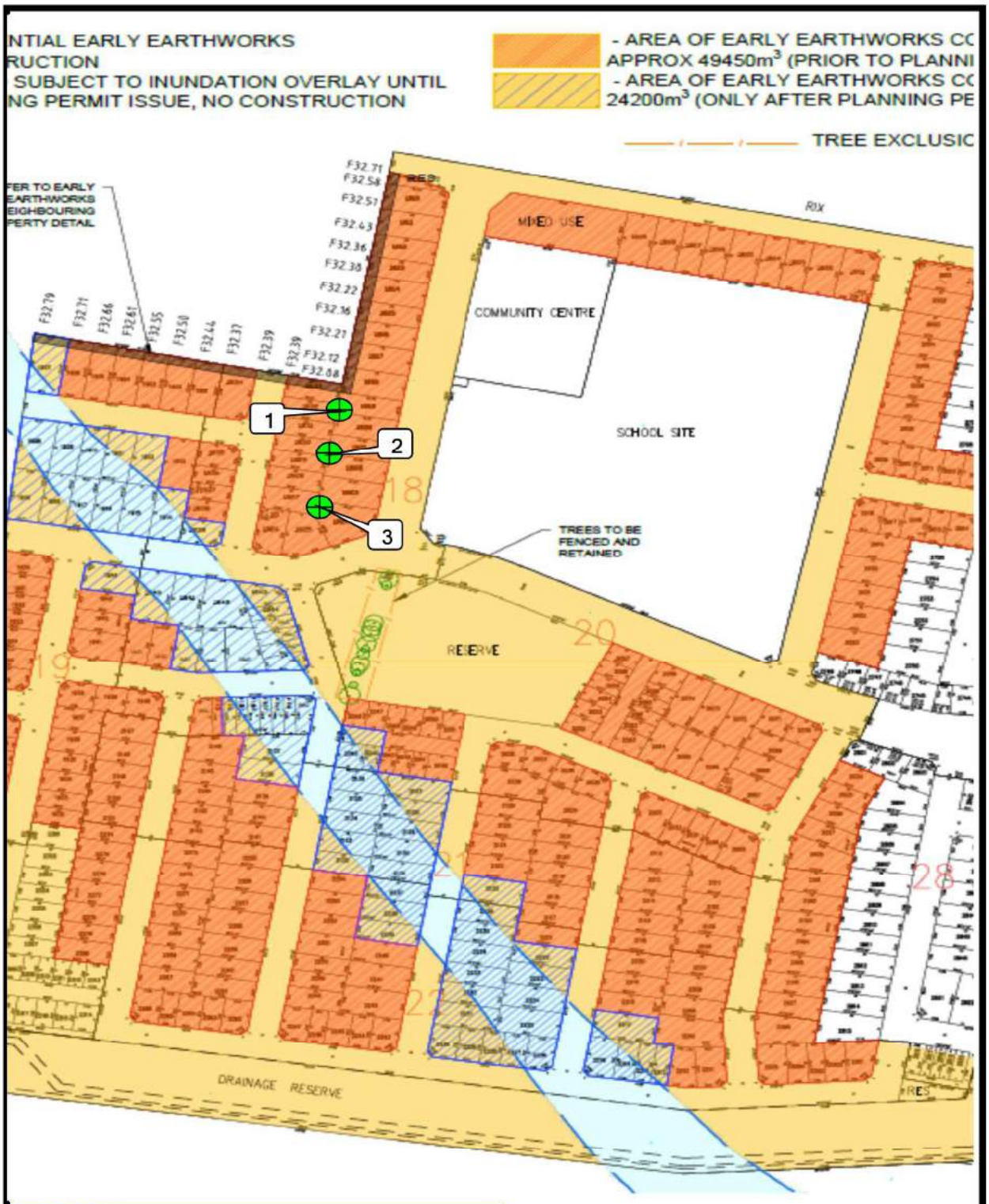
NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 21/1/2019



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: 17/1/19**	**JOB No.: 1891/750**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: RW**	**CHECKED: EG**
Sketch indicating approx. 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.: # 1891/751

LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
18/01/19	1	*Refer to #1891/752 for approx. test site locations.*	2.09	16.0	100.0	2.09	16.0	175	0.0 Wetter	101.5	0	0	0
18/01/19	2		2.16	17.0	103.0	2.10	16.0	175	1.0 Wetter	106.0	0	0	0
18/01/19	3		2.10	17.0	100.5	2.09	16.0	175	1.0 Wetter	106.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 2.20pm Finish Time: 12.40pm

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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)

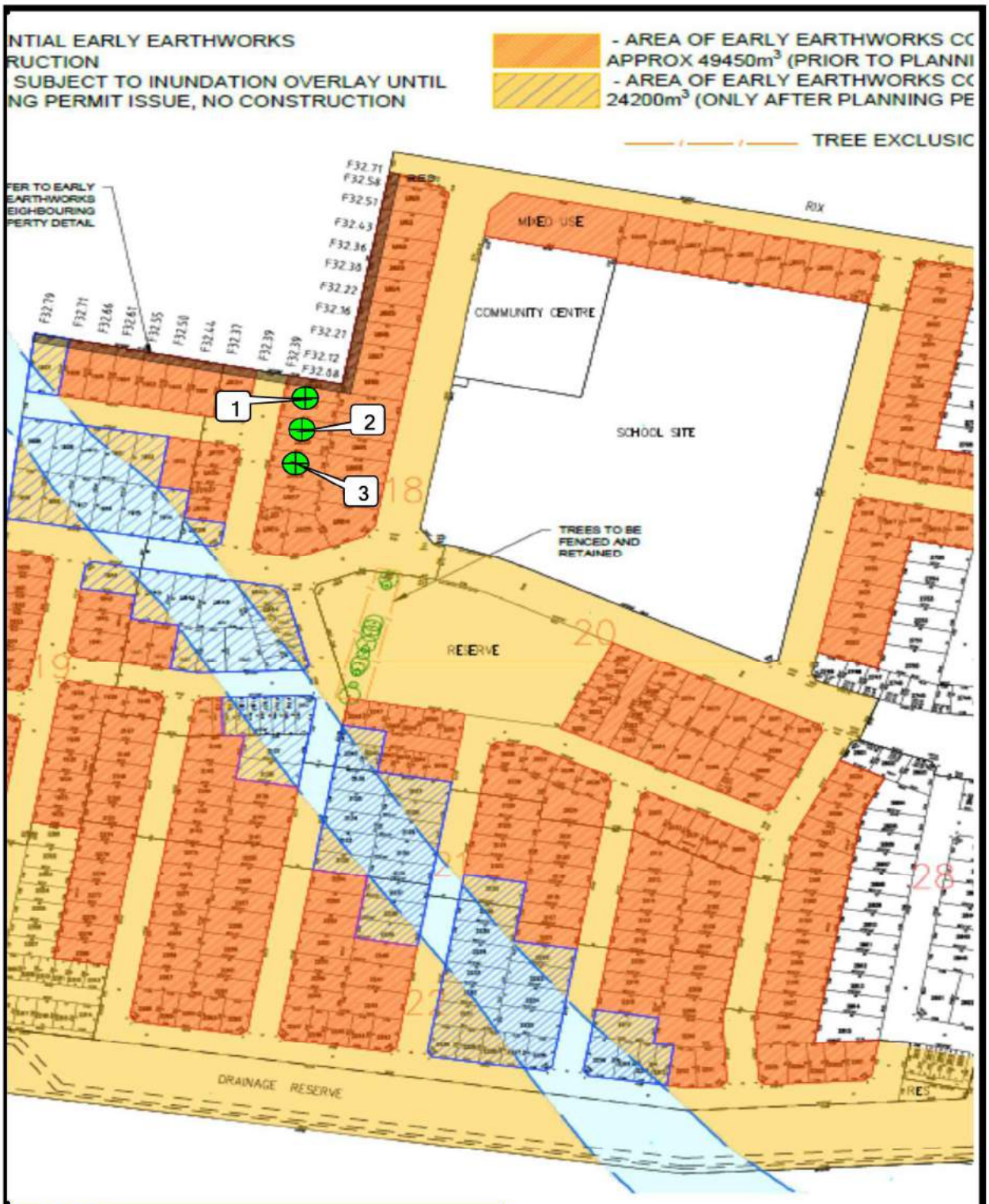
NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 23/1/2019



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: 18/1/19**	**JOB No.: 1891/752**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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.: # 1891/753
LOCATION: SYMON BROS - Arcadia Neighbourhood Stage 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
22/01/19	1	***Refer to #1891/754 for approx. test site locations.***	2.03	17.0	96.5	2.10	16.5	175	0.5 Wetter	103.0	0	0	200
22/01/19	2		2.11	19.0	102.0	2.07	17.5	175	1.5 Wetter	109.5	0	0	0
22/01/19	3		2.08	17.0	100.0	2.08	17.0	175	0.0 Drier	100.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.
Compaction specimens sampled after compaction.
Start Time: 9.00am Finish Time: 9.20am

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.

Soil Layer thickness: 200mm
Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1
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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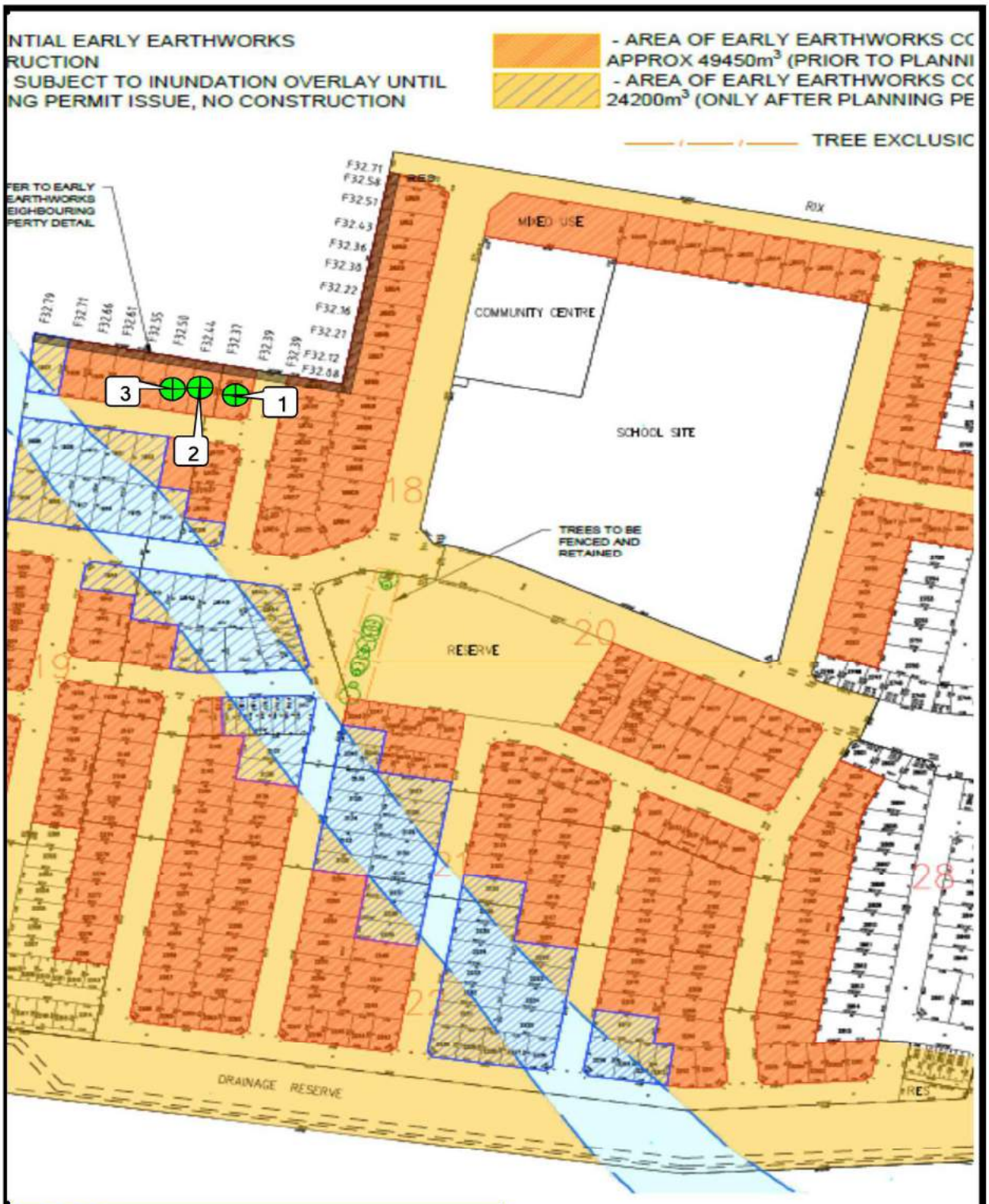
Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 31/1/2019



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

CLIENT: SYMON BROS	**DATE: 22/1/19**	**JOB No.: 1891/754**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/755

LOCATION: SYMON BROS - Arcadia Neighbourood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
21/01/19	1	*Refer to #1891/756 for approx. test site locations.*	2.03	14.5	96.0	2.11	14.5	175	0.5 Drier	97.0	0	0	0
21/01/19	2		2.07	16.5	98.5	2.09	17.0	175	0.0 Drier	98.5	0	0	0
21/01/19	3		2.03	16.0	96.5	2.10	16.5	175	0.0 Drier	98.5	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 11.05am Finish Time: 11.20am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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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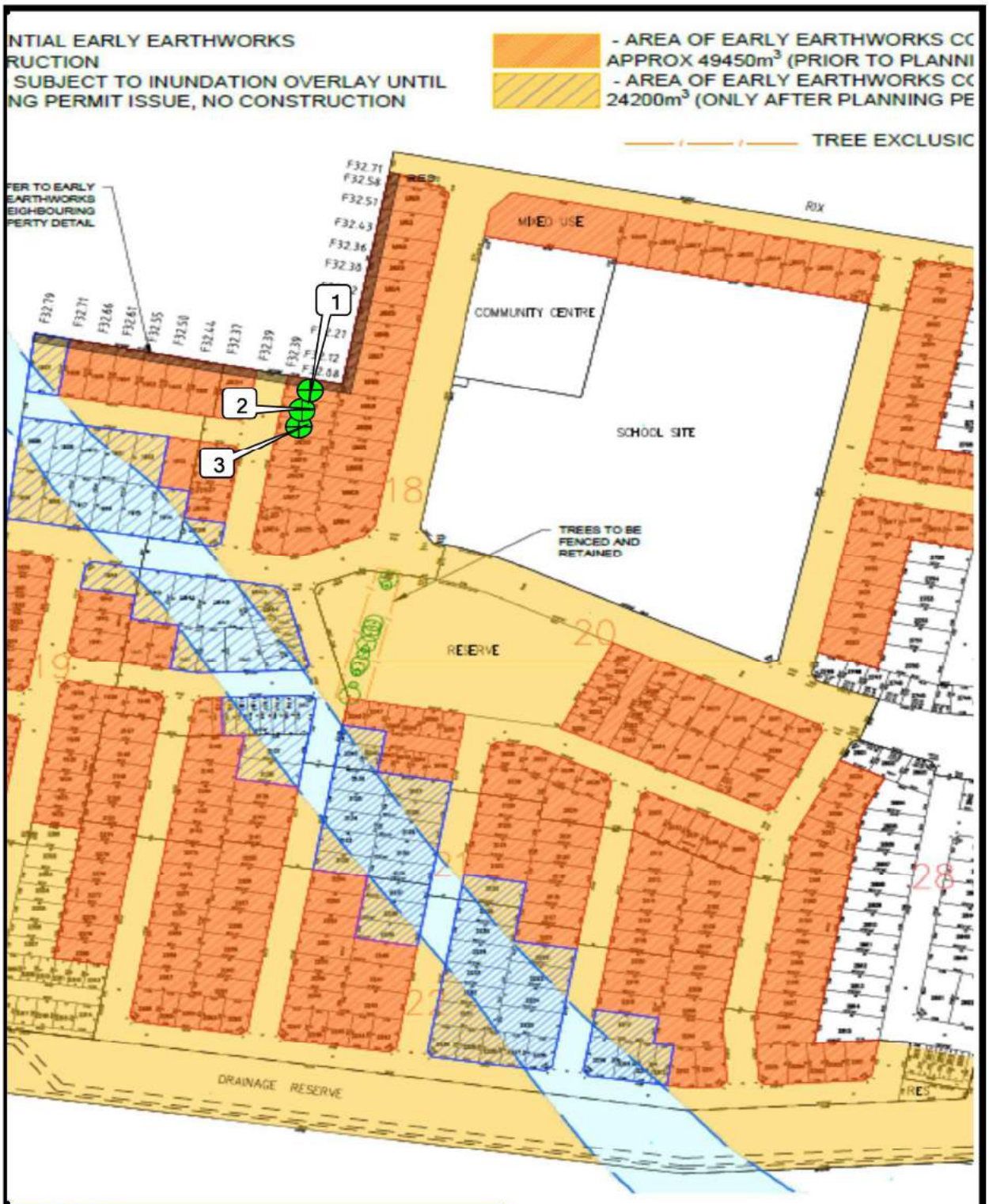
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 30/1/2019



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CLIENT: SYMON BROS	**DATE: 21/1/19**	**JOB No.: 1891/756**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/761
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
23/01/19	1	*Refer to #1891/762 for approx. test site locations.*	2.05	17.5	98.0	2.09	16.0	175	1.5 Wetter	109.0	0	0	200
23/01/19	2		2.06	16.5	98.5	2.10	16.5	175	0.0 Wetter	101.5	0	0	200
23/01/19	3		2.11	16.5	100.5	2.10	15.5	175	0.5 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: 11.25am Finish Time: 11.40am

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.

Soil Layer thickness: 200mm
Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1
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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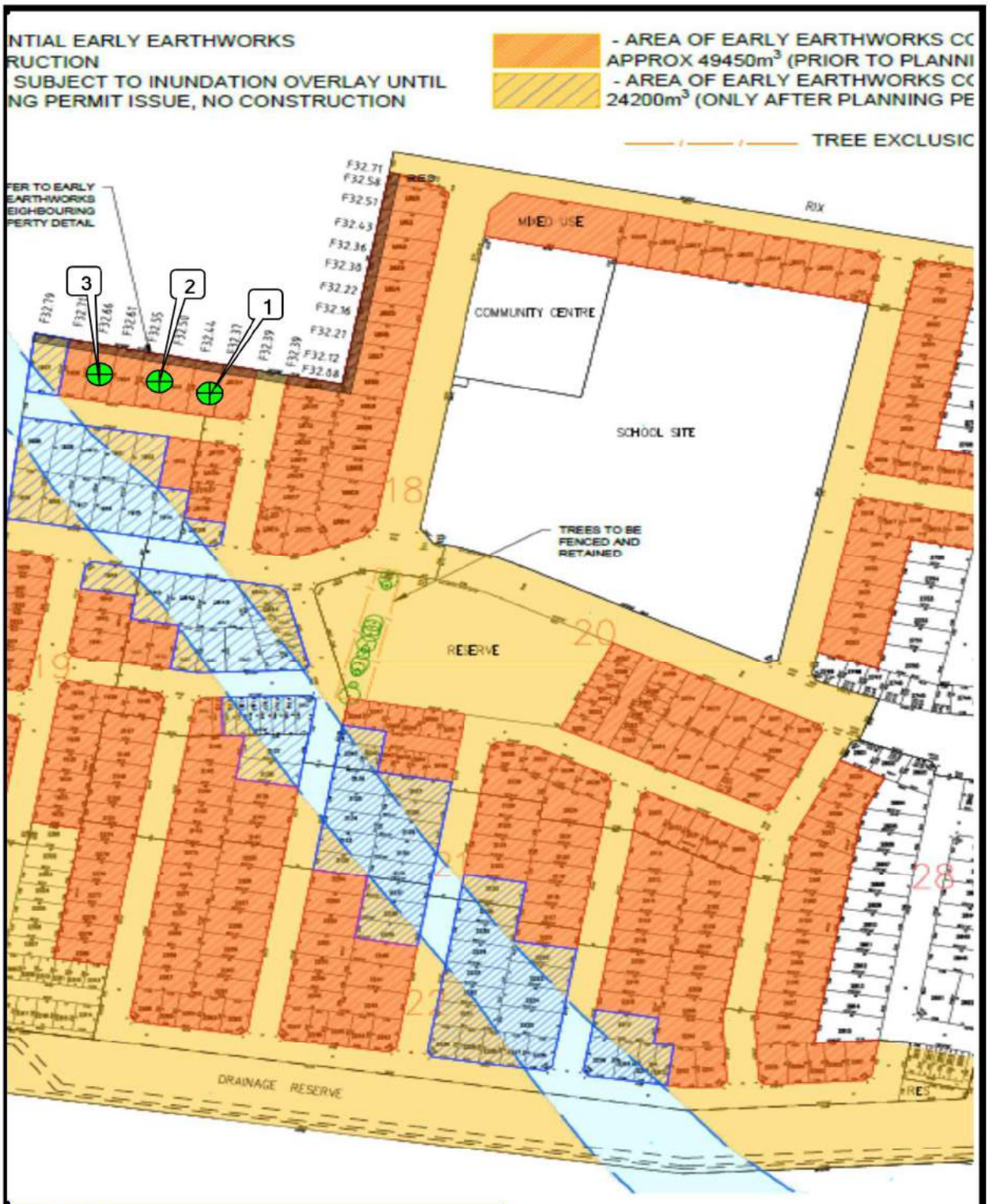
MICK CROWE
(Approved Signatory)
Issue Date: 3/2/2019



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CLIENT: SYMON BROS	**DATE: 23/1/19**	**JOB No.: 1891/762**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/763
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
24/01/19	1	*Refer to #1891/764 for approx. test site locations.*	2.17	18.0	103.0	✠ 2.10	16.0	175	1.5 Wetter	110.0	4	0	200
24/01/19	2		1.99	20.5	97.0	2.05	18.5	175	2.0 Wetter	110.5	0	0	200
24/01/19	3		2.14	13.5	99.5	2.15	13.0	175	0.0 Wetter	101.5	0	0	200
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.
Compaction specimens sampled after compaction.
Start Time: 9.30am Finish Time: 9.50am

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.

Soil Layer thickness: 200mm
Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1
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
✣

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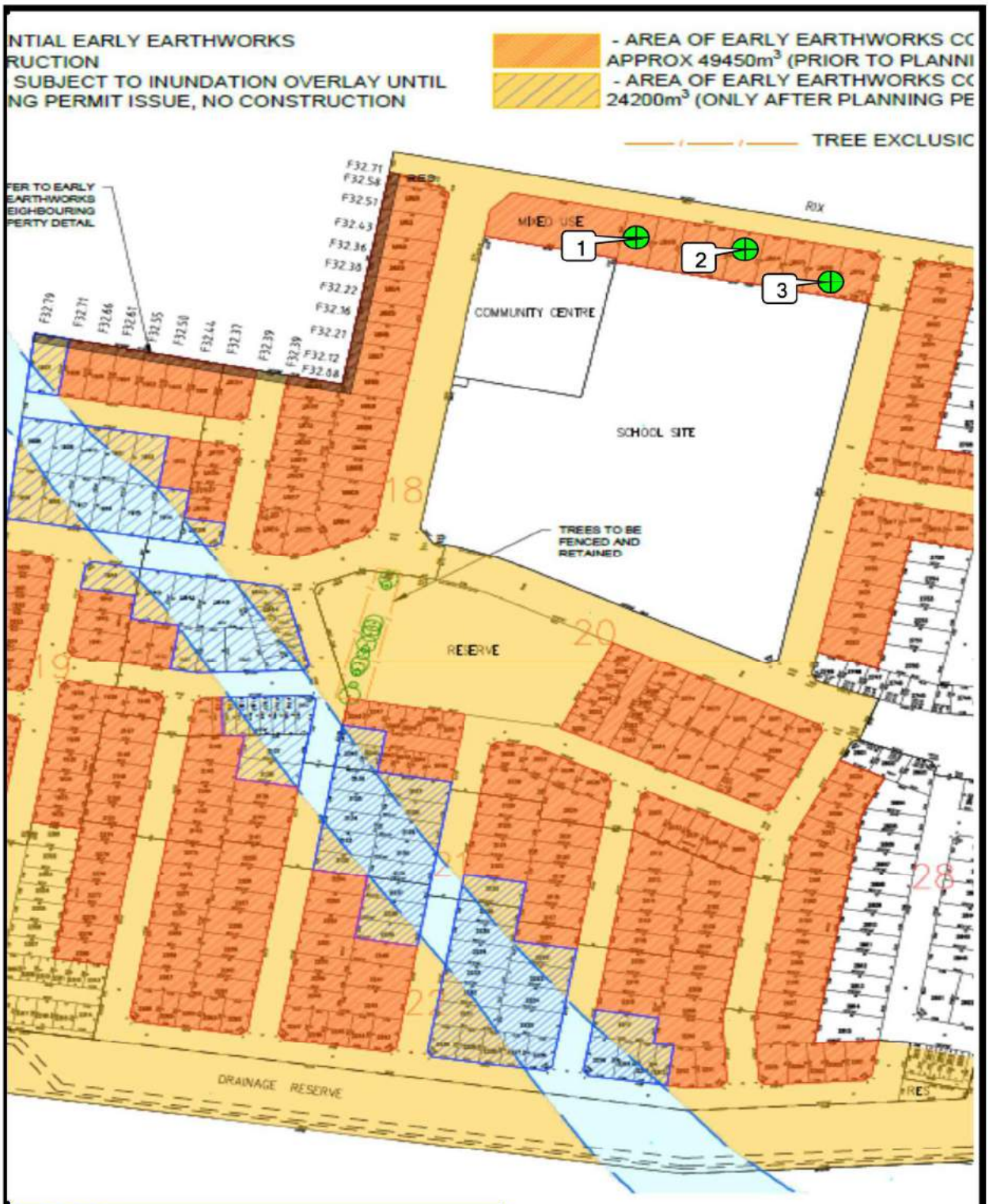
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 3/2/2019



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CLIENT: SYMON BROS	**DATE: 24/1/19**	**JOB No.: 1891/764**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/765

LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
29/01/19	1	*Refer to #1891/766 for approx. test site locations.*	2.16	12.5	100.5	2.15	13.0	175	0.0 Drier	98.5	0	0	200
29/01/19	2		2.21	12.0	104.5	2.12	12.0	175	0.0 Drier	100.0	0	0	200
29/01/19	3		2.14	13.5	100.5	2.12	14.0	175	0.0 Drier	98.5	0	0	200
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 9.10am Finish Time: 9.30am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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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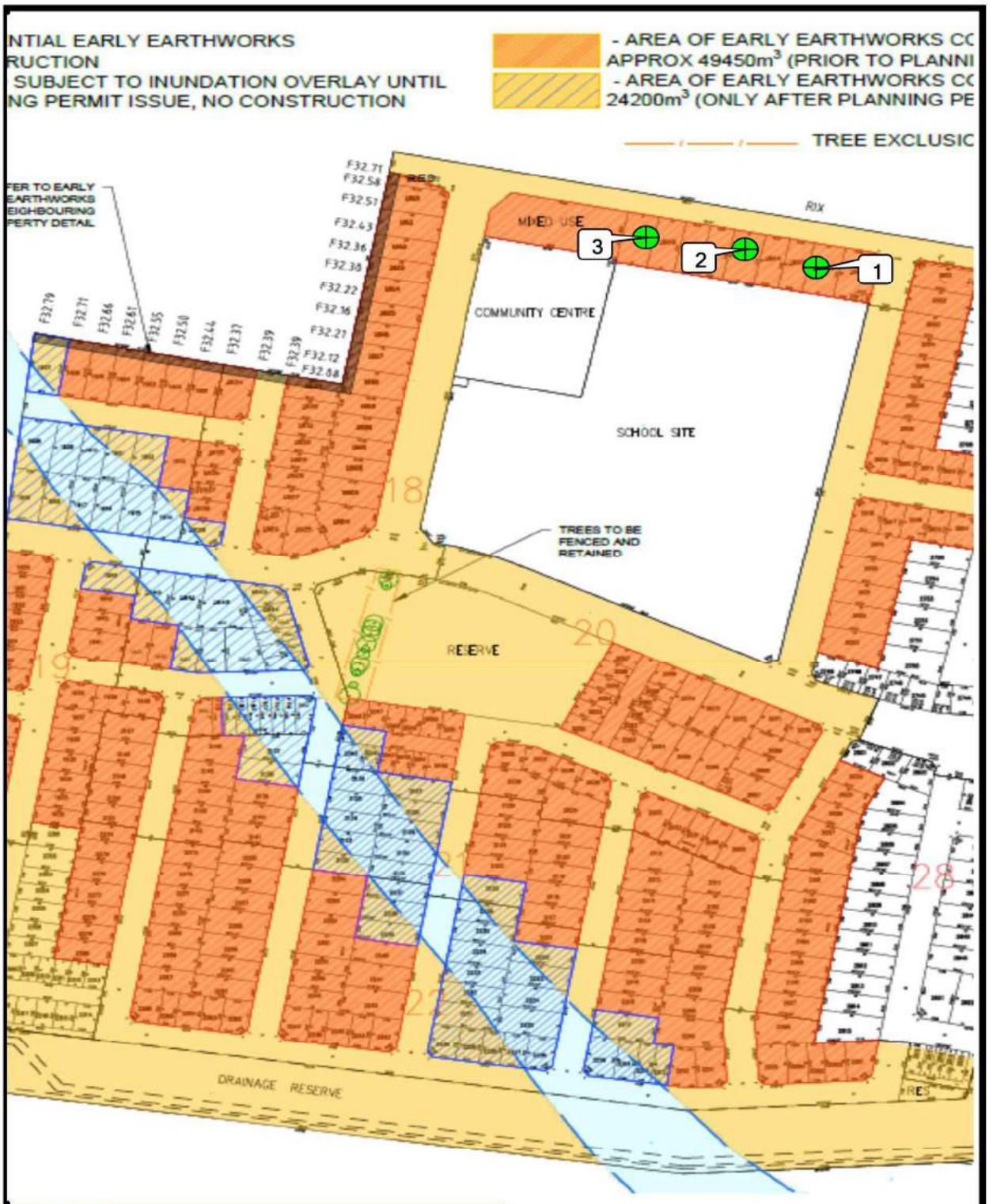
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 4/2/2019



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CLIENT: SYMON BROS	**DATE: 29/1/19**	**JOB No.: 1891/766**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/767
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
30/01/19	1	*Refer to #1891/768 for approx. test site locations.*	1.96	17.5	96.0	2.04	17.0	175	0.0 Wetter	101.5	0	0	0
30/01/19	2		1.95	17.0	96.5	2.03	17.5	175	0.0 Drier	98.5	0	0	0
30/01/19	3		1.99	17.5	98.0	2.03	18.0	175	0.5 Drier	96.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.
Compaction specimens sampled after compaction.
Start Time: 8.20am Finish Time: 8.40am

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.

Soil Layer thickness: 200mm
Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1
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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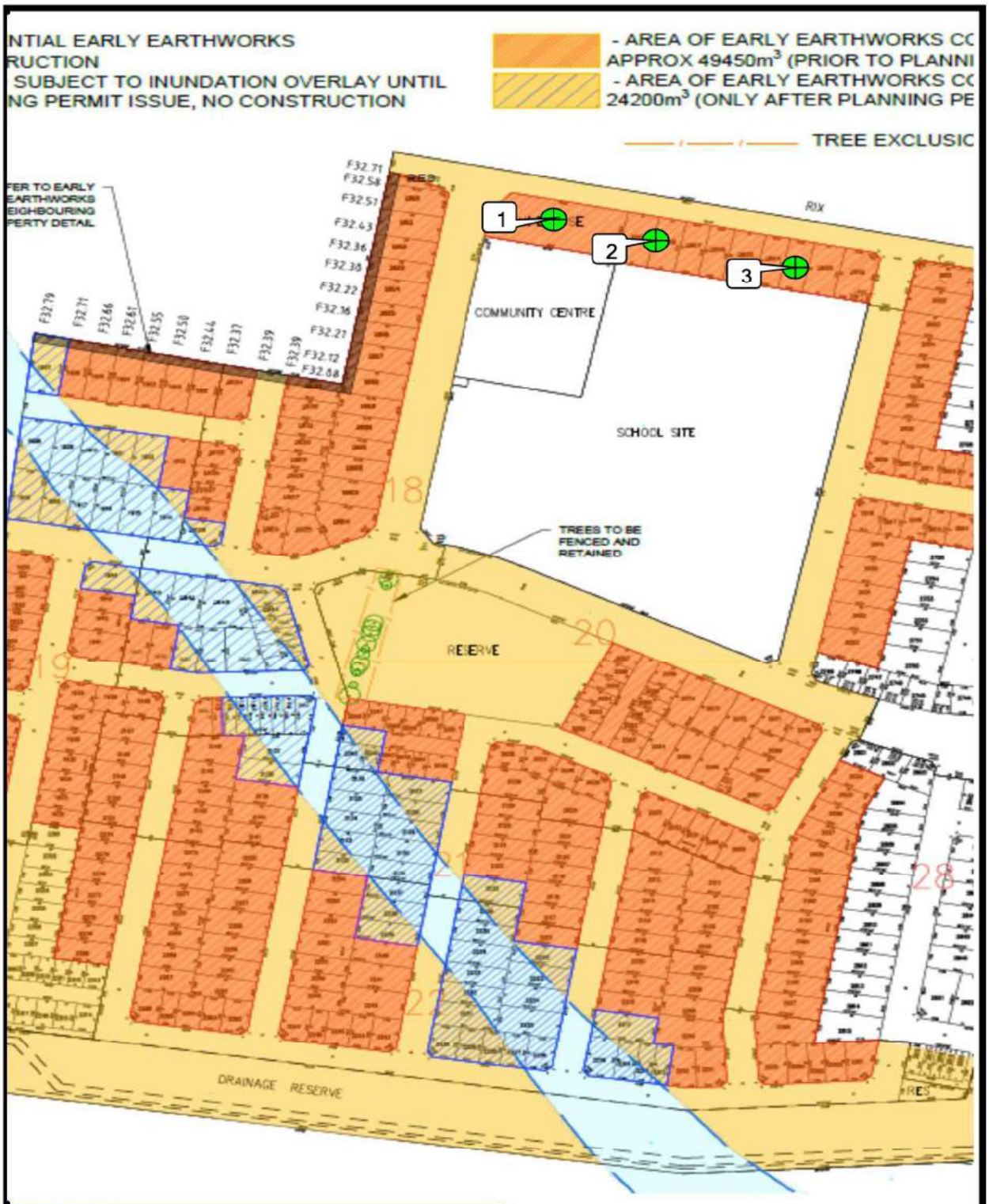
MICK CROWE
(Approved Signatory)
Issue Date: 5/2/2019



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CLIENT: SYMON BROS	**DATE: 30/1/19**	**JOB No.: 1891/768**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/769
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
31/01/19	1	***Refer to #1891/770 for approx. test site locations.***	1.95	17.0	95.5	2.04	16.5	175	0.5 Wetter	103.0	0	0	200
31/01/19	2		2.03	21.0	97.5	2.08	19.0	175	2.0 Wetter	111.5	0	0	200
31/01/19	3		2.14	14.0	102.0	2.10	14.5	175	1.0 Drier	94.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.3.
Compaction specimens sampled after compaction.
Start Time: 12.00pm Finish Time: 12.20pm

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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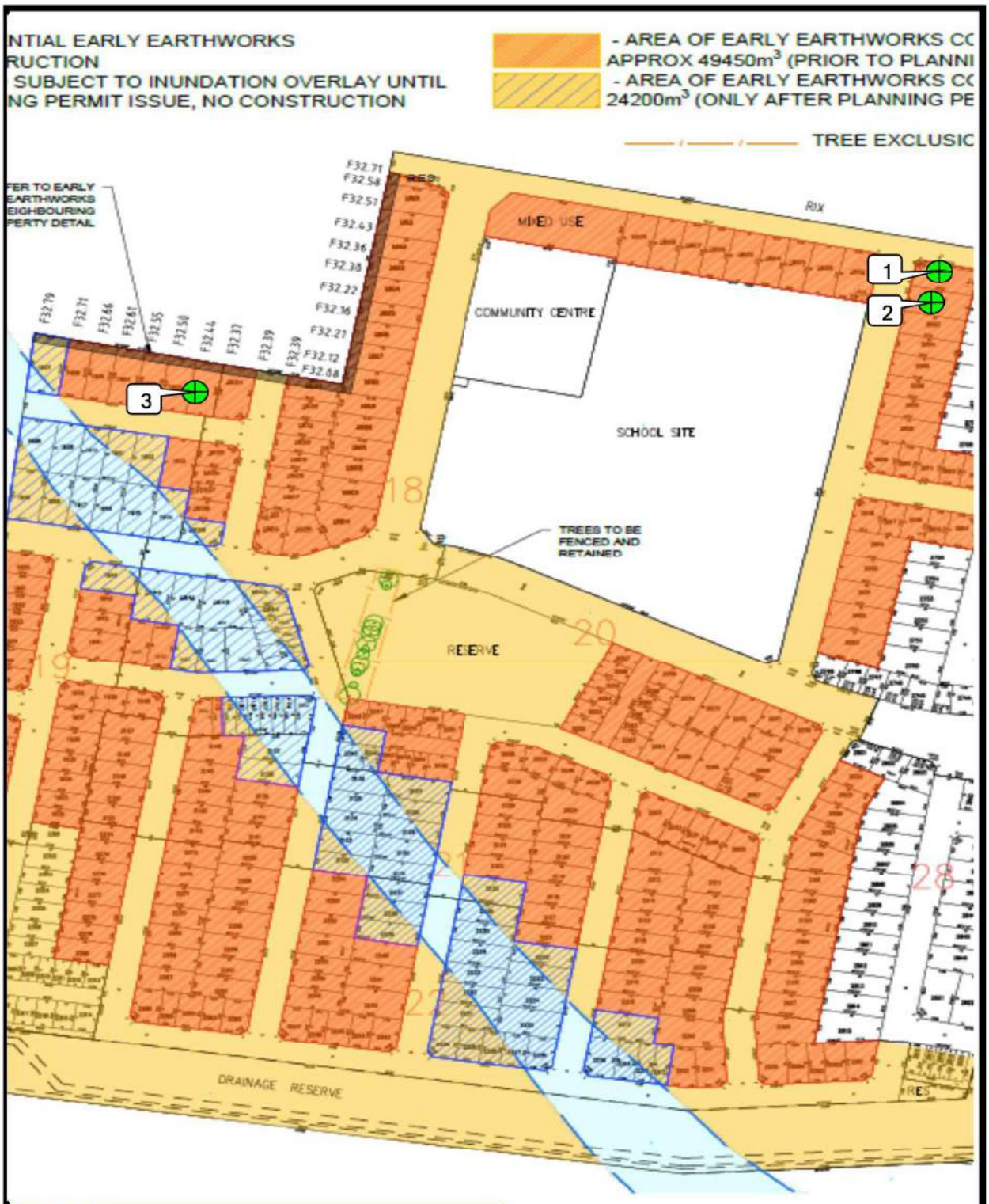
MICK CROWE
(Approved Signatory)
Issue Date: 6/2/2019



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CLIENT: SYMON BROS	**DATE: 31/1/19**	**JOB No.: 1891/770**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/771
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
1/02/19	1	***Refer to #1891/772 for approx. test site locations.***	2.06	17.0	98.0	2.10	15.5	175	1.5 Wetter	110.5	0	0	0
1/02/19	2		2.04	18.5	98.5	2.07	17.0	175	1.5 Wetter	110.0	0	0	0
1/02/19	3		2.10	16.5	99.5	2.11	15.0	175	1.5 Wetter	109.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4

Compaction specimens sampled after compaction.
Start Time: 9.10am Finish Time: 9.30am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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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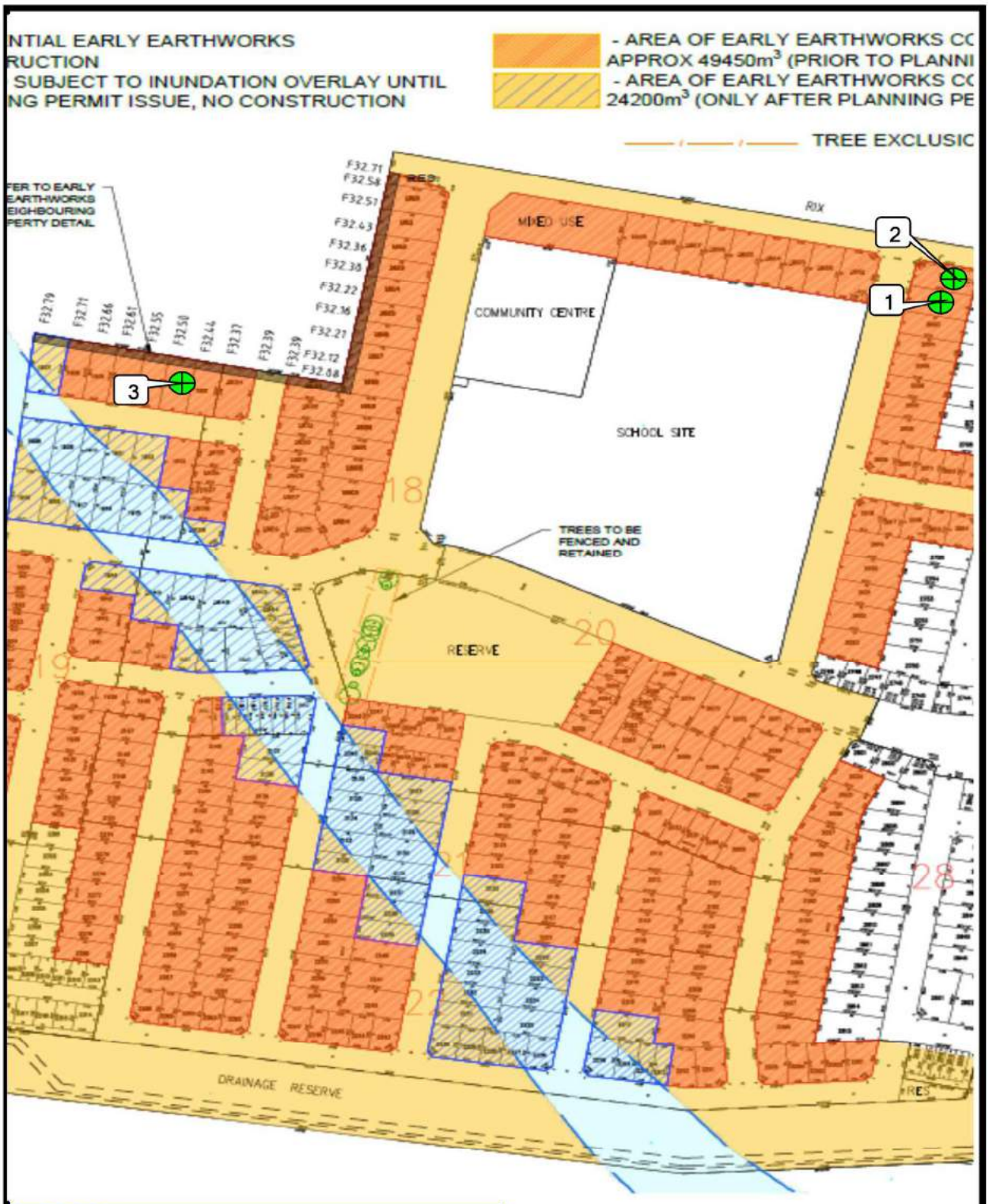
MICK CROWE
(Approved Signatory)

Issue Date: 7/2/2019



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: 1/2/19**	**JOB No.: 1891/772**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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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.: # 1891/776

LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
2/02/19	1	*Refer to #1891/777 for approx. test site locations.*	2.18	9.5	104.0	✠ 2.10	13.5	175	4.5 Drier	68.0	19	0	0
2/02/19	2		1.99	20.0	96.5	2.05	19.0	175	1.0 Wetter	105.0	0	0	0
2/02/19	3		2.01	21.0	98.5	2.04	19.5	175	1.5 Wetter	107.5	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite

Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.

Start Time: 10.40am Finish Time: 11.00am

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

Soil Layer thickness: 200mm

Compaction Test: AS 1289 5.7.1

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

✣

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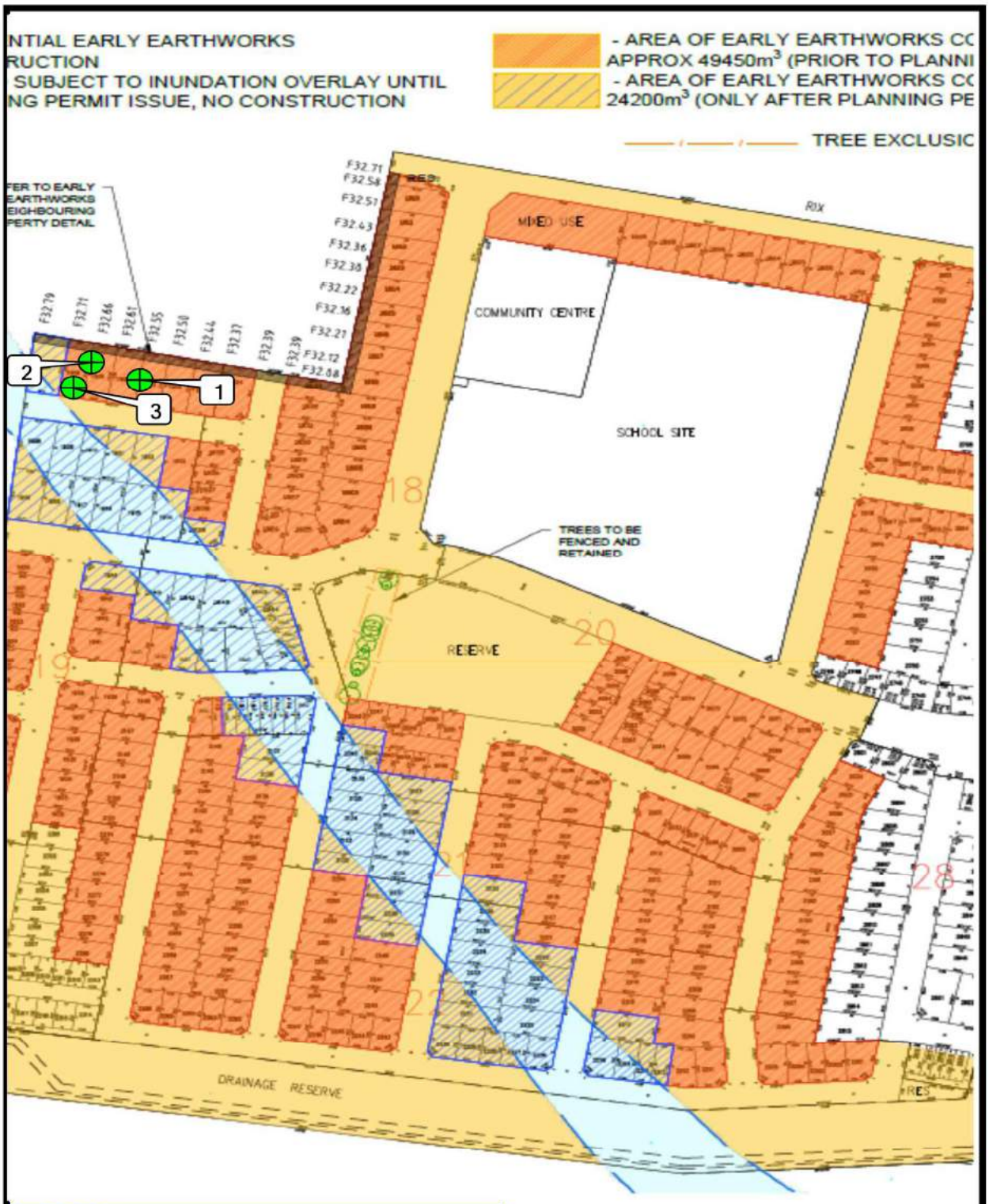
Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE

(Approved Signatory)

Issue Date: 8/2/2019



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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: 2/2/19**	**JOB No.: 1891/777**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/787
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
11/02/19	1	***Refer to #1891/788 for approx. test site locations.***	2.05	19.5	100.5	2.04	18.5	175	1.0 Wetter	105.0	0	0	400
11/02/19	2		2.07	19.5	101.5	2.04	19.0	175	0.5 Wetter	102.5	0	0	400
11/02/19	3		2.04	22.5	99.0	2.06	19.5	175	3.0 Wetter	116.5	0	0	400
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

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: 10.20am

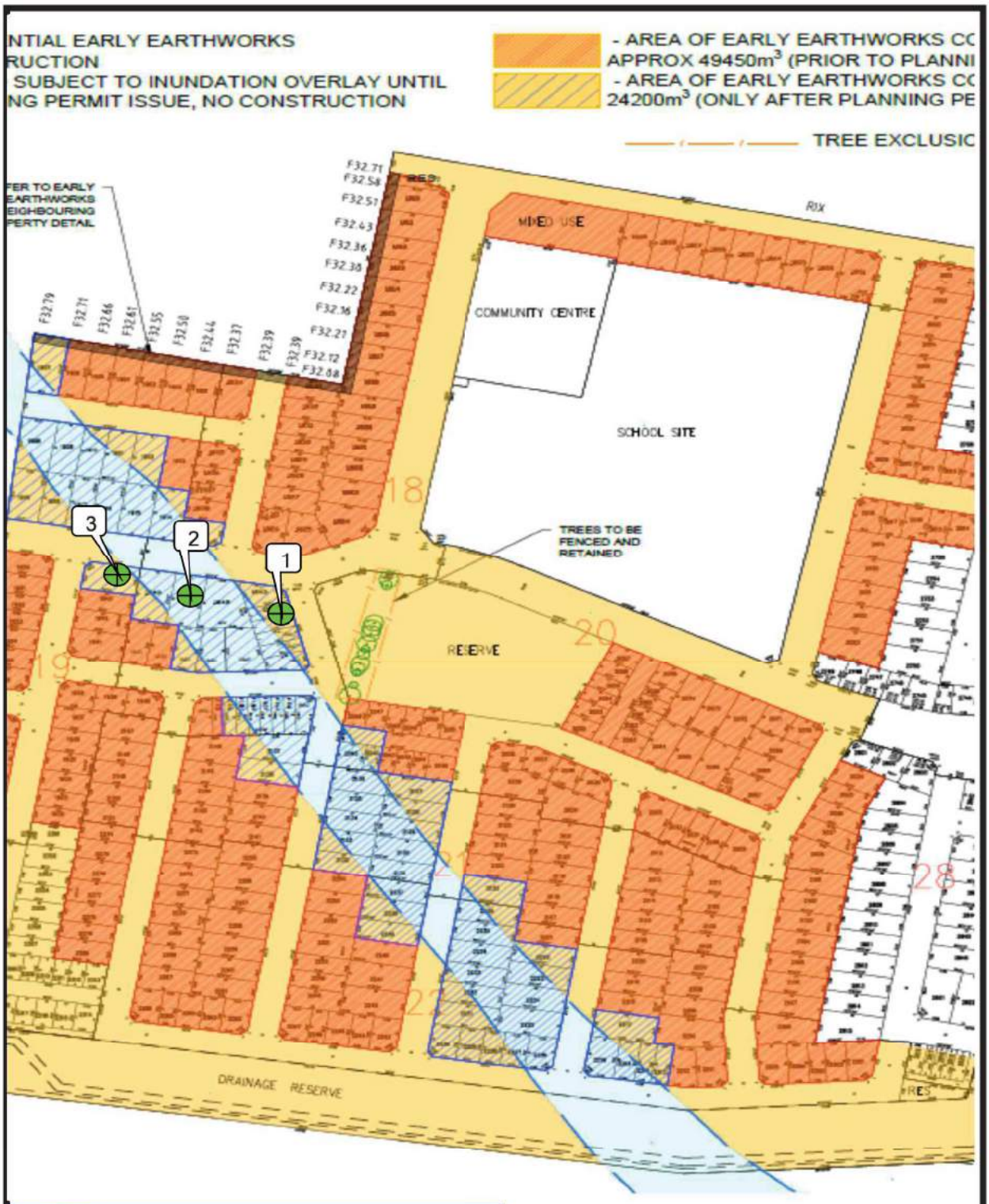
A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Soil Layer thickness: 200mm
Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1
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)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 14/2/2019



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CLIENT: SYMON BROS	**DATE: 11/2/19**	**JOB No.: 1891/788**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/789
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
13/02/19	1	***Refer to #1891/790 for approx. test site locations.***	2.04	16.0	98.5	2.07	15.5	175	0.0 Wetter	101.5	0	0	200
13/02/19	2		2.03	17.0	97.5	2.08	16.5	175	0.5 Wetter	104.5	0	0	200
13/02/19	3		2.01	18.5	97.0	2.07	18.5	175	0.0 Wetter	101.5	0	0	200
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 12.05pm Finish Time: 12.20pm

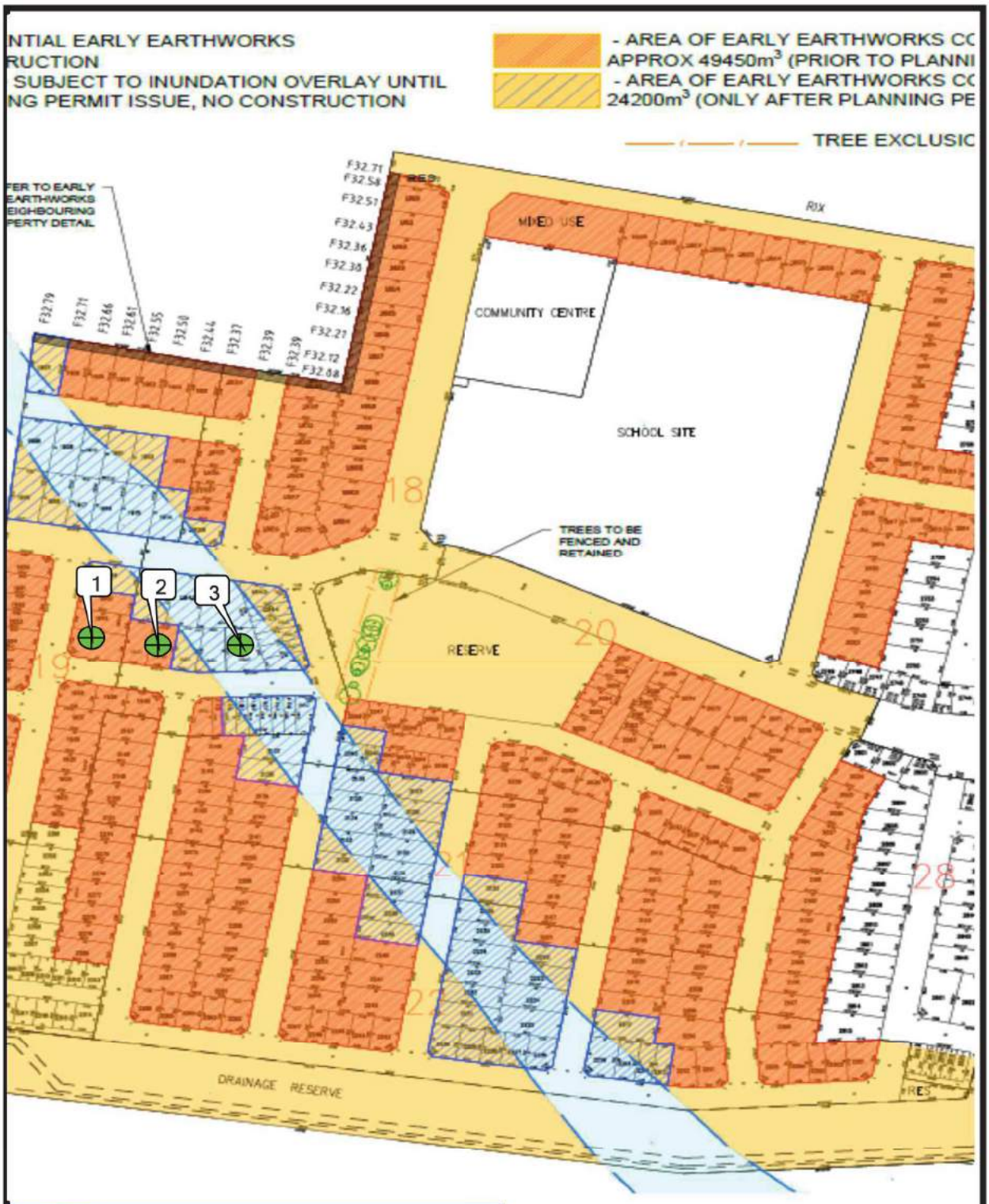
A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 18/2/2019



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CLIENT: SYMON BROS	**DATE: 13/2/19**	**JOB No.: 1891/790**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/791
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
12/02/19	1	***Refer to #1891/792 for approx. test site locations.***	1.99	19.5	96.5	2.06	17.0	175	2.5 Wetter	114.0	0	0	400
12/02/19	2		2.05	15.5	99.5	2.06	15.0	175	0.5 Wetter	104.5	0	0	400
12/02/19	3		2.05	13.0	101.0	2.03	14.5	175	1.0 Drier	92.0	0	0	200
12/02/19	4		2.05	12.0	102.5	2.00	15.0	175	3.0 Drier	79.0	0	0	200
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 7.58am Finish Time: 8.14am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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)

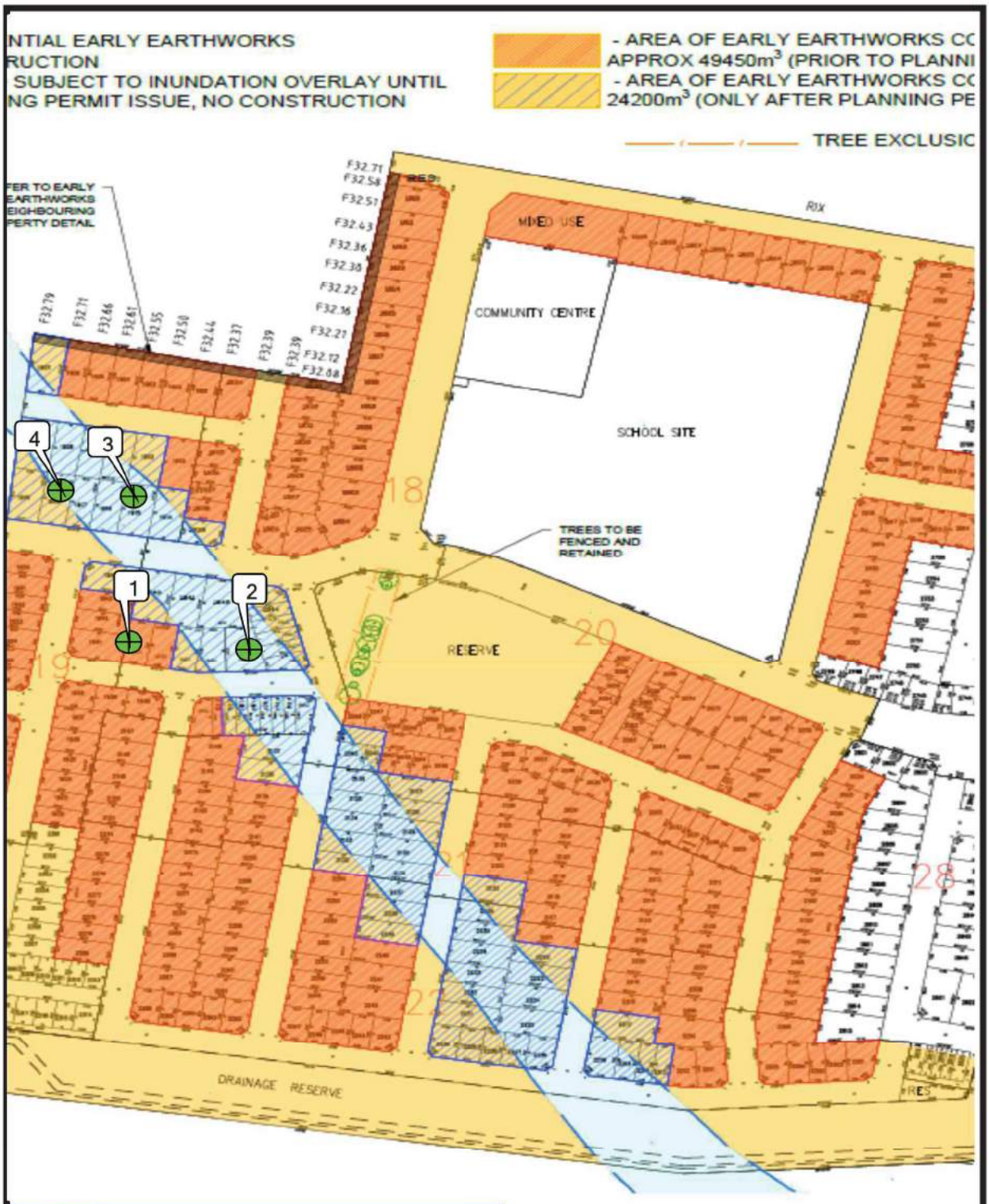
NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 18/2/2019



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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: 12/2/19**	**JOB No.: 1891/792**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: RW**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/793
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
14/02/19	1	***Refer to #1891/794 for approx. test site locations.***	2.05	20.5	100.0	2.05	18.5	175	2.0 Wetter	111.5	0	0	0
14/02/19	2		2.08	17.5	99.5	2.10	15.0	175	2.5 Wetter	117.5	0	0	0
14/02/19	3		2.09	19.0	100.5	2.07	17.5	175	1.5 Wetter	108.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 9.00am Finish Time: 9.25am

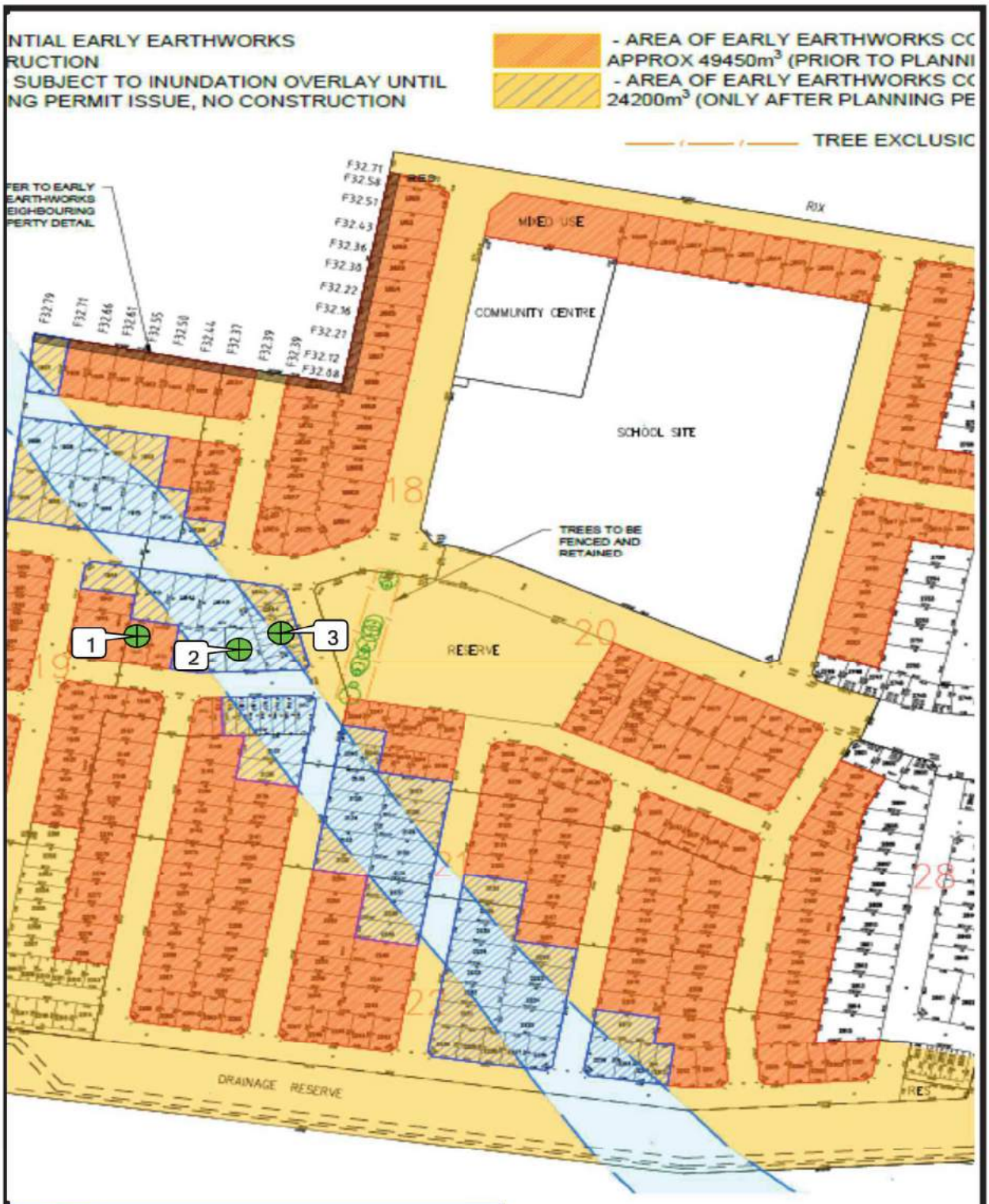
A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 19/2/2019



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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: 14/2/19**	**JOB No.: 1891/794**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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

DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/795
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
15/02/19	1	***Refer to #1891/796 for approx. test site locations.***	2.01	21.0	97.0	2.06	19.0	175	2.0 Wetter	111.5	0	0	0
15/02/19	2		2.05	21.5	99.5	2.06	19.0	175	2.5 Wetter	113.0	0	0	0
15/02/19	3		2.07	19.5	100.5	2.06	17.5	175	2.0 Wetter	111.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.
Compaction specimens sampled after compaction.
Start Time: 10.35am Finish Time: 10.55am

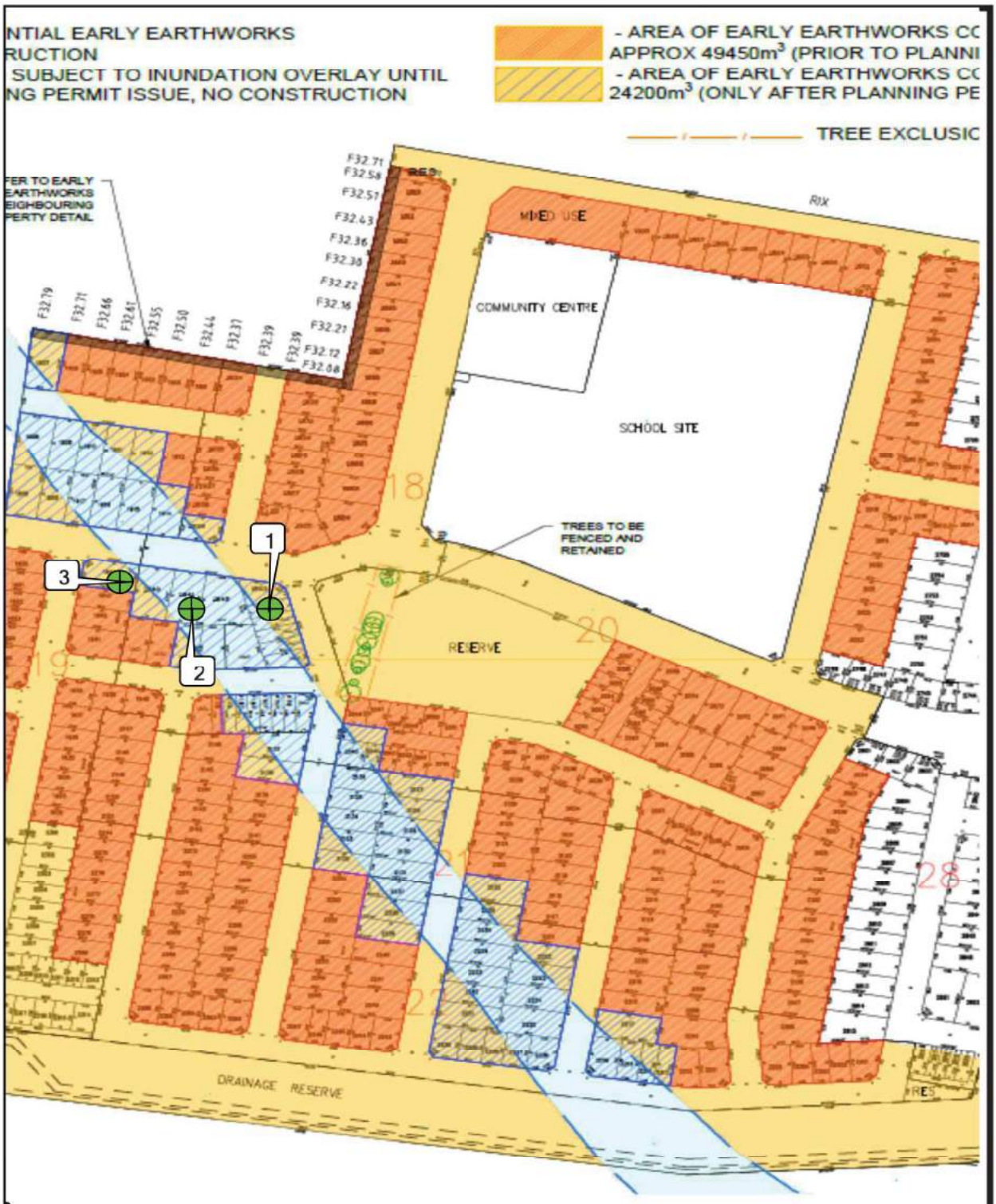
A Hilf Rapid Compaction test was carried out on a sample taken from each Field Density location to obtain the Compaction Parameters tabulated on this Report.

Moisture Content: AS 1289 2.1.1
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 20/2/2019



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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: 15/2/19**	**JOB No.: 1891/796**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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ACN 102 571 077
14 Ravenhall Way, Ravenhall, Vic 3023
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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/801
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
20/02/19	1	***Refer to #1891/802 for approx. test site locations.***	1.97	21.0	96.0	2.05	18.5	175	2.0 Wetter	111.5	0	0	200
20/02/19	2		2.07	20.0	100.5	2.06	17.5	175	2.0 Wetter	112.0	0	0	200
20/02/19	3		2.09	20.5	101.5	2.06	18.5	175	2.0 Wetter	110.5	0	0	200
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4

Compaction specimens sampled after compaction.
Start Time: 10.35am Finish Time: 10.55am

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.

Soil Layer thickness: 200mm

Moisture Content: AS 1289 2.1.1
Compaction Test: AS 1289 5.7.1

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)

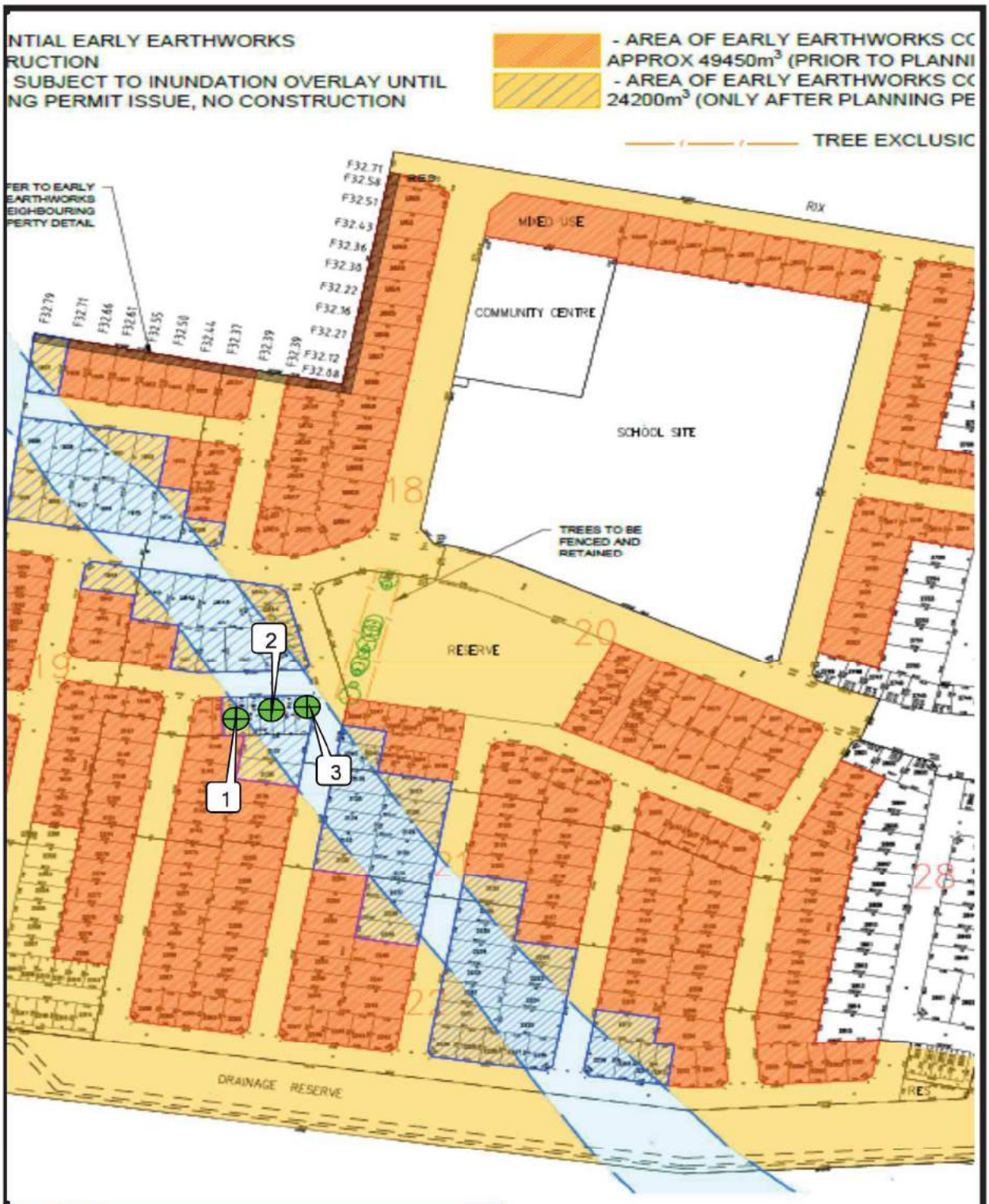
NATA ACCREDITED FOR TECHNICAL COMPETENCE

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)

Issue Date: 25/2/2019



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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: 20/2/19**	**JOB No.: 1891/802**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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.: # 1891/803
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
21/02/19	1	***Refer to #1891/804 for approx. test site locations.***	2.08	20.0	101.5	2.05	19.5	175	0.5 Wetter	103.5	0	0	0
21/02/19	2		1.97	18.5	97.0	2.03	17.5	175	0.5 Wetter	104.0	0	0	0
21/02/19	3		2.05	19.0	100.5	2.04	18.5	175	0.5 Wetter	102.5	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
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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: 1.55pm Finish Time: 2.15pm

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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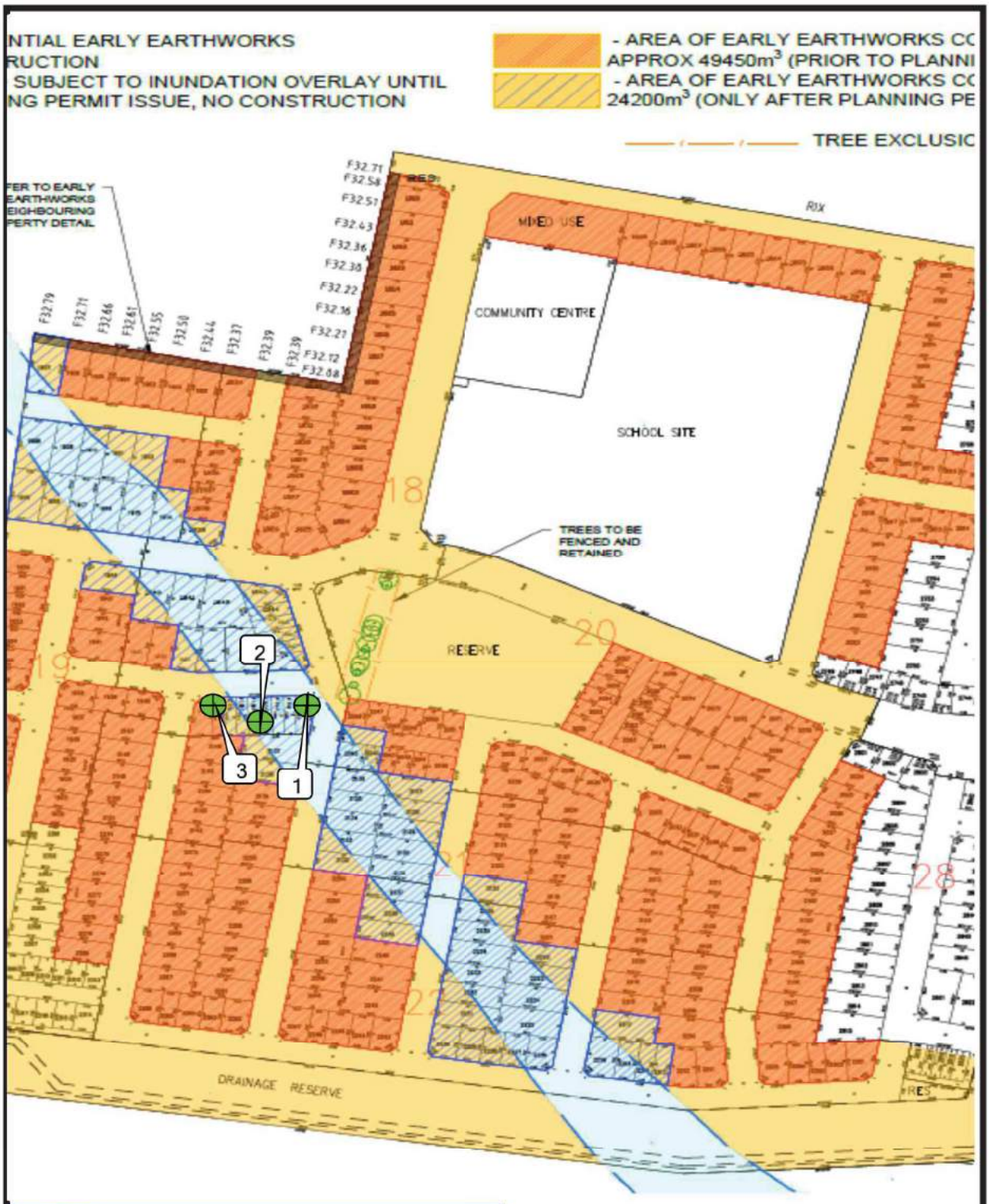
MICK CROWE
(Approved Signatory)
Issue Date: 26/2/2019



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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: 21/2/19**	**JOB No.: 1891/804**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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14 Ravenhall Way, Ravenhall, Vic 3023
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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/811
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
28/02/19	1	***Refer to #1891/812 for approx. test site locations.***	1.91	21.0	95.0	2.01	20.0	175	1.0 Wetter	106.0	0	0	400
28/02/19	2		2.02	17.5	98.0	2.06	17.5	175	0.0 Drier	100.0	0	0	400
28/02/19	3		2.06	18.5	99.5	2.07	17.0	175	1.5 Wetter	108.5	0	0	800
28/02/19	4		2.00	23.0	97.5	2.05	22.0	175	1.0 Wetter	104.5	0	0	400
28/02/19	5		2.04	15.5	97.0	2.10	15.0	175	0.5 Wetter	104.5	0	0	200
28/02/19	6		2.12	17.5	102.0	2.08	17.5	175	0.0 Wetter	101.5	0	0	200

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 11.45am 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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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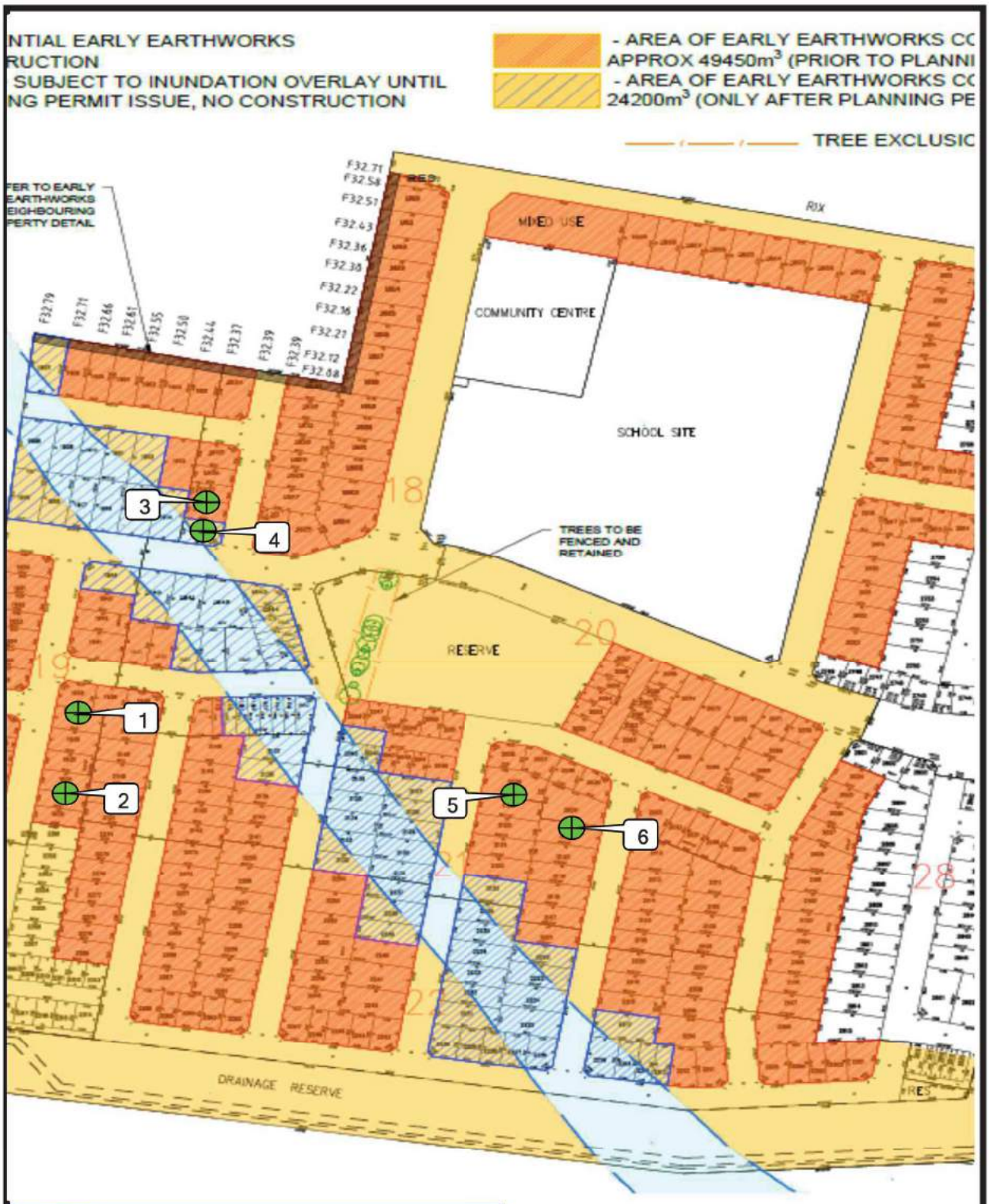
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 5/3/2019



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CLIENT: SYMON BROS	**DATE: 28/2/19**	**JOB No.: 1891/812**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/841
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
22/03/19	1	***Refer to #1891/842 for approx. test site locations.***	2.06	18.0	104.5	1.97	19.5	175	2.0 Drier	90.5	0	0	0
22/03/19	2		1.96	26.0	100.5	1.94	25.5	175	1.0 Wetter	103.0	0	0	0
22/03/19	3		1.96	20.0	99.5	1.97	20.5	175	0.0 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: 11.15am Finish Time: 11.35am

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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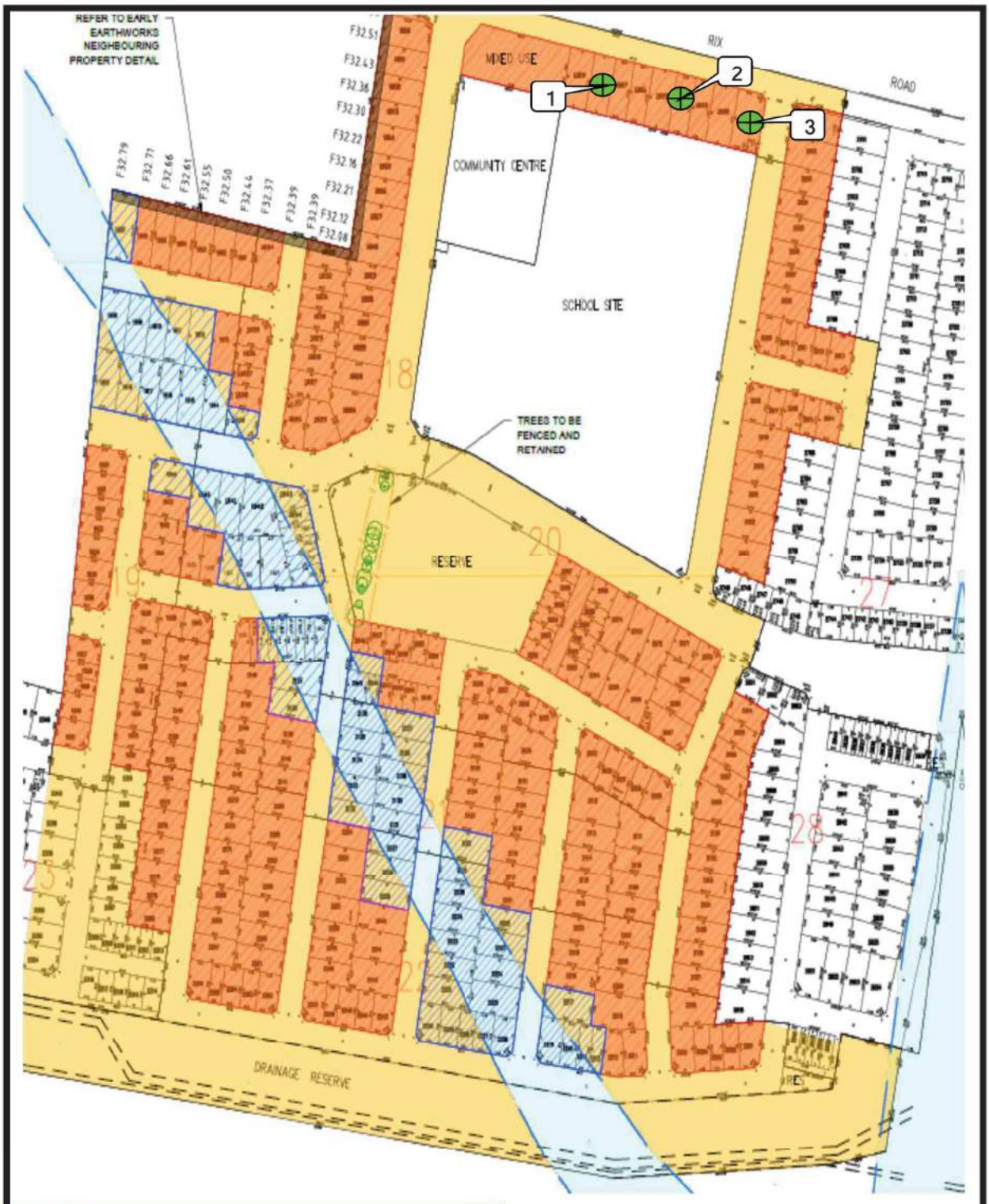
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 27/3/2019



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CLIENT: SYMON BROS	**DATE: 22/3/19**	**JOB No.: 1891/842**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/843
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
25/03/19	1	***Refer to #1891/844 for approx. test site locations.***	2.11	13.0	106.5	1.97	16.5	175	4.0 Drier	77.0	0	0	200
25/03/19	2		2.07	12.5	104.0	1.99	16.0	175	3.5 Drier	77.5	0	0	200
25/03/19	3		1.97	15.0	101.5	1.94	19.0	175	4.0 Drier	79.5	0	0	200
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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: 8.15am Finish Time: 8.35am

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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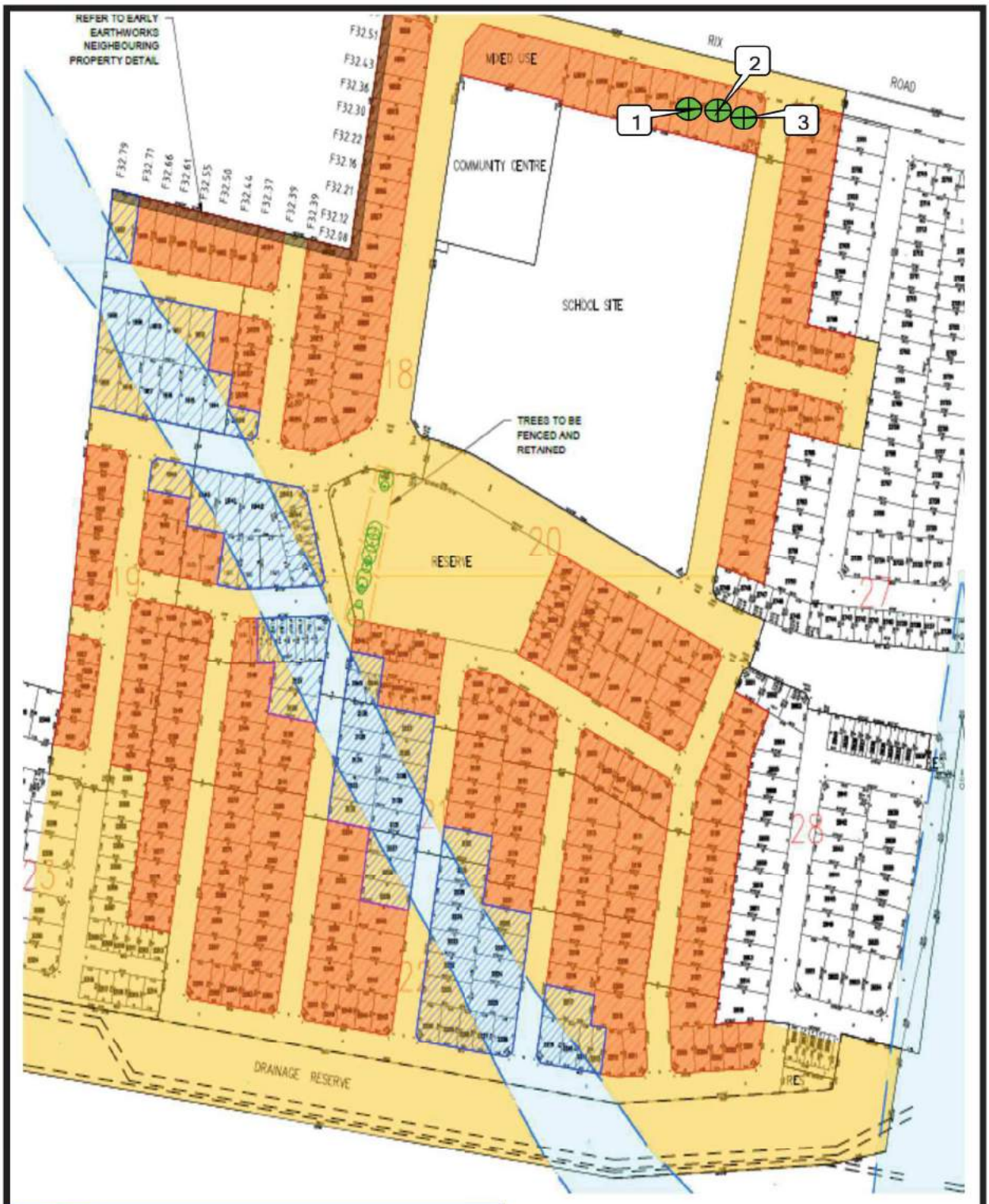
MICK CROWE
(Approved Signatory)
Issue Date: 1/4/2019



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CLIENT: SYMON BROS	**DATE: 25/3/19**	**JOB No.: 1891/844**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/847
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
27/03/19	1	***Refer to #1891/848 for approx. test site locations.***	1.99	27.0	102.5	1.94	27.0	175	0.5 Wetter	101.0	0	0	0
27/03/19	2		2.02	17.5	102.0	1.98	20.5	175	3.0 Drier	86.0	0	0	0
27/03/19	3		2.06	19.0	100.5	2.06	18.5	175	0.0 Wetter	101.5	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
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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: 9.35am Finish Time: 9.55am

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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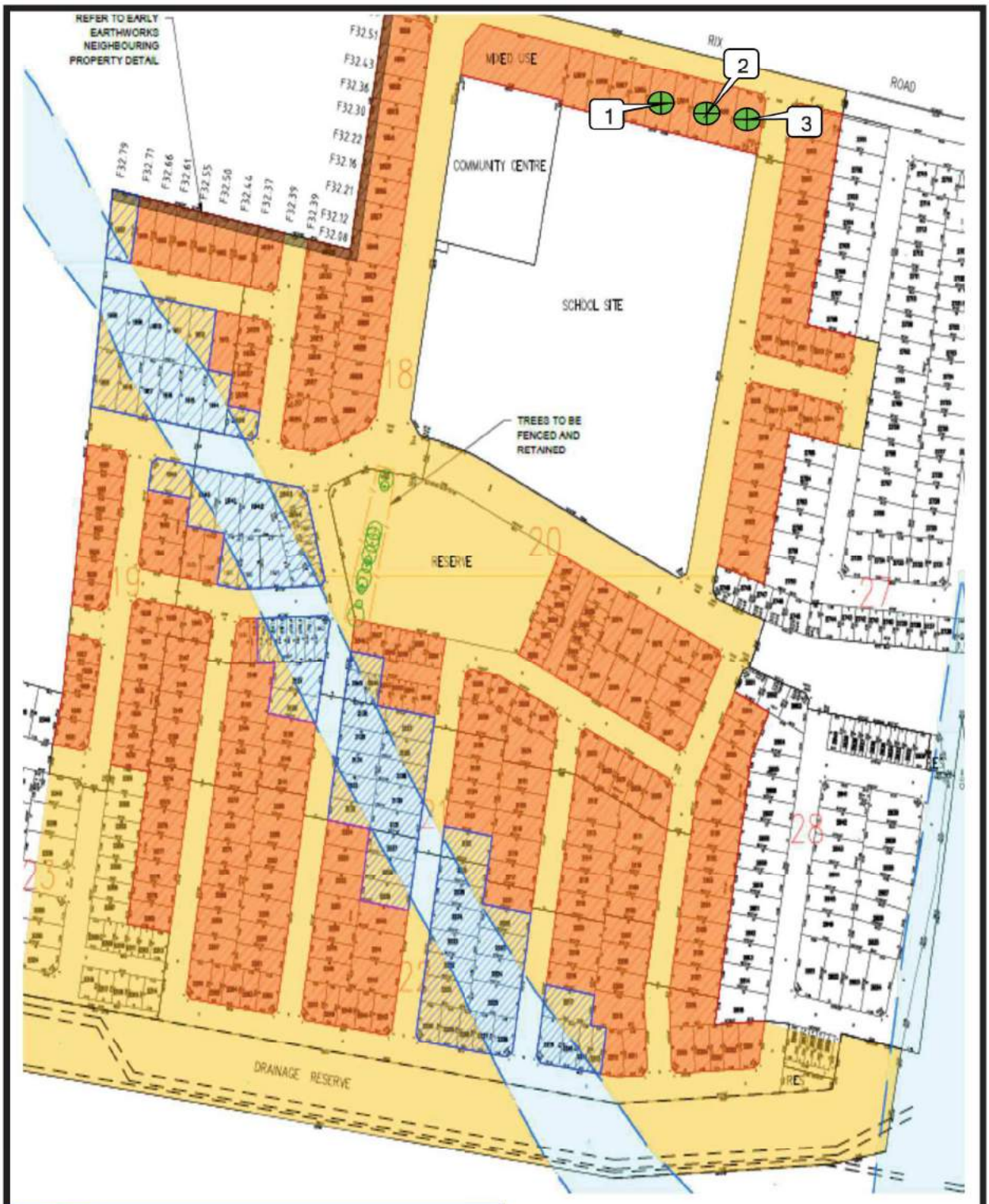
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 2/4/2019



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CLIENT: SYMON BROS	**DATE: 27/3/19**	**JOB No.: 1891/848**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/849
LOCATION: SYMON BROS - Arcadia Neighbourhood 3

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
28/03/19	1	***Refer to #1891/850 for approx. test site locations.***	2.06	17.0	104.5	1.97	19.5	175	2.5 Drier	88.0	0	0	0
28/03/19	2		2.08	22.0	105.5	1.97	22.5	175	0.5 Drier	97.0	0	0	0
28/03/19	3		1.98	24.0	102.5	1.94	24.5	175	0.5 Drier	97.0	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

NOTES: Clayey Fill Ex. Onsite
Test sites located - Geolab Procedure 4, Part 4.4.

Compaction specimens sampled after compaction.
Start Time: 2.00pm Finish Time: 2.30pm

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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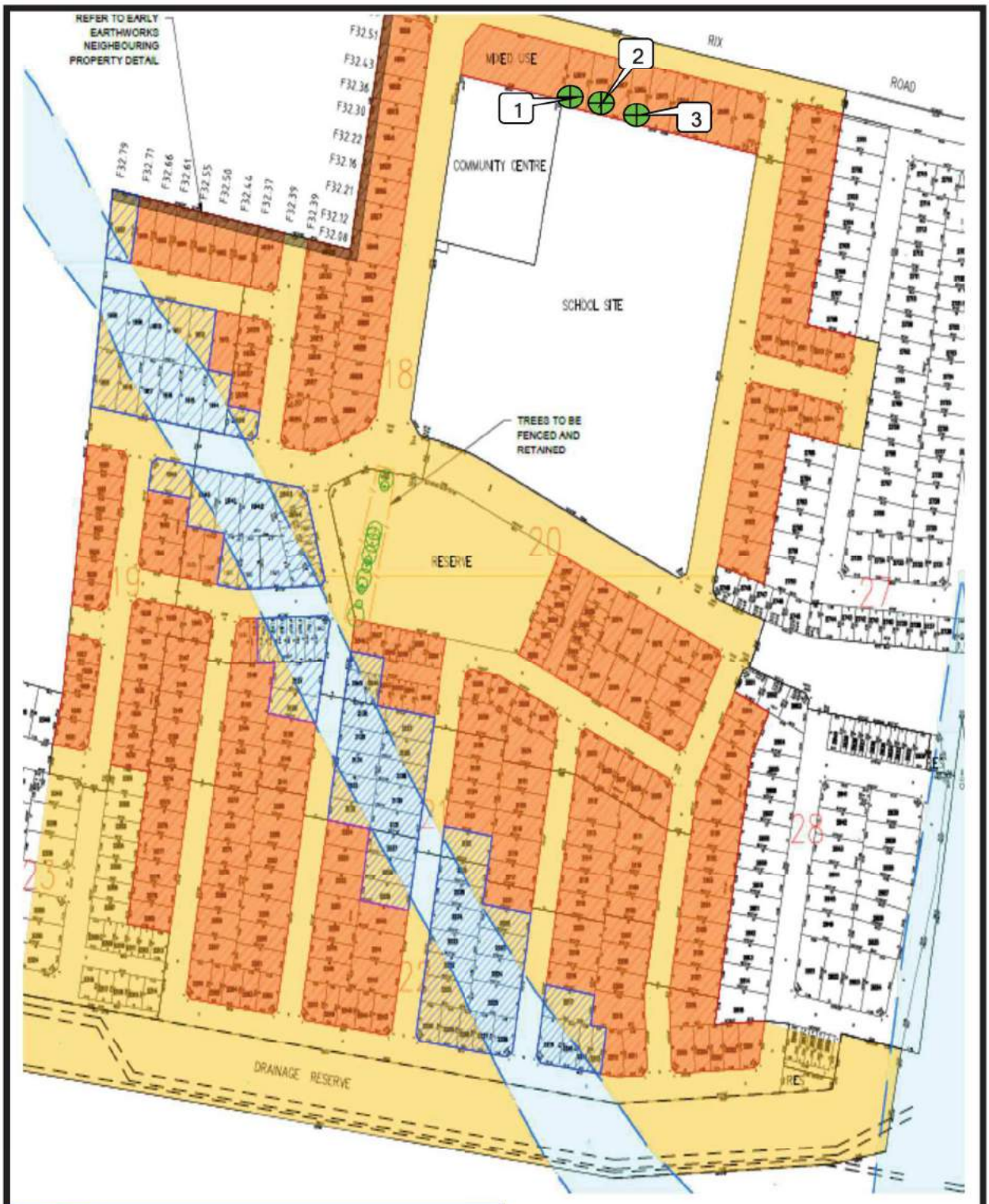
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 2/4/2019



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CLIENT: SYMON BROS	**DATE: 28/3/19**	**JOB No.: 1891/850**
LOCATION: Arcadia Neighbourhood 3	**OPERATOR: MV**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**

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DAILY SUMMARY - FIELD DENSITY TESTS

REPORT NO.: # 1891/906
LOCATION: SYMON BROS - Arcadia Stage 18

DATE OF TESTS	TEST NUM.	TEST LOCATION	FIELD WET DENSITY (t/m³)	FIELD MOISTURE CONTENT (%)	HILF DENSITY RATIO STANDARD (%)	STANDARD PCWD OR APCWD (t/m³)	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)
1/08/19	1	***Refer to #1891/907 for approx. test site locations.***	1.93	18.0	95.0	2.04	17.0	175	0.5 Wetter	104.0	0	0	1000
1/08/19	2		1.97	20.5	97.0	2.03	19.0	175	1.5 Wetter	107.5	0	0	500
1/08/19	3		1.94	18.0	95.5	2.03	17.5	175	0.5 Wetter	102.5	0	0	0
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-
-	-		-	-	-	-	-	-	-	-	-	-	-

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
Soil Layer thickness: 200mm
Compaction Test: AS 1289 5.7.1
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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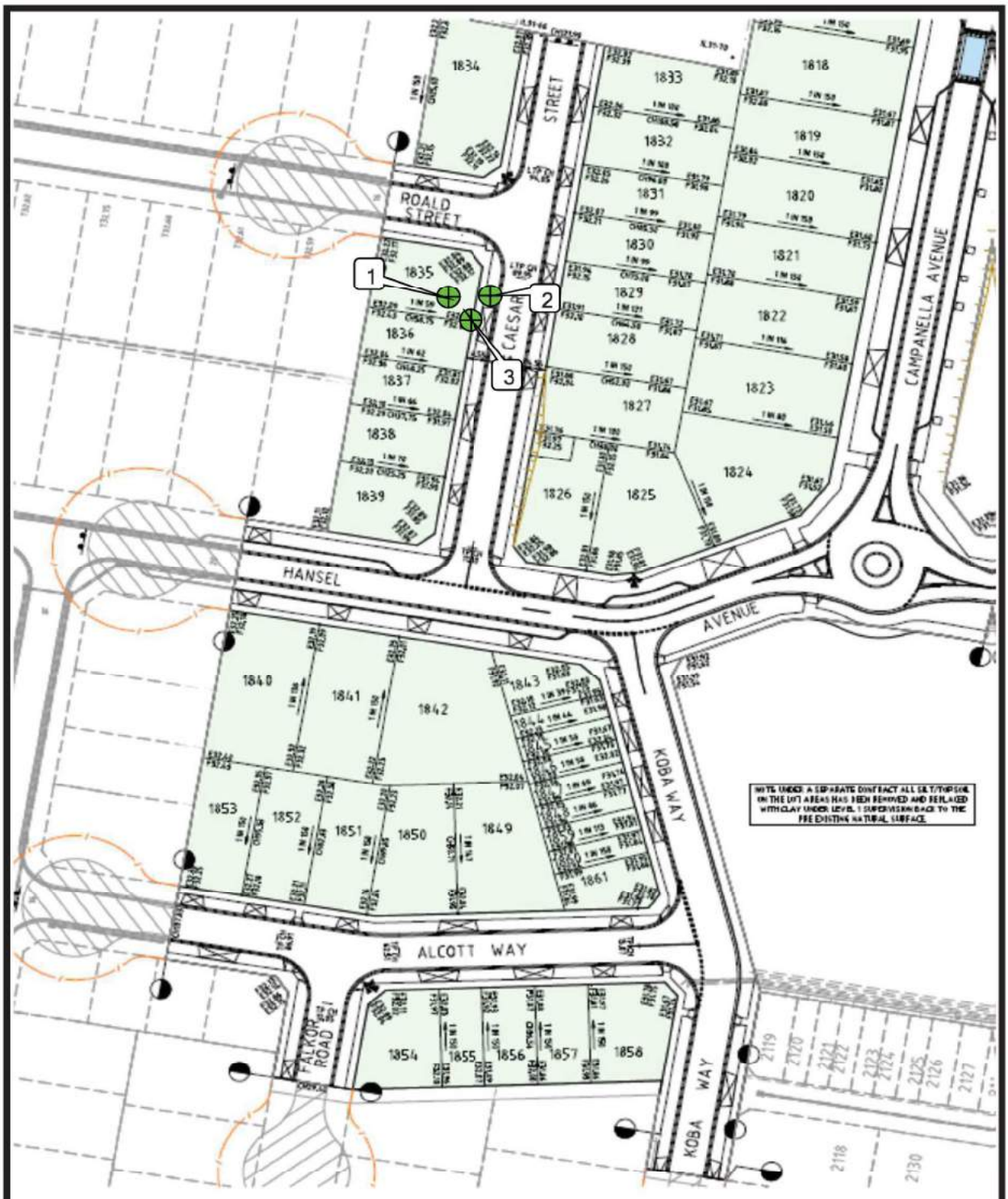
NATA Accredited Laboratory Number 14561

MICK CROWE
(Approved Signatory)
Issue Date: 5/8/2019



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CLIENT: SYMON BROS	**DATE: 1/8/19**	**JOB No.: 1891/907**
LOCATION: Arcadia Stage 18	**OPERATOR: TM**	**CHECKED: EG**
Sketch indicating approx. compaction test locations	**SCALE: NTS**	**FIGURE No: -**