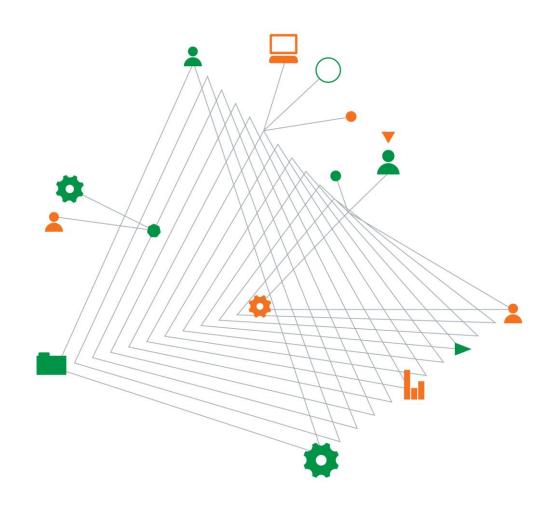


Peet No. 1895 Pty Ltd

Level 1 Inspection and Testing, Stage 4 – Civil works 7 & 8, Little Green Residential Precinct 1

GEOTABTF09878AA-AI

24 March 2017



Experience comes to life when it is powered by expertise

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Level 1 Inspection and Testing, Stage 4 - Civil works 7 & 8, Little **Green Residential Precinct 1**

Prepared for

Peet No. 1895 Pty Ltd

Prepared by

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24 March 2017

Document authorisation

Our ref: GEOTABTF09878AA-AI

For and on behalf of Coffey

Trevor Smith

Principal Engineering Geologist

JW Smigh

Quality information

Revision history

Revision	Description	Date	Author	Reviewer	Signatory
0	Level 1 Report	24/03/17	Shaun Price	Trevor Smith	Trevor Smith

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Report Status	No. of copies	Format	Distributed to	Date
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Appendix C - Summary of imported fill material

1. Introduction

This report presents the results of the Level 1 Inspection and Testing for fill placement within Stage 4 - Civil works 7 & 8 and retaining wall of Little Green Residential Estate, Tarneit, undertaken by Coffey Services Australia Pty Ltd (Coffey).

The works were commissioned by Mark Zammataro of Spiire Australia Pty Ltd.

The Project was commenced on behalf of Amex Corporation Pty Ltd. On 1 March 2015 ownership transferred to Peet No 1895 Pty Ltd, the change in ownership had no significant influence on level 1 activities.

2. Project Summary

Level 1 Inspection and Testing, as defined in AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development," provides for full time inspection of the construction of controlled fill and field and laboratory testing in accordance with AS1289 "Methods of Testing Soils for Engineering Purposes".

The Level 1 Inspection was undertaken by geotechnical professionals from Coffey during the following dates listed in table 1. Testing was undertaken during this period in accordance with the required frequency.

Table 1: Dates of Level 1 supervision

Month	Dates
November 2015	24, 25 ,26 and 30
December 2015	1, 2, 3, 4, 8, 9, 10, 11, 14, 15, 16, 17, 18, 21 and 22
January 2015	4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 18, 19, 20, 21, 22 and 27
February 2015	2, 3, 4, 5, 9, 10, 11, 12,15, 16, 17, 18, 19, 22, 23, 24, 25, 26 and 29
March 2016	1, 2, 3, 4, 7, 8, 9, 15, 16, 17, 21, 22 and 23
July 2016	20, 21, 26, 27 and 28
August 2016	16, 17, 18, 23, 24, 25, 26, 29, 30 and 31
September 2016	1, 6, 8, 20, 22, 23, 24 and 26
October 2016	12, 13, 14, 18 and 21

The main contractor for the project was BMD Constructions who have conducted the bulk earthworks at the site. Coffey and Terra Firma have undertaken the compaction control testing in their NATA accredited laboratories, as part of the Level 1 Inspection and Testing process.

This report is applicable to fill placed by BMD within Stage 4 - civil works 7 & 8 and the retaining wall of the Little Green Estate development in the areas shown in Figure 1. Figure 1 also identifies the filling areas of the engineered fill platforms.

This report does not include fill other than where mentioned in this report or any other fill that may be placed during this period or subsequent periods at or surrounding the subject site. Excluded works comprise trench backfill, foot paths, landscaping fill, placement of topsoil, roadway testing, sewer and stormwater channels backfills.

3. Specification/work instructions

The specification for the project was prepared by Spiire Australia Pty Ltd for Little Green Residential Estate Precinct 1 under reference number "301119 Little Green Bulk Earthworks – Rev B" dated 20 February 2015. A maximum compacted layer thickness of 200 mm was to be followed for the project. However from 2 June, after discussions between Coffey, BMD and Spiire on 22 May 2015, a maximum compacted layer thickness of 300 mm was allowed. A testing depth of 275mm was adopted to provide results for the full layer thickness. The extract of the specified requirements is provided in Appendix B and a short summary is provided below:

- All filling shall be to a level 150 mm below the finished surface level shown and compacted as per AS3798-1998. Filling material is to be in accordance with the specification and to the satisfaction of council and the superintendent.
- Filling material is to be in accordance with the specification of AS3798-2007 and to the satisfaction of council and the superintendent.
- All filling on lots and within road reserves greater than 200mm is to be undertaken using level 1 supervision and completed in accordance with AS 3798-2007.
- Item 13 of the Specifications under reference "301119 Little Green Bulk Earthworks Rev B" dated 20 February 2015 notes that fill placed on allotment areas is to achieve the following specifications:
 - Maximum dry density of 98%;
 - o Minimum California Bearing Ratio (CBR) of 5%; and
 - Bearing pressure of 100kPa at less than 1.0m depth from finished surface level or bulk filling surface level and bearing pressure of 150kPa at greater than 1.0m depth from finished surface level or bulk surface level.

Email correspondence from Mark Zammataro of Spiire sent to Coffey and BMD 25 May 2015 indicated that the filling works were to achieve the following specifications:

- Layers not exceeding 200mm compacted thickness;
- Density ratio to be minimum 95% Standard;
- No CBR value requirement;
- Moisture variation to be within 3% of the optimum moisture condition (OMC); and
- Allowed rock size to be up to 130mm diameter, i.e. 2/3 of a layer.

Following further discussions between Mark Zammataro of Spiire and Sotir Stojcevski of Coffey, the specifications were altered to meet the following requirements:

A compacted layer thickness not exceeding 300mm;

- Maximum dry density of 95%; and
- Moisture variation to be within ±3% OMC.

4. Fill Material

Fill used for the construction of Stage 4 - civil works 7 & 8 and retaining wall comprised of imported clay from various sites around the greater Melbourne area. A spreadsheet indicating the source name and estimated volumes are attached in Appendix C. It is noted that Coffey's summary of imported fill material was derived from daily discussions held by the Level 1 GITA representative and the site foreman.

Environmental assessment of the imported materials is understood to have been conducted by BMD. A clean fill summary sheet is also attached in Appendix C as provided by BMD. The clean fill reports for the source locations are held by BMD.

Organic or deleterious matter and oversize materials that were observed within the imported fill were removed prior to placing the engineered fill platforms.

Coffey consider that the imported fill material was suitable for the construction of the engineered fill platforms.

5. Earthworks

The earthworks for this project included stripping of topsoil, proof rolling the subgrade and placement and compaction of fill to construct engineered fill platforms.

5.1. Subgrade assessment - Stage 4 - Civil Stage 7 & 8

The subgrade assessment was undertaken in Stage 4 - civil works 7 & 8 during the early stage of the works. The assessment was undertaken on 24-27 and 30 November 2015. Subgrade assessment was conducted following the removal of topsoil and before any fill was placed. In all areas the subgrade comprised natural clay of very stiff to hard consistency. No soft spots were observed during the subgrade proof rolling. Where organics and roots were observed, they were removed. And backfilled with engineered fill prior to bulk earthworks commencing. A surveyor engaged by BMD undertook a survey of the subgrade levels following Coffey's assessment.

5.2. Subgrade assessment – Stage 4 - Civil Stage 7 & 8-Retaining Wall

The subgrade assessment was undertaken in Stage 4 - civil works 7 & 8 - RE Wall at the end of the stage of the works. The assessment was undertaken on 21 February 2017. Subgrade assessment was conducted following the removal of topsoil and before any fill was placed. In all areas the subgrade comprised natural clay of very stiff to hard consistency. No soft spots were observed during the subgrade proof rolling. A surveyor engaged by BMD undertook a survey of the subgrade levels following Coffey's assessment.

5.3. Fill construction

Fill material was placed generally in loose layers varying in thickness from 200 mm to 350 mm. Compacted layers were approximately 150 mm to 300 mm thick.

All sourced fill was trucked in and spread with a bulldozer. A water cart and a pad foot roller were present onsite during works for moisture conditioning and compacting.

Coffey's Level 1 Inspector was on site on a full time basis during the placement, compaction and testing of the fill on the dates noted in Section 1 of this report. Coffey understands that BMD did not place any fill within stage 4 – civil stage 7 & 8 during this period when Coffey was absent from the site.

Where significant time gaps occurred in fill placement, the surface was scarified and watered prior to the re-commencement of fill placement.

6. Survey data and fill thickness

BMD's appointed surveyor Jac Surveyors Pty Ltd (SMS) conducted a survey of Stage 4 - civil works 7 & 8 after stripping the topsoil and after the subgrade was approved for placement of fill. The stripped surface levels and finished surface levels are provided in Appendix B of this report under reference Stage 4 Strip Surface and Stage 4 Finish Surface.

The survey shows that between 0.6m and 2.5m of fill was placed across the lots in Stage 4 - civil works 7 & 8 and the retaining wall. Coffey observed the fill being placed between 1 and 10 layers in these areas across Stage 4 - civil works 7 & 8 and the retaining wall which resulted in maximum layer thickness of 300mm. The produced layer thickness for Stage 4 - civil works 7 & 8 and the retaining wall are in compliance with the specifications of AS 3798-2007 and within the specifications outlined in section 3 of this report.

7. Testing and results

7.1 Density Testing

Field density testing was undertaken progressively on the compacted fill. Testing was undertaken under the following frequencies:

- 1 test per material type per layer per 2500 m² or 1 test per 500 m³ or 3 tests per lot whichever requires most tests in accordance with Type 1 Earthworks (large scale operations) as defined in Table 8.1 of the AS 3798-2007.
- 1 test per layer or 1 test per 200 m³ distributed reasonably evenly throughout the fill depth or 1 test per residential lot – whichever requires the most tests in accordance with Type 2 Earthworks (small scale operations) as defined in Table 8.1 of the AS 3798-2007.

The field density testing was conducted by Coffey's personnel on site. All laboratory testing was performed by Coffey and Terra Firma's NATA accredited laboratory. A Hilf rapid method compaction test (AS1289.5.7.1) was performed for each field density test.

A total of 215 field density tests were performed on stage 4 – civil stages 7 & 8 during the earthworks as presented in Figure 2. Of the 215 tests, 29 did not meet the specified criteria and these areas were

subsequently re-worked and re-tested. Test 198 and 204 occurred in an area beneath a proposed road, the area was reworked and supervised by Coffey personnel on site following the failed tests, however both samples were not re-tested as this area will be tested as part of the road construction. BMD will have an external testing company come to site at a later date to test the road.

Once retested, all test results met the specified dry density ratio criteria of 95% Standard and moisture variation of ±3% of the SOMC.

A total of 19 field density tests were performed on the retaining wall of stage 4 – civil stages 7 & 8 during the earthworks as presented in Figure 2. All of the 19 tests passed the specified criteria.

A summary of the test results obtained from the field density testing within the Stage 4 - Civil works 7 & 8 and the retaining wall are provided in a table presented as Figure 2. The laboratory test reports of the field density tests are presented in Appendix A.

8. Statement of compliance

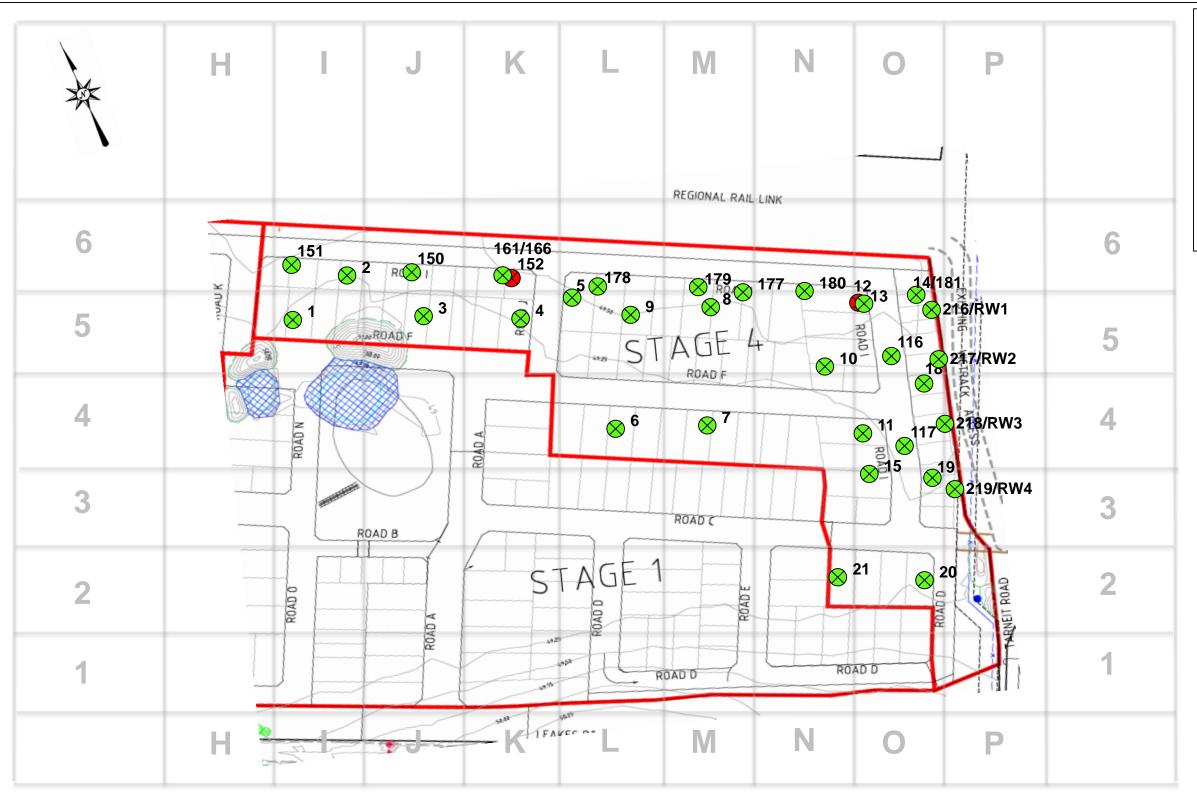
Coffey personnel have provided Level 1 Inspection and testing services during the construction of the engineered fill area within Stage 4 - Civil works 7 & 8 and the retaining wall as shown in Figure 1. A geotechnical professional from Coffey (Level 1 Inspector) was on site on a full time basis during subgrade preparation and fill placement, and observed the construction techniques adopted.

Based on observations made by Coffey's Level 1 Inspector and the results of field and laboratory tests, Coffey consider that the engineered fill area within Stage 4 - Civil works 7 & 8 and the retaining wall constructed by BMD to the levels indicated in Section 5, as far as we have been able to determine, has been placed in general accordance with the intent of the specification.

Figures

Figure 1- Field Density Test Locations

Figure 2 - Summary of Field Density Test Results





Approximate location of field density test - Layer 1 (PASSED)



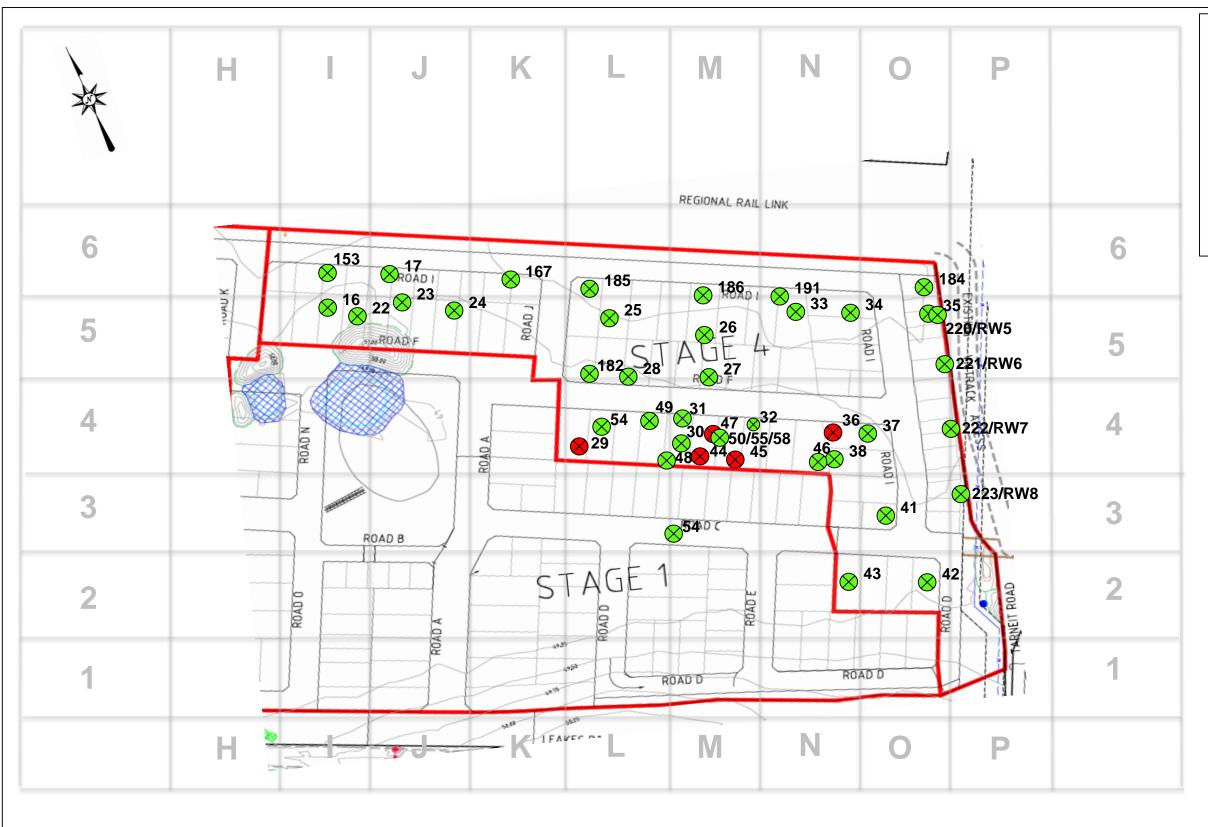
Approximate location of field density test - Layer 1 (FAILED)

Source: Extracted from 301119

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client:	Peet No. 18	95 Pty Ltd
project: LITTLE GREEN ESTATE- STAGE 4		
title:	Test locations fo	rlayer 1
project no:	GEOTABTF09878AA	figure no: Figure 1 - A





Approximate location of field density test - Layer 2 (PASSED)



Approximate location of field density test - Layer 2 (FAILED)

Source: Extracted from 301119

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approved	S.P	
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client: Peet No. 1895 Pty Ltd			
project:	LITTLE GREEN ESTA	TE- STAGE	: 4
title:	Test locations fo	r layer 2	
project no:	GEOTABTF09878AA	figure no:	Figure 1 - B





Approximate location of field density test - Layer 3 (PASSED)



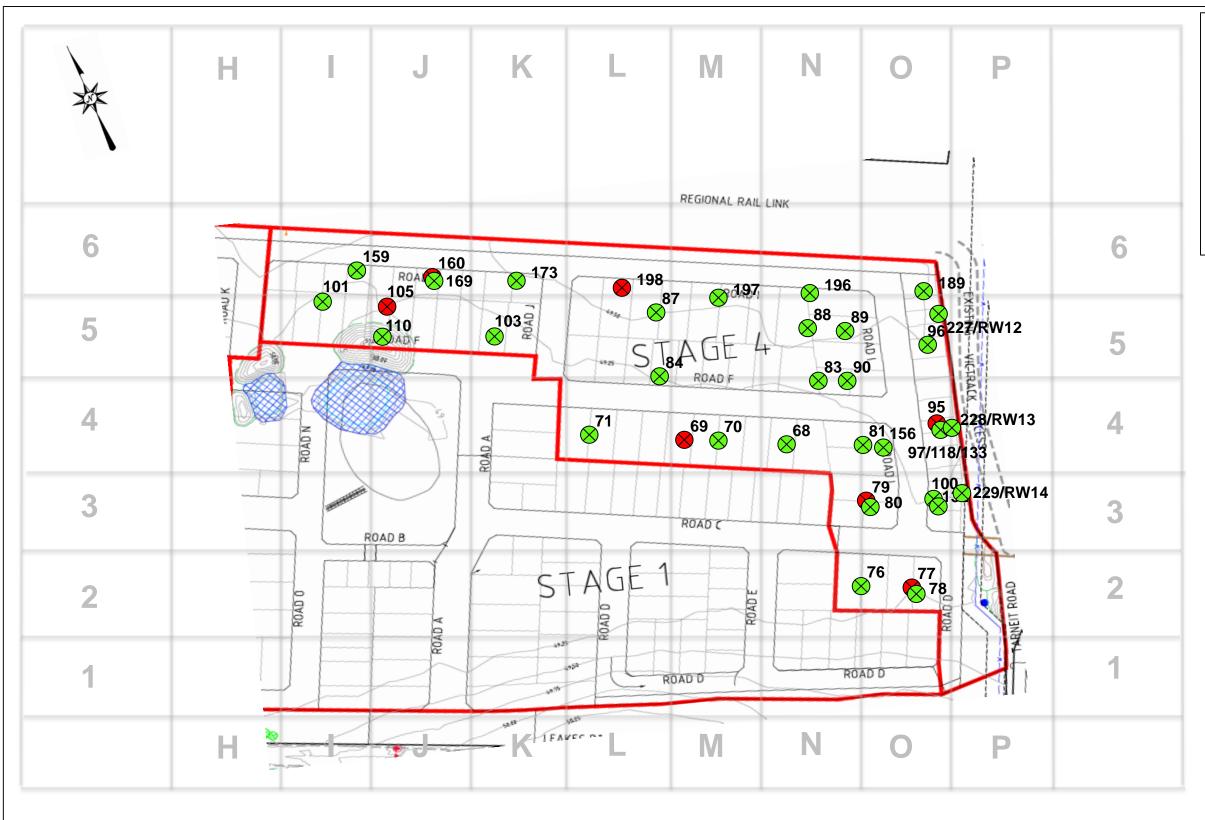
Approximate location of field density test - Layer 3 (FAILED)

Source: Extracted from 301119

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	client:	Peet No. 189	95 Pty Ltd
	project:	oject: LITTLE GREEN ESTATE- STAGE 4	
title: Test locations for layer 3		r layer 3	
	project no:	GEOTABTF09878AA	figure no: Figure 1 - C





Approximate location of field density test - Layer 4 (PASSED)



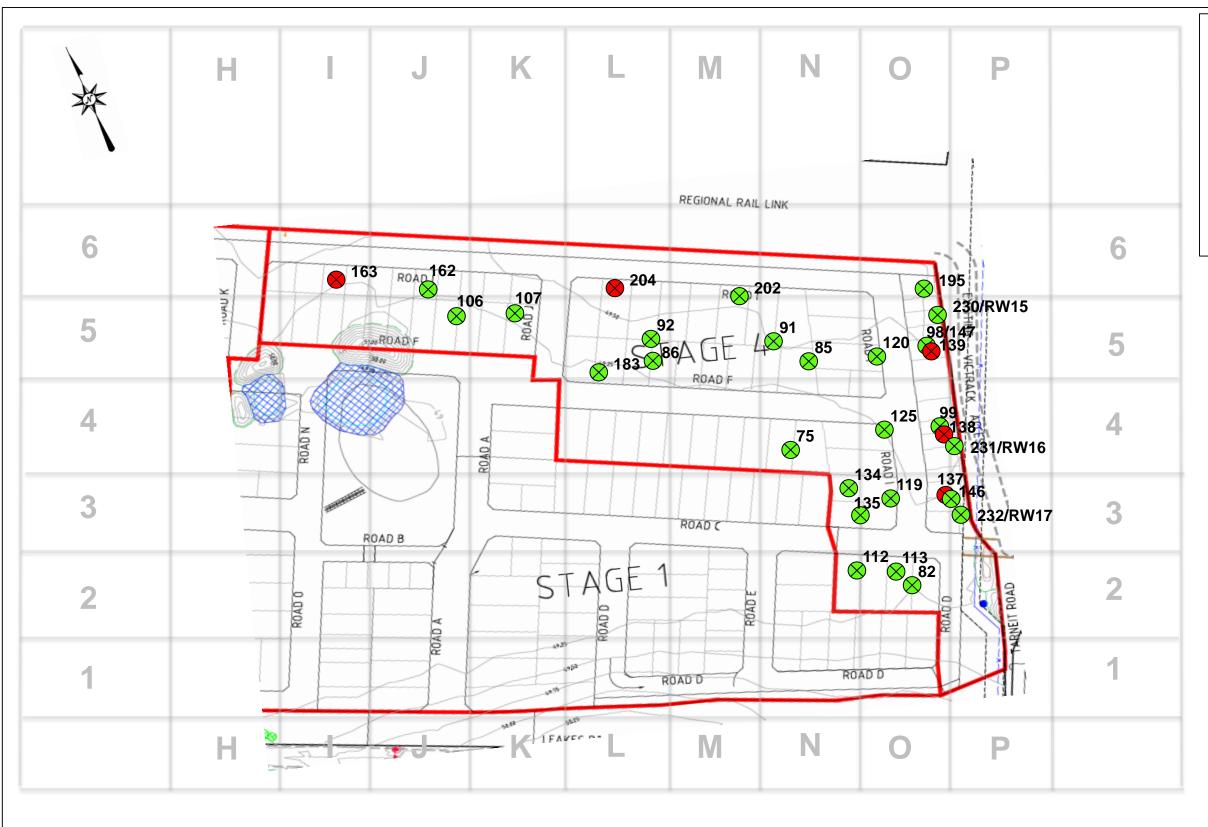
Approximate location of field density test - Layer 4 (FAILED)

Source: Extracted from 301119

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date	18/11/2016	
scale	NTS	A
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client: Peet No. 1895 Pty Ltd		
project:	oject: LITTLE GREEN ESTATE- STAGE 4	
title:	Test locations for layer 4	
project no:	GEOTABTF09878AA	figure no: Figure 1 - D





Approximate location of field density test - Layer 5 (PASSED)



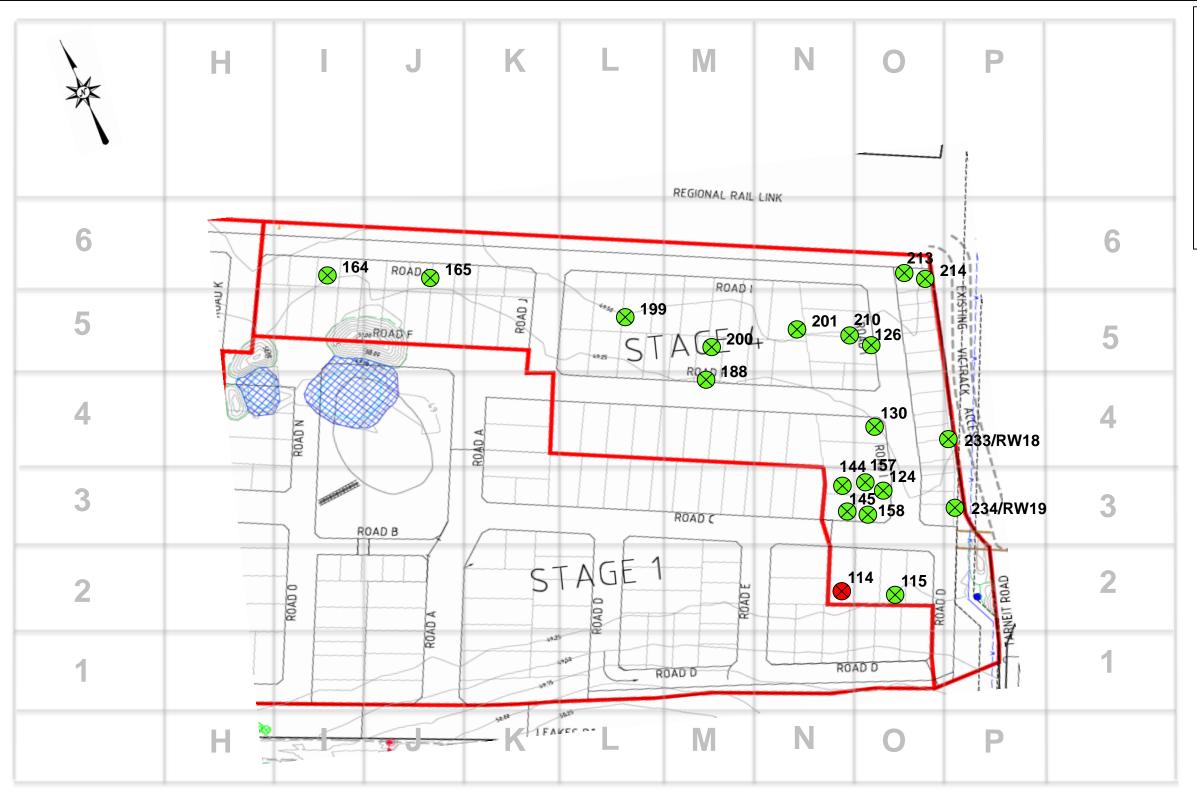
Approximate location of field density test - Layer 5 (FAILED)

Source: Extracted from 301119

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client:	Peet No. 1895 Pty Ltd		
project:	LITTLE GREEN ESTATE- STAGE 4		
title: Test locations for layer 5			
project no:	GEOTABTF09878AA	figure no:	Figure 1 - E





Approximate location of field density test - Layer 6 (PASSED)



Approximate location of field density test - Layer 6 (FAILED)

Source: Extracted from 301119

drawn	W.H	
 approved	S.P	
date	18/11/2016	
scale	NTS	
original size	А3	



client:	client: Peet No. 1895 Pty Ltd		
project:	LITTLE GREEN ESTA	TE- STAGE	: 4
title:	Test locations fo	or layer 6	
project no:	GEOTABTF09878AA	figure no:	Figure 1 - F





Approximate location of field density test - Layer 7 (PASSED)



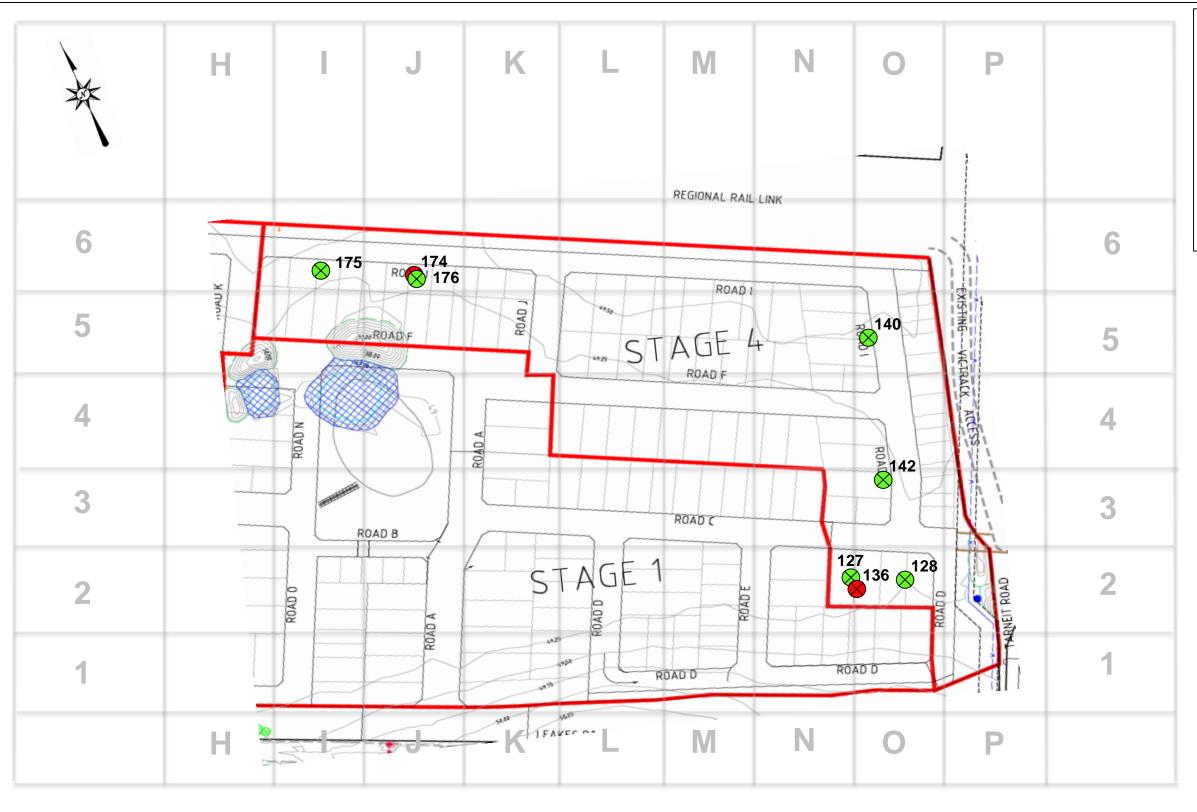
Approximate location of field density test - Layer 7 (FAILED)

Source: Extracted from 301119

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approved	S.P	
date	18/11/2016	
scale	NTS	A
original size	А3	

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client: Peet No. 1895 Pty Ltd			
project:	LITTLE GREEN ESTATE- STAGE 4		
title:	Test locations for layer 7		
project no:	GEOTABTF09878AA	figure no:	Figure 1 - G





Approximate location of field density test - Layer 8 (PASSED)



Approximate location of field density test - Layer 8 (FAILED)

Source: Extracted from 301119

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title:	Test locations fo	r layer 8										
project no:	GEOTABTF09878AA	figure no:	Figure 1 - H									





Approximate location of field density test - Layer 9 (PASSED)



Approximate location of field density test - Layer 9 (FAILED)

Source: Extracted from 301119

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original size	А3

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client:	Peet No. 18	95 Pty Ltd
project:	LITTLE GREEN ESTA	TE- STAGE 4
title:	Test locations fo	rlayer 9
project no:	GEOTABTF09878AA	figure no: Figure 1 - I





Approximate location of field density test - Layer 10 (PASSED)



Approximate location of field density test - Layer 10 (FAILED)

Source: Extracted from 301119

drawn	W.H
approved	S.P
date	18/11/2016
scale	NTS
original size	А3

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client: Peet No. 1895 Pty Ltd										
project: LITTLE GREEN ESTATE- STAGE 4										
	title: Test locations for layer 10									
	project no:	GEOTABTF09878AA	figure no:	Figure 1 - J						

Project:		Little Green Estate			Coffey Jol	b #:	GEOTABT	F09878AA			Specifica	ition: 95% Hilf Density Ratio
Client:		SPIIRE/AMEX			Period:		July 2015	Current				±3% of OMC
		_								-		
Test	Retest	Day	Area	Layer	Field	Field	Hilf	Moisture	Moisture	Pass	Retest	Comment
	of Test	/	Grid		Wet	Moisture	Density	Ratio	Variation	//		(source)
		Date			Density	Content	Ratio	0/	of OMC	Fail		
#	#			#	t/m3	%	%	%	%		#	
1		Wednesday, 2 December 2015	15 (Mid)	1	1.99	22.0	101.5	90.5	2.0 dry	Pass		Ravenhall Prison
2		Wednesday, 2 December 2015	16 (SE)	1	1.98	20.0	102.5	88.5	2.5 dry	Pass		Ravenhall Prison
3		Thursday, 3 December 2015	J5	1	2.05	18.5	103.5	99.0	0.0 OMC	Pass		South Yarra & St Albans
4		Friday, 4 December 2015	K5 (N)	1	2.12	14.0	100.5	96.0	0.5 dry	Pass		South Yarra & Ravenhall Prison
5		Friday, 4 December 2015	L5 (NW)	1	1.91	14.0	97.5	87.0	2.0 dry	Pass		South Yarra & Ravenhall Prison
6		Thursday, 10 December 2015	L4	1	1.90	20.0	95.5	89.5	2.0 dry	Pass		Werribee Plaza, Coburg & St Albans
7		Thursday, 10 December 2015	M4	1	2.01	18.5	97.0	100.0	0.0 OMC	Pass		Werribee Plaza, Coburg & St Albans
8		Thursday, 10 December 2015	M5 (N)	1	2.11	18.5	107.0	90.0	2.0 dry	Pass		Werribee Plaza, Coburg & St Albans
9		Thursday, 10 December 2015	L5	1	2.06	14.5	99.0	85.5	2.5 dry	Pass		Werribee Plaza, Coburg & St Albans
10		Thursday, 17 December 2015	N5 (S)	1	2.06	14.5	99.0	85.5	2.5 dry	Pass		Ravenhall Prison & St Albans
11		Thursday, 17 December 2015	O4 (SW)	1	1.98	20.0	98.5	89.0	2.5 dry	Pass		South Melbourne & South Yarra
12		Thursday, 17 December 2015	O5 (NW)	1	1.89	8.5	89.0	77.5	2.5 dry	Fail	13	South Melbourne & South Yarra
13	12	Friday, 18 December 2015	05 (NW)	1	2.08	13.5	99.0	87.5	2.0 dry	Pass		South Melbourne & South Yarra
14		Friday, 18 December 2015	O5 (NE)	1	1.93	18.5	95.0	97.5	0.5 dry	Pass		South Melbourne & South Yarra
15		Friday, 18 December 2015	O3 (NW)	1	2.04	13.5	97.5	86.5	2.0 dry	Pass		South Melbourne & South Yarra
16		Tuesday, 22 December 2015	15 (N)	2	1.90	20.0	95.0	98.0	0.5 dry	Pass		
17		Tuesday, 22 December 2015	J6 (SW)	2	1.96	17.5	99.5	87.5	2.5 dry	Pass		
18		Tuesday, 22 December 2015	O4 (NE)	1	2.09	10.5	96.0	87.5	1.5 dry	Pass		
19		Tuesday, 22 December 2015	O3 (NE)	1	1.98	22.0	97.0	100.5	0.0 OMC	Pass		
20		Friday, 8 January 2016	O2 (E)	1	2.20	13.0	104.0	95.0	0.5 dry	Pass		
21		Friday, 8 January 2016	N2 (E)	1	1.96	15.5	95.0	97.5	0.5 dry	Pass		
22		Monday, 11 January 2016	15	2	1.99	16.0	98.5	102.5	0.5 wet	Pass		South Melbourne
23		Monday, 11 January 2016	J5	2	2.09	19.5	101.0	100.5	0.0 OMC	Pass		South Melbourne
24		Wednesday, 13 January 2016	J5 (E)	2	1.87	28.5	97.5	106.5	1.5 wet	Pass		South Melbourne
25		Thursday, 14 January 2016	L5	2	2.12	14.5	103.0	86.0	2.0 dry	Pass		
26		Thursday, 14 January 2016	M5	2	2.10	14.5	101.0	85.0	2.5 dry	Pass		
27		Friday, 15 January 2016	M5 (S)	2	1.98	21.0	102.5	87.0	3.0 dry	Pass		Ravenhall Prison
28		Friday, 15 January 2016	L5 (S)	2	2.04	16.0	97.0	98.0	0.5 dry	Pass		Ravenhall Prison
29		Monday, 18 January 2016	L4 (W)	2	1.97	20.0	104.5	80.0	4.5 dry	Fail	54	Ravenhall Prison
30		Monday, 18 January 2016	M4 (W)	2	1.99	23.0	105.5	90.0	2.5 dry	Pass		Ravenhall Prison
31		Tuesday, 19 January 2016	M4 (W)	2	2.03	16.0	106.5	85.0	3.0 dry	Pass		Ravenhall Prison
32		Tuesday, 19 January 2016	M4 (E)	2	2.01	16.5	102.5	84.0	3.0 dry	Pass		Ravenhall Prison
33		Wednesday, 20 January 2016	N5	2	1.87	26.5	97.0	100.5	0.0 OMC	Pass		South Yarra and South Melbourne
34		Wednesday, 20 January 2016	N5 (E)	2	2.11	17.0	101.0	90.0	2.0 dry	Pass		South Yarra and South Melbourne
35		Wednesday, 20 January 2016	05	2	2.07	8.0	97.5	73.5	3.0 dy	Pass		South Melbourne & South Yarra
36		Thursday, 21 January 2016	N4	2	1.92	19.5	101.0	80.5	4.5 dry	Fail	38	Ravenhall Prison
37		Thursday, 21 January 2016	04	2	1.98	19.5	108.0	86.0	3.0 dy	Pass	- 30	Ravenhall Prison
38	36	Friday, 22 January 2016	N4	2	1.97	19.0	96.0	99.0	0.0 OMC	Pass		Ravenhall Prison
30	30	i iluay, 22 January 2010	1144		1.57	15.0	50.0	33.0	J.U GIVIC	F 033		Naverman i 113011

39		Wednesday, 27 January 2016	I (W)	3	2.00	16.5	98.0	89.0	2.0 dry	Pass		St. Albans
40		Wednesday, 27 January 2016	1	3	2.02	23.0	99.5	93.5	1.5 dry	Pass		St. Albans
41		Wednesday, 3 February 2016	O2 (W)	2	2.08	25.0	104.0	30.0	3.0 wet	Pass		Onsite-Werribee-South Melbourne
42		Wednesday, 3 February 2016	02	2	2.01	21.0	101.5	98.5	0.5 dry	Pass		Onsite-Werribee-South Melbourne
43		Wednesday, 3 February 2016	03	2	1.92	22.5	101.0	88.5	3.0 dry	Pass		Onsite-Werribee-South Melbourne
44		Thursday, 4 February 2016	M4	2	1.95	22.5	105.5	84.5	4.0 dry	Fail	47	Onsite-St.Albans-South Melbourne
45		Thursday, 4 February 2016	N4 (W)	2	1.95	21.0	104.0	83.0	4.0 dry	Fail	48	Onsite-St. Albans-South Melbourne
46		Thursday, 4 February 2016	N4 (E)	2	2.04	24.0	108.5	96.5	1.0 dry	Pass	10	Onsite-St. Albans-South Melbourne
47	44	Friday, 5 February 2016	M4	2	1.75	24.4	93.5	84.5	4.0 dry	Fail	50	Onsite-St. Albans-South Melbourne
48	45	Friday, 5 February 2016	N4 (W)	2	1.88	20.3	95.0	90.5	2.0 dry	Pass	30	Onsite-St.Albans-South Melbourne
49	7	Friday, 5 February 2016	L4 (E)	2	1.84	25.2	96.0	89.0	3.0 dry	Pass		Onsite-St. Albans-South Melbourne
50	47	Tuesday, 9 February 2016	M4	2	1.92	23.6	94.0	115.0	3.0 wet	Fail	55	Onsite-St.Albans-South Melbourne
51	47	Tuesday, 9 February 2016	N4 (SE)	3	1.88	29.5	99.0	101.0	0.5 wet	Pass	33	Onsite Onsite
52		Tuesday, 9 February 2016	03	3	1.83	33.0	94.5	106.0	1.5 wet	Fail	56	Onsite
53		Tuesday, 9 February 2016	N3	3	1.83	18.7	97.0	82.0	4.0 wet	Fail	57	Onsite
54	29	, · · · · · · · · · · · · · · · · · · ·	L4	2	2.05	25.2	102.0	109.0	2.0 wet		37	
55	50	Wednesday, 10 February 2016	M4	2	1.98	19.0	98.5	130.0		Pass Fail	58	Ravenhall Prison
56	50	Wednesday, 10 February 2016	03	3	1.98	28.9	95.5		4.5 wet		58	Onsite-St.Albans-South Melbourne
		Wednesday, 10 February 2016		3				103.0	1.0 wet	Pass		Onsite
57	53	Wednesday, 10 February 2016	N3 (E)	2	1.88 1.85	25.1	99.0	101.5	0.5 wet	Pass		Onsite
58	55	Thursday, 11 February 2016	M4			22.4	98.5	87.5	3.0 dry	Pass		Onsite-St.Albans-South Melbourne
59		Thursday, 11 February 2016	02	3	1.91	20.4	103.5	97.0	0.5 dry	Pass		Onsite
60		Friday, 12 February 2016	L4	3	1.85	30.1	96.0	104.5	1.0 wet	Pass		
61		Friday, 12 February 2016	L4 (NE)	3	1.88	20.4	97.5	97.5	0.5 dry	Pass		
62		Friday, 12 February 2016	M4 (NE)	3	1.90	20.9	100.5	95.5	1.0 dry	Pass		5 1 6: 4!!
63		Monday, 15 February 2016	N4	3	2.06	20.5	103.0	92.0	1.5 dry	Pass		Essendon-St.Albans
64		Monday, 15 February 2016	M4	3	1.98	19.0	99.0	88.5	2.5 dry	Pass		Essendon-St.Albans
65		Tuesday, 16 February 2016	L4 (E)	3	1.97	19.2	99.5	89.5	2.0 dry	Pass		Essendon
66		Tuesday, 16 February 2016	K5	3	1.94	22.0	98.0	97.0	0.5 dry	Pass		Essendon
67		Tuesday, 16 February 2016	J5	3	2.01	21.3	100.0	99.0	0.5 dry	Pass		Essendon
68		Wednesday, 17 February 2016	N4	4	2.01	18.0	100.5	89.5	2.0 dry	Pass		
69		Wednesday, 17 February 2016	M4	4	1.88	21.9	99.5	86.0	3.5 dry	Fail	70	
70	69	Thursday, 18 February 2016	M4	4	2.05	22.8	105.0	98.0	0.5 dry	Pass		
71		Thursday, 18 February 2016	L4	4	2.04	12.5	98.0	86.0	2.0 dry	Pass		
72		Friday, 19 February 2016	N5	3	2.08	13.8	96.5	99.0	0.0 OMC	Pass		Onsite BMD
73		Friday, 19 February 2016	M5	3	1.89	18.3	98.0	86.0	3.0 dry	Pass		Onsite BMD
74		Friday, 19 February 2016	L5	3	1.82	32.0	95.5	93.5	2.0 dry	Pass		Onsite BMD
75		Tuesday, 23 February 2016	N5	5	1.92	36.9	99.5	99.0	0.5 dry	Pass		Onsite BMD
76		Wednesday, 24 February 2016	02	4	2.04	20.0	100.5	99.0	0.0 OMC	Pass		
77		Wednesday, 24 February 2016	O4 (E)	4	1.82	21.6	93.0	96.5	1.0 dry	Fail	78	
78	77	Thursday, 25 February 2016	O2 (E)	4	2.00	15.0	103.0	86.0	2.5 dry	Pass		
79		Friday, 26 February 2016	03	4	1.93	19.5	94.0	100.0	0.0 OMC	Fail	80	
80	79	Monday, 29 February 2016	03	4	2.08	18.2	104.0	98.5	0.5 dry	Pass		
81		Monday, 29 February 2016	04	4	1.93	22.4	105.5	87.5	3.0 dry	Pass		
82		Tuesday, 1 March 2016	02	5	1.89	22.6	105.0	87.5	3.0 dry	Pass		
83		Wednesday, 2 March 2016	N5	4	2.00	19.4	99.5	96.5	0.5 dry	Pass		
84		Wednesday, 2 March 2016	M5	4	1.98	21.6	96.0	98.5	0.5 dry	Pass		

0.5		Frider A March 2016	NE	-	1.00	22.2	05.5	00.0	0.5 d	Dane		1
85		Friday, 4 March 2016	N5 L5	5 5	1.89	23.2	95.5	98.0	0.5 dry	Pass		
86		Friday, 4 March 2016	L5 L5		1.92	18.8	95.5	97.0	0.5 dry	Pass		
87		Monday, 7 March 2016		4	2.07	12.7	99.5	93.0	1 dry	Pass		
88		Monday, 7 March 2016	N5	4	1.98	22	97.5	102.0	0.5 wet	Pass		
89		Wednesday, 9 March 2016	N5	4	1.88	22.1	95.5	95.0	1 dry	Pass		
90		Wednesday, 9 March 2016	N5	4	1.92	19.3	95.5	97.5	0.5 dry	Pass		
91		Tuesday, 15 March 2016	N5	5	1.99	19.7	98.0	99.5	OMC	Pass		
92		Tuesday, 15 March 2016	L5	5	1.99	20.7	98.0	99.0	OMC	Pass		
93		Thursday, 17 March 2016	04	3	1.95	23.7	98.0	89.5	2.5 dry	Pass		
94		Thursday, 17 March 2016	05	3	1.95	19.5	101.0	87.0	3 dry	Pass		
95		Monday, 21 March 2016	04	4	1.85	18.7	99.5	82.5	4 dry	Fail	95	
96		Monday, 21 March 2016	05	4	1.94	19.1	101	89.5	2 dry	Pass		
97	95	Tuesday, 22 March 2016	04	4	1.87	19.7	98	86.5	3 dry	Pass		
98		Tuesday, 22 March 2016	04	5	2.01	19.2	101	99	ОМС	Pass		
99		Wednesday, 23 March 2016	04	5	1.86	21.7	97	98.5	0.5 dry	Pass		
100		Wednesday, 23 March 2016	03	4	1.88	19.9	98.5	99.5	omc	Pass		
101		Wednesday, 20 July 2016	15	4	2.13	23.1	107.5	100	OMC	Pass		
102		Wednesday, 20 July 2016	J5	3	1.94	18.9	98.5	95.5	1.0 Dry	Pass		
103		Thursday, 21 July 2016	K5	4	2.00	18.5	100	97.5	0.5 dry	Pass		
104		Thursday, 21 July 2016	L5	3	1.94	23.5	97.5	92.5	1.5 dry	Pass		
105		Tuesday, 26 July 2016	J5	4	1.97	25.5	103.5	86	3.5 dry	Fail	110	
106		Tuesday, 26 July 2016	J5	5	1.95	15.8	102.5	84.5	3.0 dry	Pass		
107		Tuesday, 26 July 2016	K5	5	2.05	26.2	104	90	2.5 dry	Pass		
108		Wednesday, 27 July 2016	J6	3	1.99	12.7	89	101.5	OMC	Fail	111	
109		Wednesday, 27 July 2016	L6	3	2.10	20.3	105	93	1.5 dry	Pass		
110	105	Wednesday, 27 July 2016	J5	4	2.06	20.5	105	91.5	2.0 dry	Pass		
111	108	Thursday, 28 July 2016	J6	3	1.96	16.8	97.5	111	1.5 wet	Pass		
112		Tuesday, 16 August 2016	N2	5	2.01	26.6	101.5	101	OMC	Pass		
113		Tuesday, 16 August 2016	02	5	2.00	24.6	100.5	106	1.5 Wet	Pass		
114		Wednesday, 17 August 2016	N2	6	1.82	19.3	89	101	OMC	Fail	123	
115		Wednesday, 17 August 2016	02	6	2.05	16.2	100	99.5	ОМС	Pass		
116		Wednesday, 17 August 2016	04	1	1.98	15	98	96.5	0.5 Dry	Pass		
117		Wednesday, 17 August 2016	03	1	1.97	22.7	99.5	90	2.5 Dry	Pass		
118		Thursday, 18 August 2016	04	4	1.96	16.7	97	96.5	0.5 Dry	Pass		
119		Thursday, 18 August 2016	03	5	1.92	22.5	96	99	0.5 Dry	Pass		
120		Thursday, 18 August 2016	05	5	1.94	20.4	95	98	0.5 Dry	Pass		
121		Thursday, 18 August 2016	N2	7	2.03	18	101	98.5	0.5 Dry	Pass		
122		Thursday, 18 August 2016	02	7	1.98	19	99.5	91.5	1.5 Dry	Pass		
123	114	Thursday, 18 August 2016	N2	6	1.96	21	100	91.5	2.0 Dry	Pass		
124		Thursday, 18 August 2016	03	6	1.96	23	97	101	OMC	Pass		
125		Thursday, 18 August 2016	04	5	1.94	24.5	96.5	101.5	0.5 Wet	Pass		
126		Thursday, 18 August 2016	05	6	1.92	22	95	98	0.5 Dry	Pass		
127		Thursday, 18 August 2016	N2	8	1.93	19.5	100	95	1.0 Dry	Pass		
128		Thursday, 18 August 2016	02	8	1.90	22	98	80.5	4.0 Dry	Fail	136	
129		Tuesday, 23 August 2016	05 W	7	1.97	24.6	106.5	89	3.0 Dry	Pass		
130		Tuesday, 23 August 2016	04 W	6	1.92	17.7	95	99.5	OMC	Pass		
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131		Tuesday, 23 August 2016	03 W	7	2.00	15.9	98	100.5	ОМС	Pass		
131		,	03 W	4	1.90	26.7	98	106.5	1.5 Wet	Pass		
133		Tuesday, 23 August 2016 Tuesday, 23 August 2016	03 E	4	1.90	24.9	102	88.5	3.0 Dry	Pass		
134		Wednesday, 24 August 2016	N3 North	5	2.02	23.2	98.5	104.5	1.0 Wet	Pass		
135		Wednesday, 24 August 2016 Wednesday, 24 August 2016	N3 South	5	2.02	15.2	98	104.5	OMC			
	120	, · · · · · · · · · · · · · · · · · · ·	N3 South N2	8	1.85		98	101		Pass Fail	140	
136	128	Wednesday, 24 August 2016		_		26.7	94		1.5 Wet	_	148	
137		Wednesday, 24 August 2016	O3 East	5	1.88	26.9		101.5	0.5 Wet	Fail	146	
138		Wednesday, 24 August 2016	O4 East	5	1.96	26.3	102.5	92.5	2.0 Dry	Pass	4.47	
139		Wednesday, 24 August 2016	O5 East	5	1.84	22.4	93.5	98	0.5 Dry	Fail	147	
140		Wednesday, 24 August 2016	O5 West	8	1.90	23.6	95.5	99	OMC	Pass		
141		Wednesday, 24 August 2016	O4 West	7	1.99	20.4	100	97	0.5 Dry	Pass		
142		Wednesday, 24 August 2016	O3 West	8	1.88	20.2	96	92	1.5 Dry	Pass		
143		Thursday, 25 August 2016	02	10	1.88	30.5	100.5	91	2.5 Dry	Pass		
144		Thursday, 25 August 2016	N3 South	6	1.99	25.3	105	92	2.0 Dry	Pass		
145		Thursday, 25 August 2016	N3 North	6	1.92	17	99	87	2.5 Dry	Pass		
146	137	Friday, 26 August 2016	O3 East	5	1.98	23.9	106	96.5	1.0 Dry	Pass		
147	139	Friday, 26 August 2016	O5 East	5	1.93	19.8	101	88	2.5 Dry	Pass		
148	136	Friday, 26 August 2016	N2	9	2.06	19.8	104.5	89	2.5 Dry	Pass		
149		Friday, 26 August 2016	N2	10	1.99	23.4	105.5	97	1.0 Dry	Pass		
150		Friday, 26 August 2016	J6	1	1.98	22.3	104	89	2.5 Dry	Pass		
151		Friday, 26 August 2016	16	1	1.97	20.6	101	90.5	2.0 Dry	Pass		
152		Monday, 29 August 2016	K6	1	1.88	21.3	103.5	81	5.0 Dry	Fail	161	
153		Monday, 29 August 2016	16	2	1.98	19.8	103	85	3.0 Dry	Pass		
154		Monday, 29 August 2016	J6	3	1.95	18.3	98	87	2.5 Dry	Pass		
155		Monday, 29 August 2016	16	3	2.03	17.3	101	95.5	0.5 Dry	Pass		
156		Tuesday, 30 August 2016	N4	4	1.96	20.3	100.5	87.5	3.0 Dry	Pass		
157		Tuesday, 30 August 2016	N3 North	6	1.98	21.4	100	88.5	2.5 Dry	Pass		
158		Tuesday, 30 August 2016	N3 South	6	1.99	16.2	101	85.5	2.5 Dry	Pass		
159		Tuesday, 30 August 2016	16	4	1.89	20.6	99	86	3.0 Dry	Pass		
160		Tuesday, 30 August 2016	J6	4	1.91	22.1	94	102.5	0.5 Dry	Fail	169	
161	152	Tuesday, 30 August 2016	К6	1	2.05	23.1	102.5	99	OMC	Pass		
162		Tuesday, 30 August 2016	J6	5	2.01	23.5	99.5	90	2.0 Dry	Pass		
163		Tuesday, 30 August 2016	16	5	1.93	17.2	98.5	82.5	3.5 Dry	Fail	166	
164		Wednesday, 31 August 2016	16	6	1.88	20.7	98	90.5	2.0 Dry	Pass		
165		Wednesday, 31 August 2016	J6	6	1.87	21.5	95	98.5	0.5 Dry	Pass		
166	163	Wednesday, 31 August 2016	К6	1	1.91	26.6	95	100.5	OMC	Pass		
167		Wednesday, 31 August 2016	К6	2	1.89	17.8	96	90	2.0 Dry	Pass		
168		Thursday, 1 September 2016	16	7	2.06	14.8	107	77.5	4.0 Dry	Fail	172	
169	161	Thursday, 1 September 2016	J6	4	2.00	11.9	105	98	ОМС	Pass		
170		Thursday, 1 September 2016	J6	7	1.98	23.4	98.5	102.5	0.5 Wet	Pass		
171		Thursday, 1 September 2016	K6	3	1.96	24.6	99.5	94	1.5 Dry	Pass		
172	168	Tuesday, 6 September 2016	16	7	2.06	20.6	105	90	2.0 Dry	Pass		
173		Tuesday, 6 September 2016	К6	4	2.00	24.3	101.5	92.5	1.5 Dry	Pass		
174		Tuesday, 6 September 2016	J6	8	2.01	17.2	103.5	80	4.0 Dry	Fail	176	
175		Tuesday, 6 September 2016	16	8	1.99	17.9	102.5	84.5	3.0 Dry	Pass		
176	174	Thursday, 8 September 2016	J6	8	2.05	18.1	99.5	99	OMC	Pass		
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190 Friday, 23 September 2016 O6 3 2.00 19.8 103 98 0.5 Dry Pass 191 Friday, 23 September 2016 N6 2 2.05 16.3 106.5 84.5 3.0 Dry Pass 192 Monday, 26 September 2016 N6 3 1.98 22 99 99 OMC Pass 193 Monday, 26 September 2016 M6 3 1.94 21.8 93.5 112.5 2.5 Wet Fail 203 194 Monday, 26 September 2016 L6 3 2.02 20.4 103.5 96 1.0 Dry Pass 195 Monday, 26 September 2016 O6 5 1.91 22 96 98 0.5 Dry Pass 196 Wednesday, 12 October 2016 N6 4 1.98 22.2 103 90 2.5 Dry Pass 197 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail	
191	
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194 Monday, 26 September 2016 L6 3 2.02 20.4 103.5 96 1.0 Dry Pass 195 Monday, 26 September 2016 O6 5 1.91 22 96 98 0.5 Dry Pass 196 Wednesday, 12 October 2016 N6 4 1.98 22.2 103 90 2.5 Dry Pass 197 Wednesday, 12 October 2016 M6 4 1.98 23.6 105.5 89.5 2.5 Dry Pass 198 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail Excluded test result, area was level 1 supervision and coffey ok, A road is to be build over to testing company is testing the retest this section. 199 Thursday, 13 October 2016 N5 6 1,98 20.3 98.5 89.5 2.5 Dry Pass 200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	
195 Monday, 26 September 2016 O6 5 1.91 22 96 98 0.5 Dry Pass 196 Wednesday, 12 October 2016 N6 4 1.98 22.2 103 90 2.5 Dry Pass 197 Wednesday, 12 October 2016 M6 4 1.98 23.6 105.5 89.5 2.5 Dry Pass 198 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail Excluded test result, area was level 1 supervision and coffey ok, A road is to be build over to testing company is testing the retest this section. 199 Thursday, 13 October 2016 N5 6 1,98 20.3 98.5 89.5 2.5 Dry Pass 200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	
196 Wednesday, 12 October 2016 N6 4 1.98 22.2 103 90 2.5 Dry Pass 197 Wednesday, 12 October 2016 M6 4 1.98 23.6 105.5 89.5 2.5 Dry Pass 198 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail Excluded test result, area was level 1 supervision and coffey ok, A road is to be build over the testing company is testing the retest this section. 199 Thursday, 13 October 2016 N5 6 1,98 20.3 98.5 89.5 2.5 Dry Pass 200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	
197 Wednesday, 12 October 2016 M6 4 1.98 23.6 105.5 89.5 2.5 Dry Pass 198 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail Excluded test result, area was level 1 supervision and coffey ok, A road is to be build over the testing company is testing the retest this section. 199 Thursday, 13 October 2016 N5 6 1,98 20.3 98.5 89.5 2.5 Dry Pass 200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	
198 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail Excluded test result, area was level 1 supervision and coffey ok, A road is to be build over the testing company is testing the retest this section. 199 Thursday, 13 October 2016 N5 6 1,98 20.3 98.5 89.5 2.5 Dry Pass 200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	
198 Wednesday, 12 October 2016 L6 4 1.97 19 108 76.5 5.5 Dry Fail level 1 supervision and coffey ok, A road is to be build over the testing company is testing the retest this section. 199 Thursday, 13 October 2016 N5 6 1,98 20.3 98.5 89.5 2.5 Dry Pass 200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	
200 Thursday, 13 October 2016 M5 6 1.97 20.9 102.5 90 2.0 Dry Pass	pelieve the area is ne test, an external
201 Thursday, 13 October 2016 L5 6 1.98 21.6 103 90.5 2.0 Dry Pass	
202 Thursday, 13 October 2016 M6 - East 5 2.01 22 108.5 88 3.0 Dry Pass	
203 168 Thursday, 13 October 2016 M6 - West 3 2.01 21.4 107 87.5 3.0 Dry Pass	
Thursday, 13 October 2016 L6 5 1.98 21.2 108 82.5 4.5 Dry Fail Excluded test result, area was level 1 supervision and coffey ok, A road is to be build over the testing company is testing the retest this section.	pelieve the area is ne test, an external
205 Friday, 14 October 2016 N5 7 1.97 23.1 104 91 2.0 Dry Pass	
206 Friday, 14 October 2016 M5 7 2.04 24.3 105 90 2.5 Dry Pass	
207 Friday, 14 October 2016 L5 7 1.99 27.3 106 91.5 2.5 Dry Pass	
208 Friday, 14 October 2016 N6 South 7 2.01 22.7 104.5 90 2.5 Dry Pass	
209 Tuesday, 18 October 2016 L5-NE 7 2.09 20.7 100.5 98 0.5 Dry Pass	\neg
210 Tuesday, 18 October 2016 L5-SE 6 2.04 17.5 101 100.5 OMC Pass	
211 Friday, 21 October 2016 N5 9 2.05 18.4 98 100 OMC Pass	
212 Friday, 21 October 2016 N5 9 1.98 20.7 99.5 95.5 1.0 Dry Pass	
213 Friday, 21 October 2016 O6 6 2.04 21.3 96.5 102.5 0.5 Wet Pass	
214 Friday, 21 October 2016 O6 6 2.01 21.3 98.5 97 0.5 Dry Pass	

215	Tuesday 21 February 2017	L6	N/A	N/A	N/A	N/A	N/A	1.0 Dry	N/A	Pre-analysis testing sampled from stockpile
216/RW1	Wednesday, 22 February 2017	03	1	1.92	17.5	97	98	0.5 dry	Pass	
217/RW2	Wednesday, 22 February 2017	03	1	1.92	19.6	95.5	91	1.5 dry	Pass	
218/RW3	Wednesday, 22 February 2017	04	1	1.93	20.7	99	97	0.5 dry	Pass	
219/RW4	Wednesday, 22 February 2017	O5	1	1.92	26.7	100	97.5	0.5 dry	Pass	
220/RW5	Thursday, 23 February 2017	03	2	1.93	19.5	100.5	90.5	2.0 dry	Pass	
221/RW6	Thursday, 23 February 2017	03	2	1.90	20.6	99.5	102	0.5 wet	Pass	
222/RW7	Thursday, 23 February 2017	04	2	1.90	19	98.5	96.5	3.0 dry	Pass	
223/RW8	Thursday, 23 February 2017	O5	2	1.91	20.1	100.5	91.5	2.0 dry	Pass	
224/RW9	Friday, 24 February 2017	03	3	1.94	16.8	96.5	85.5	2.5 dry	Pass	
225/RW10	Friday, 24 February 2017	04	4	1.96	14.4	98	84.5	2.5 dry	Pass	
226/RW11	Friday, 24 February 2017	O5	5	1.94	18.1	98.5	90.5	1.5 dry	Pass	
227/RW12	Monday, 27 February 2017	03	4	1.93	20.1	103	86.5	3.0 dry	Pass	
228/RW13	Monday, 27 February 2017	04	4	1.89	28.7	101.5	110	2.5 wet	Pass	
229/RW14	Monday, 27 February 2017	O5	4	1.89	16	98.5	84	3.0 dry	Pass	
230/RW15	Monday, 27 February 2017	03	5	1.89	17.2	95	109.5	1.5 wet	Pass	
231/RW16	Monday, 27 February 2017	04	5	1.92	15.6	95	85.5	2.5 dry	Pass	
232/RW17	Monday, 27 February 2017	O5	5	1.90	18.2	95	106	1.0 wet	Pass	
233/RW18	Tuesday, 28 February 2017	O5	6	1.88	17	96.5	86	2.5 dry	Pass	
234/RW19	Tuesday, 28 February 2017	04	6	1.90	20.3	98.5	90.5	2.0 dry	Pass	

Appendix A - Laboratory Results



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM15W01301

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM15W01301'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

P.O. Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 3/12/2015

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data				
Sample ID	ABTM15S-04552	ABTM15S-04553		
Field Sample ID	1	2		
Date Tested	2/12/2015	2/12/2015		
Time Tested	15:00	15:30		
Location	Stage 4	Stage 4		
	Grid I5 Middle	Grid I6(SE)		
	Layer 1	Layer 1		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	22.0	20.0		
Field Wet Density (t/m³)	1.99	1.98		
Field Dry Density (t/m³)	1.63	1.65		
Peak Converted Wet Density* (t/m³)	1.95	1.94		
Optimum Moisture Content (%)	24.5	23.0		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	90.5	88.5		
Moisture Variation (%)	2.0 dry	2.5 dry		
Hilf Density Ratio (%)	101.5	102.5		
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM15W01314

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

P.O. Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 4/12/2015

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1

Sampling Method:

Source: Material:

Sample Data				
Sample ID	ABTM15S-04630			
Field Sample ID	3			
Date Tested	3/12/2015			
Time Tested	14:30			
Location	Stage 4			
	Grid J5			
	Middle			
	Layer 1			
Field and Laboratory Data				
Depth of Test (mm)	275			
Depth of Layer (mm)	300			
AS Sieve Size (mm)	19.0			
Oversize Wet (%)	0			
Field Moisture Content (%)	18.5			
Field Wet Density (t/m³)	2.05			
Field Dry Density (t/m³)	1.73			
Peak Converted Wet Density* (t/m³)	1.99			
Optimum Moisture Content (%)	19.0			
Compactive Effort	Standard			
Moisture Ratio (%)	99.0			
Moisture Variation (%)	0.0			
Hilf Density Ratio (%)	103.5			
legend * adjusted for oversize material				

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Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM15W01320

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

P.O. Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 7/12/2015

Sample Details

Location: Little Green Estate Stage 2, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Imported

Material:

Sample Data				
Sample ID	ABTM15S-04649	ABTM15S-04650		
Field Sample ID	4	5		
Date Tested	4/12/2015	4/12/2015		
Time Tested	14:40	15:00		
Location	Grid K5 (N)	Grid L5 (NW)		
	Layer 1	Layer 1		
	Stage 4	Stage 4		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	14.0	14.0		
Field Wet Density (t/m³)	2.12	1.91		
Field Dry Density (t/m³)	1.86	1.67		
Peak Converted Wet Density* (t/m³)	2.10	1.96		
Optimum Moisture Content (%)	14.5	16.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	96.0	87.0		
Moisture Variation (%)	0.5 dry	2.0 dry		
Hilf Density Ratio (%)	100.5	97.5		
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM15W01344

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

P.O. Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 11/12/2015

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data					
Sample ID	ABTM15S-04709	ABTM15S-04710	ABTM15S-04711	ABTM15S-04712	
Field Sample ID	6	7	8	9	
Date Tested	10/12/2015	10/12/2015	10/12/2015	10/12/2015	
Time Tested	14:20	14:40	14:50	15:15	
Location	Stage 4	Stage 4	Stage 4	Stage 4	
	Grid L4	Grid M4	Grid M5 (N)	Grid L5	
	Layer 1	Layer 1	Layer 1	Layer 1	
Field and Laboratory Data					
Depth of Test (mm)	275	275	275	275	
Depth of Layer (mm)	300	300	300	300	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	0	0	0	
Field Moisture Content (%)	20.0	18.5	18.5	14.5	
Field Wet Density (t/m³)	1.90	2.01	2.11	2.06	
Field Dry Density (t/m³)	1.58	1.69	1.78	1.79	
Peak Converted Wet Density* (t/m³)	1.99	2.07	1.98	2.08	
Optimum Moisture Content (%)	22.5	18.5	20.5	17.5	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	89.5	100.0	90.0	85.5	
Moisture Variation (%)	2.0 dry	0.0	2.0 dry	2.5 dry	
Hilf Density Ratio (%)	95.5	97.0	107.0	99.0	
legend * adjusted for oversize material					



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM15W01397

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 18/12/2015

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

					_
Sample Data					
Sample ID	ABTM15S-04927	ABTM15S-04928	ABTM15S-04929		
Field Sample ID	10	11	12		_
Date Tested	17/12/2015	17/12/2015	17/12/2015		
Time Tested	14:00	14:30	15:00		
Location	Stage 4	Stage 4	Stage 4		
	Grid N5 (S)	Grid O4 (SW)	Grid O5 (NW)		
	Layer 1	Layer 1	Layer 1		
Field and Laboratory Data					
Depth of Test (mm)	275	275	225		
Depth of Layer (mm)	300	300	250		
AS Sieve Size (mm)	19.0	19.0	19.0		
Oversize Wet (%)	0	0	0		
Field Moisture Content (%)	14.5	20.0	8.5		
Field Wet Density (t/m³)	2.06	1.98	1.89		
Field Dry Density (t/m³)	1.80	1.65	1.74		
Peak Converted Wet Density* (t/m³)	2.08	2.01	2.12		
Optimum Moisture Content (%)	17.0	22.5	11.0		
Compactive Effort	Standard	Standard	Standard		
Moisture Ratio (%)	85.5	89.0	77.5		
Moisture Variation (%)	2.5 dry	2.5 dry	2.5 dry		
Hilf Density Ratio (%)	99.0	98.5	89.0		
legend * adjusted for oversize material					



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM15W01404

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 21/12/2015

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

ABTM15S-04949	ABTM15S-04950	ABTM15S-04951			
13	14	15			
18/12/2015	18/12/2015	18/12/2015			
14:40					
Stage 4	Stage 4	Stage 4			
Grid O5 (NW)	Grid O5 (NE)	Grid O3 (NW)			
Retest of No 12					
275	275	275			
300	300	300			
19.0	19.0	19.0			
3	0	0			
13.5	18.5	13.5			
2.08	1.93	2.04			
1.83	1.63	1.80			
2.10	2.03	2.10			
15.5	19.0	15.5			
Standard	Standard	Standard			
87.5	97.5	86.5			
2.0 dry	0.5 dry	2.0 dry			
99.0	95.0	97.5			
	13 18/12/2015 14:40 Stage 4 Grid O5 (NW) Retest of No 12 275 300 19.0 3 13.5 2.08 1.83 2.10 15.5 Standard 87.5 2.0 dry	13 14 18/12/2015 18/12/2015 14:40 Stage 4 Stage 4 Grid O5 (NW) Grid O5 (NE) Retest of No 12 275 275 300 300 19.0 19.0 3 0 13.5 18.5 2.08 1.93 1.83 1.63 2.10 2.03 15.5 19.0 Standard Standard 87.5 97.5 2.0 dry 0.5 dry	13 14 15 18/12/2015 18/12/2015 18/12/2015 14:40 Stage 4 Stage 4 Stage 4 Grid O5 (NW) Grid O5 (NE) Grid O3 (NW) Retest of No 12 275 275 275 300 300 300 19.0 19.0 19.0 3 0 0 13.5 18.5 13.5 2.08 1.93 2.04 1.83 1.63 1.80 2.10 2.03 2.10 15.5 19.0 15.5 Standard Standard 87.5 97.5 86.5 2.0 dry 0.5 dry 2.0 dry	13 14 15 18/12/2015 18/12/2015 18/12/2015 14:40 Stage 4 Stage 4 Stage 4 Grid O5 (NW) Grid O5 (NE) Grid O3 (NW) Retest of No 12 275 275 275 300 300 300 19.0 19.0 19.0 3 0 0 13.5 18.5 13.5 2.08 1.93 2.04 1.83 1.63 1.80 2.10 2.03 2.10 15.5 19.0 15.5 Standard Standard 87.5 97.5 86.5 2.0 dry 0.5 dry 2.0 dry	13 14 15 18/12/2015 18/12/2015 18/12/2015 14:40 Stage 4 Stage 4 Stage 4 Grid O5 (NW) Grid O5 (NE) Grid O3 (NW) Retest of No 12 275 275 275 275 300 300 300 19.0 19.0 19.0 19.0 3 0 0 0 13.5 18.5 13.5 2.08 1.93 2.04 1.83 1.63 1.80 2.10 2.03 2.10 15.5 19.0 15.5 Standard Standard Standard Standard Standard 87.5 97.5 86.5 2.0 dry 0.5 dry 2.0 dry



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00001

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W00001'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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ACCREDITATION

measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 23/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data				
Sample ID	ABTM16S-00001	ABTM16S-00002		
Field Sample ID	16	17		
Date Tested	22/12/2015	22/12/2015		
Time Tested	13:45			
Location	Grid I5 (N)	Grid J6 (SW)		
	Layer 2	Layer 2		
	Stage 4	Stage 4		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	20.0	17.5		
Field Wet Density (t/m³)	1.90	1.96		
Field Dry Density (t/m³)	1.59	1.66		
Peak Converted Wet Density* (t/m³)	2.01	1.97		
Optimum Moisture Content (%)	20.0	20.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	98.0	87.5		
Moisture Variation (%)	0.5 dry	2.5 dry		
Hilf Density Ratio (%)	95.0	99.5		
legend * adjusted for oversize material				

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Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00002

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W00002'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

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ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 23/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data		
Sample ID	ABTM16S-00003	ABTM16S-00004
Field Sample ID	18	19
Date Tested	22/12/2015	22/12/2015
Time Tested	14:30	14:45
Location	Grid O4 (NE)	Grid O3 (NE)
	Layer 1	Layer 1
	Stage 4	Stage 4
Field and Laboratory Data		
Depth of Test (mm)	275	275
Depth of Layer (mm)	300	300
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	0	0
Field Moisture Content (%)	10.5	22.0
Field Wet Density (t/m³)	2.09	1.98
Field Dry Density (t/m³)	1.89	1.62
Peak Converted Wet Density* (t/m³)	2.18	2.04
Optimum Moisture Content (%)	12.0	21.5
Compactive Effort	Standard	Standard
Moisture Ratio (%)	87.5	100.5
Moisture Variation (%)	1.5 dry	0.0
Hilf Density Ratio (%)	96.0	97.0
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00027

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 9/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data		
Sample ID	ABTM16S-00094	ABTM16S-00095
Field Sample ID	20	21
Date Tested	8/01/2016	8/01/2016
Time Tested	13:45	14:20
Location	Stage 4	Stage 4
	Grid O2 (E)	Grid N2 (E)
	Layer 1	Layer 1
Field and Laboratory Data		
Depth of Test (mm)	275	275
Depth of Layer (mm)	300	300
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	0	0
Field Moisture Content (%)	13.0	15.5
Field Wet Density (t/m³)	2.20	1.96
Field Dry Density (t/m³)	1.94	1.69
Peak Converted Wet Density* (t/m³)	2.11	2.07
Optimum Moisture Content (%)	14.0	16.0
Compactive Effort	Standard	Standard
Moisture Ratio (%)	95.0	97.5
Moisture Variation (%)	0.5 dry	0.5 dry
Hilf Density Ratio (%)	104.0	95.0
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00036

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal: Project No.: Project Name:

Lot No.: TRN:



Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Plater

Approved Signatory: Ketankumar Patel (Senior Geotechnician)
NATA Accredited Laboratory Number:431

Date of Issue: 12/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM DRY DENSITY RATIO OF 95% of Standard Compaction (as advised by client) (+3 to -3)

OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-00124	ABTM16S-00125		
Field Sample ID	22	23		
Date Tested	11/01/2016	11/01/2016		
Time Tested	11:30	11:45		
Location	Lot b/w rd I&F	Lot b/w rd I&F		
	Grid I5	Gird J5		
	Layer 2	Layer 2		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	16.0	19.5		
Field Wet Density (t/m³)	1.99	2.09		
Field Dry Density (t/m³)	1.71	1.75		
Peak Converted Wet Density* (t/m³)	2.01	2.08		
Optimum Moisture Content (%)	15.5	19.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	102.5	100.5		
Moisture Variation (%)	0.5 wet	0.0		
Hilf Density Ratio (%)	98.5	101.0		
legend * adjusted for oversize material				

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00050

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
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Approved Signatory: Ketankumar Patel (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 14/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM DRY DENSITY RATIO OF 95% of Standard Compaction (as advised by client) (+3 TO -3)

OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Comple Date				
Sample Data				
Sample ID	ABTM16S-00191			
Field Sample ID	24			
Date Tested	13/01/2016			
Time Tested	09:50			
Location	Grid J 5			
	Layer 2			
Field and Laboratory Data				
Depth of Test (mm)	250			
Depth of Layer (mm)	300			
AS Sieve Size (mm)	19.0			
Oversize Wet (%)	0			
Field Moisture Content (%)	28.5			
Field Wet Density (t/m³)	1.87			
Field Dry Density (t/m³)	1.46			
Peak Converted Wet Density* (t/m³)	1.92			
Optimum Moisture Content (%)	26.5			
Compactive Effort	Standard			
Moisture Ratio (%)	106.5			
Moisture Variation (%)	1.5 wet			
Hilf Density Ratio (%)	97.5			
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00056

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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Plater

Approved Signatory: Ketankumar Patel

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 15/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements:

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-00200	ABTM16S-00201		
Field Sample ID	25	26		
Date Tested	14/01/2016	14/01/2016		
Time Tested	15:00	15:15		
Location	Grid L 5	Grid M 5		
	Layer 2	Layer 2		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	14.5	14.5		
Field Wet Density (t/m³)	2.12	2.10		
Field Dry Density (t/m³)	1.86	1.83		
Peak Converted Wet Density* (t/m³)	2.07	2.08		
Optimum Moisture Content (%)	16.5	17.0		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	86.0	85.0		
Moisture Variation (%)	2.0 dry	2.5 dry		
Hilf Density Ratio (%)	103.0	101.0		
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00061

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 18/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction -3% to +3% of OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data		
Sample ID	ABTM16S-00215	ABTM16S-00216
Field Sample ID	27	28
Date Tested	15/01/2016	15/01/2016
Time Tested	14:10	14:15
Location	Stage 4	Stage 4
	Grid M5	Grid L5
	Layer 2	Layer 2
Field and Laboratory Data		
Depth of Test (mm)	275	275
Depth of Layer (mm)	300	300
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	0	0
Field Moisture Content (%)	21.0	16.0
Field Wet Density (t/m³)	1.98	2.04
Field Dry Density (t/m³)	1.64	1.76
Peak Converted Wet Density* (t/m³)	1.94	2.11
Optimum Moisture Content (%)	24.5	16.0
Compactive Effort	Standard	Standard
Moisture Ratio (%)	87.0	98.0
Moisture Variation (%)	3.0 dry	0.5 dry
Hilf Density Ratio (%)	102.5	97.0
egend * adjusted for oversize material		

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00066

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Plater

Approve

Approved Signatory: Ketankumar Patel

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 19/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM DRY DENSITY RATIO OF 95% of Standard Compaction (as advised by client) (+3 To -3)

OMC

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-00226	ABTM16S-00227		
Field Sample ID	29	30		
Date Tested	18/01/2016	18/01/2016		
Time Tested	14:50	15:10		
Location	Grid L 4(W)	Grid M 4(W)		
	Layer 2	Layer 2		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	20.0	23.0		
Field Wet Density (t/m³)	1.97	1.99		
Field Dry Density (t/m³)	1.64	1.62		
Peak Converted Wet Density* (t/m³)	1.89	1.89		
Optimum Moisture Content (%)	25.0	25.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	80.0	90.0		
Moisture Variation (%)	4.5 dry	2.5 dry		
Hilf Density Ratio (%)	104.5	105.5		
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00075

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Plater

Approved Signatory: Ketankumar Patel

(Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements:

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-00259	ABTM16S-00260		
Field Sample ID	31	32		
Date Tested	19/01/2016	19/01/2016		
Location	Grid M 4(W)	Grid M 4(E)		
	Layer 2	Layer 2		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	16.0	16.5		
Field Wet Density (t/m³)	2.03	2.01		
Field Dry Density (t/m³)	1.75	1.73		
Peak Converted Wet Density* (t/m³)	1.90	1.96		
Optimum Moisture Content (%)	19.0	19.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	85.0	84.0		
Moisture Variation (%)	3.0 dry	3.0 dry		
Hilf Density Ratio (%)	106.5	102.5		
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00081

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

Date of Issue:

Sample Details

Location: Little Green

Client Request ID:

Specification Requirements:

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.2.1.1, AS 1289.5.7.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source:

Material: Fill

Sample Data				
Sample ID	ABTM16S-00309	ABTM16S-00310	ABTM16S-00311	
Field Sample ID	33	34	35	
Date Tested	20/01/2016	20/01/2016	20/01/2016	
Time Tested	14:55	15:10	15:25	
Location	Stage 4	Stage 4	Stage 4	
	Layer 2	Layer 2	Layer 2	
	Grid N5	Grid N5 (E)	Grid O5	
Field and Laboratory Data				
Depth of Test (mm)	275	275	275	
Depth of Layer (mm)	300	300	300	
AS Sieve Size (mm)	19.0	19.0	19.0	
Field Moisture Content (%)	26.5	17.0	8.0	
Field Wet Density (t/m³)	1.87	2.11	2.07	
Field Dry Density (t/m³)	1.48	1.80	1.92	
Peak Converted Wet Density* (t/m³)	1.93	2.09	2.12	
Optimum Moisture Content (%)	26.5	19.0	10.5	
Compactive Effort	Standard	Standard	Standard	
Moisture Ratio (%)	100.5	90.0	73.5	
Moisture Variation (%)	0.0	2.0 dry	3.0 dry	
Hilf Density Ratio (%)	97.0	101.0	97.5	
legend * adjusted for oversize material				

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Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00084

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Shaun Price

(Laboratory Manager)
NATA Accredited Laboratory Number:431

Date of Issue: 22/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data		
Sample ID	ABTM16S-00320	ABTM16S-00321
Field Sample ID	36	37
Date Tested	21/01/2016	21/01/2016
Time Tested	15:15	15:30
Location	Stage 4	Stage 4
	Layer 2	Layer 2
	Grid N4	Grid O4
Field and Laboratory Data		
Depth of Test (mm)	275	275
Depth of Layer (mm)	300	300
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	6	0
Field Moisture Content (%)	19.5	19.5
Field Wet Density (t/m³)	1.92	1.98
Field Dry Density (t/m³)	1.60	1.66
Peak Converted Wet Density* (t/m³)	1.89	1.83
Optimum Moisture Content (%)	24.5	22.5
Compactive Effort	Standard	Standard
Moisture Ratio (%)	80.5	86.0
Moisture Variation (%)	4.5 dry	3.0 dry
Hilf Density Ratio (%)	101.0	108.0
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00091

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal: SPIIRE/AMEX CORPORATION

Project No.: INFOABTM00385AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1

Lot No.: TRN:



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K.B. Patel

Approved Signatory: Krushik Patel

(Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 23/01/2016

Sample Details

Location: Little Green Estate, Tarneit, Vic

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data		
Sample ID	ABTM16S-00341	
Field Sample ID	00186	
Date Tested	22/01/2016	
Time Tested	11:30	
Location	Stage 4	
	Layer 2	
	N4	
Field and Laboratory Data		
Depth of Test (mm)	275	
Depth of Layer (mm)	300	
Field Moisture Content (%)	19.0	
Field Wet Density (t/m³)	1.97	
Field Dry Density (t/m³)	1.65	
Peak Converted Wet Density* (t/m³)	2.05	
Optimum Moisture Content (%)	19.0	
Compactive Effort	Standard	
Moisture Ratio (%)	99.0	
Moisture Variation (%)	0.0	
Hilf Density Ratio (%)	96.0	
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00098

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
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ACCREDITATION

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 28/01/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.2.1.1, AS 1289.5.7.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Imported
Material: Insitu

Sample Data			
•	ADTIMACO 00057	ADTM400 00050	
Sample ID	ABTM16S-00357	ABTM16S-00358	
Field Sample ID	39	40	
Date Tested	27/01/2016	27/01/2016	
Time Tested	15:15	15:25	
Location	Stage 4	Stage 4	
	Layer 3	Layer 3	
	Grid I (W)	Grid I	
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	9	9	
Field Moisture Content (%)	16.5	23.0	
Field Wet Density (t/m³)	2.00	2.02	
Field Dry Density (t/m³)	1.72	1.65	
Peak Converted Wet Density* (t/m³)	2.04	2.03	
Optimum Moisture Content (%)	18.5	24.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	89.0	93.5	
Moisture Variation (%)	2.0 dry	1.5 dry	
Hilf Density Ratio (%)	98.0	99.5	
legend * adjusted for oversize material			



Coffey Services Australia Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00116

Preliminary Report Issued - Issue No.:1,2 Issue No: 3 This report replaces all previous issues of report no 'HDR:ABTM16W00116'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

measurements included in this document are traceable NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025 Testing.

The results of the tests, calibrations and/or

Approved Signatory: Shaun Price (Senior Geotechnical Technician) NATA Accredited Laboratory Number:431 Date of Issue: 23/03/2017

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data				
Sample ID	ABTM16S-00432	ABTM16S-00433	ABTM16S-00434	
Field Sample ID	41	42	43	
Date Tested	3/02/2016	3/02/2016	3/02/2016	
Time Tested	16:00	16:15	16:25	
Location	Site 1	Site 2	Site 3	
Field and Laboratory Data				
Depth of Test (mm)	275	275	275	
Depth of Layer (mm)	300	300	300	
AS Sieve Size (mm)	19.0	19.0	19.0	
Oversize Wet (%)	0	0	0	
Field Moisture Content (%)	26.0	21.0	22.5	
Field Wet Density (t/m³)	2.08	2.01	1.92	
Field Dry Density (t/m³)	1.65	1.66	1.57	
Peak Converted Wet Density* (t/m³)	2.00	1.98	1.90	
Optimum Moisture Content (%)	23.0	21.0	25.0	
Compactive Effort	Standard	Standard	Standard	
Moisture Ratio (%)	113.0	98.5	88.5	
Moisture Variation (%)	3.0 wet	0.5 dry	3.0 dry	
Hilf Density Ratio (%)	104.0	101.5	101.0	
legend * adjusted for oversize material				

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00126

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W00126'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025

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Approved Signatory: Bryce Slinn

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 5/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data				
Sample ID	ABTM16S-00480	ABTM16S-00481	ABTM16S-00482	
Field Sample ID	00044	00045	00046	
Date Tested	4/02/2016	4/02/2016	4/02/2016	
Time Tested	16:00	16:15	16:30	
Location	Grid 4	Grid N4	Grid N4	
	Layer 2	West	East	
		Layer 2	Layer 2	
Field and Laboratory Data				
Depth of Test (mm)	275	275	275	
Depth of Layer (mm)	300	300	300	
AS Sieve Size (mm)	19.0	19.0	19.0	
Oversize Wet (%)	0	0	8	
Field Moisture Content (%)	22.5	21.0	24.0	
Field Wet Density (t/m³)	1.95	1.95	2.04	
Field Dry Density (t/m³)	1.59	1.61	1.64	
Peak Converted Wet Density* (t/m³)	1.85	1.88	1.87	
Optimum Moisture Content (%)	26.5	25.5	25.0	
Compactive Effort	Standard	Standard	Standard	
Moisture Ratio (%)	84.5	83.0	96.5	
Moisture Variation (%)	4.0 dry	4.0 dry	1.0 dry	
Hilf Density Ratio (%)	105.5	104.0	108.5	
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00135

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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WORLD RECOGNISED
ACCREDITATION

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 8/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 **Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-00493	ABTM16S-00494	ABTM16S-00495
Field Sample ID	47	48	49
Client Sample ID	47	48	49
Date Tested	5/02/2016	5/02/2016	5/02/2016
Time Tested	13:40	13:55	14:15
Location	Retest of 45	Retest of 44	Grid L4(E)
	Grid M4	Grid L4(SE)	Layer 2
	Layer 2	Layer 2	
Field and Laboratory Data			
Depth of Test (mm)	275	275	275
Depth of Layer (mm)	300	300	300
Oversize Wet (%)	9	17	
Field Moisture Content (%)	24.4	20.3	25.2
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	1.75	1.88	1.84
Field Dry Density (t/m³)	1.40	1.56	1.47
Peak Converted Wet Density* (t/m³)	1.87	1.97	1.92
Optimum Moisture Content (%)	29.0	22.5	28.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	84.5	90.5	89.0
Moisture Variation (%)	4.0 dry	2.0 dry	3.0 dry
Hilf Density Ratio (%)	93.5	95.0	96.0
legend * adjusted for oversize material			

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00146

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Bryce Slinn

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 10/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample ID						
Field Sample ID 50 51 52 53 Client Sample ID 50 51 52 53 Date Tested 9/02/2016 9/02/2016 9/02/2016 9/02/2016 Location Retest of 47 Layer 3 Layer 3 Layer 3 Layer 2 Grid M4 Grid O3 Grid N3 Field and Laboratory Data Depth of Test (mm) 275 275 275 275 Depth of Layer (mm) 300 300 300 300 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Wet Density (t/m³) 1.92 1.88 1.83 1.83 Field Dry Density (t/m³) 1.55 1.45 1.37 1.54 Peak Converted Wet Density* (t/m³) 2.03 1.90 1.94 1.88 Optimum Moisture Content (%) 20.5 29.5 31.0 23.0 Compactive Effort Standard Standard Sta	Sample Data					
So	Sample ID	ABTM16S-00530	ABTM16S-00531	ABTM16S-00532	ABTM16S-00533	
Date Tested	Field Sample ID	50	51	52	53	
Layer 3	Client Sample ID	50	51	52	53	
Layer 2 Grid N4(SE) Grid O3 Grid N3	Date Tested	9/02/2016	9/02/2016	9/02/2016	9/02/2016	
Field and Laboratory Data Depth of Test (mm) 275 275 275 275 Depth of Layer (mm) 300 300 300 300 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.	Location	Retest of 47	Layer 3	Layer 3	Layer 3	
Field and Laboratory Data Depth of Test (mm) 275 275 275 275 Depth of Layer (mm) 300 300 300 300 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.		Layer 2	Grid N4(SE)	Grid O3	Grid N3	
Depth of Test (mm) 275 275 275 275 Depth of Layer (mm) 300 300 300 300 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Moisture Content Method AS 1289.2.1.1		Grid M4				
Depth of Layer (mm) 300 300 300 300 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Moisture Content Method AS 1289.2.1.1 AS 128	Field and Laboratory Data					
Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Moisture Content Method AS 1289.2.1.1	Depth of Test (mm)	275	275	275	275	
Field Moisture Content (%) 23.6 29.5 33.0 18.7 Field Moisture Content Method AS 1289.2.1.1	Depth of Layer (mm)	300	300	300	300	Г
Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1	Oversize Wet (%)	0	0	0	0	Г
Field Wet Density (t/m³) 1.92 1.88 1.83 1.83 Field Dry Density (t/m³) 1.55 1.45 1.37 1.54 Peak Converted Wet Density* (t/m³) 2.03 1.90 1.94 1.88 Optimum Moisture Content (%) 20.5 29.5 31.0 23.0 Compactive Effort Standard Standard Standard Standard Moisture Ratio (%) 115.0 101.0 106.0 82.0 Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Field Moisture Content (%)	23.6	29.5	33.0	18.7	
Field Dry Density (t/m³) 1.55 1.45 1.37 1.54 Peak Converted Wet Density* (t/m³) 2.03 1.90 1.94 1.88 Optimum Moisture Content (%) 20.5 29.5 31.0 23.0 Compactive Effort Standard Standard Standard Standard Moisture Ratio (%) 115.0 101.0 106.0 82.0 Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Peak Converted Wet Density* (t/m³) 2.03 1.90 1.94 1.88 Optimum Moisture Content (%) 20.5 29.5 31.0 23.0 Compactive Effort Standard Standard Standard Standard Moisture Ratio (%) 115.0 101.0 106.0 82.0 Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Field Wet Density (t/m³)	1.92	1.88	1.83	1.83	
Optimum Moisture Content (%) 20.5 29.5 31.0 23.0 Compactive Effort Standard Standard Standard Standard Moisture Ratio (%) 115.0 101.0 106.0 82.0 Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Field Dry Density (t/m³)	1.55	1.45	1.37	1.54	
Compactive Effort Standard Standard Standard Standard Moisture Ratio (%) 115.0 101.0 106.0 82.0 Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Peak Converted Wet Density* (t/m³)	2.03	1.90	1.94	1.88	
Moisture Ratio (%) 115.0 101.0 106.0 82.0 Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Optimum Moisture Content (%)	20.5	29.5	31.0	23.0	
Moisture Variation (%) 3.0 wet 0.5 wet 1.5 wet 4.0 dry Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Compactive Effort	Standard	Standard	Standard	Standard	Γ
Hilf Density Ratio (%) 94.0 99.0 94.5 97.0	Moisture Ratio (%)	115.0	101.0	106.0	82.0	
•	Moisture Variation (%)					
legend * adjusted for oversize material	Hilf Density Ratio (%)	94.0	99.0	94.5	97.0	
	legend * adjusted for oversize material					Г

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00148

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

By S

Approved Signatory: Bryce Slinn

(Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 11/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data					
Sample ID	ABTM16S-00536	ABTM16S-00537	ABTM16S-00538	ABTM16S-00539	
Field Sample ID	54	55	56	57	
Client Sample ID	54	55	56	57	
Date Tested	10/02/2016	10/02/2016	10/02/2016	10/02/2016	
Time Tested	15:45	16:15	16:30	16:40	
Location	Layer 2	Layer 2	Layer 3	Layer 3	
	Grid L4	Grid M4	Grid O3	Grid N3 (6)	
	Retest of #29	Retest of #50	Retest of #52	Retest of #53	
Field and Laboratory Data					
Depth of Test (mm)	275	275	275	275	
Depth of Layer (mm)	300	300	300	300	
Oversize Wet (%)	8	13	0	0	
Field Moisture Content (%)	25.2	19.0	28.9	25.1	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.05	1.98	1.83	1.88	
Field Dry Density (t/m³)	1.64	1.66	1.42	1.51	
Peak Converted Wet Density* (t/m³)	2.01	2.01	1.91	1.90	
Optimum Moisture Content (%)	23.0	14.5	28.0	25.0	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	109.0	130.0	103.0	101.5	
Moisture Variation (%)	2.0 wet	4.5 wet	1.0 wet	0.5 wet	
Hilf Density Ratio (%)	102.0	98.5	95.5	99.0	
legend * adjusted for oversize material					

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00156

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
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ACCREDITATION

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By S

Approved Signatory: Bryce Slinn

(Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 12/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data				
-	ADTM400 00507	ADTM400 00500		
Sample ID	ABTM16S-00567	ABTM16S-00568		
Field Sample ID	00058	00059		
Client Sample ID	00058	00059		
Date Tested	11/02/2016	11/02/2016		
Time Tested	13:50	13:55		
Location	Retest of #55	Stage 4		
	Stage 4	Layer 3		
	Layer 2	Grid O2		
	Grid M4			
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	22.4	20.4		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	1.85	1.91		
Field Dry Density (t/m³)	1.51	1.59		
Peak Converted Wet Density* (t/m³)	1.88	1.84		
Optimum Moisture Content (%)	25.5	21.0		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	87.5	97.0		
Moisture Variation (%)	3.0 dry	0.5 dry		
Hilf Density Ratio (%)	98.5	103.5		
legend * adjusted for oversize material				

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00167

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
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Approved Signatory: Bryce Slinn

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 15/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data					
Sample ID	ABTM16S-00600	ABTM16S-00601	ABTM16S-00602		
Field Sample ID	00060	00061	00062		
Date Tested	12/02/2016	12/02/2016	12/02/2016		
Time Tested	14:10	14:25	16:40		
Location	Grid L4	Grid L4 (N/E)	Grid M4(N/E)		
	Layer 3	Layer 3	Layer 3		
Field and Laboratory Data					
Depth of Test (mm)	275	275	275		
Depth of Layer (mm)	300	300	300		
Oversize Wet (%)	7	0	0		
Field Moisture Content (%)	30.1	20.4	20.9		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	1.85	1.88	1.90		
Field Dry Density (t/m³)	1.42	1.56	1.57		
Peak Converted Wet Density* (t/m³)	1.93	1.93	1.89		
Optimum Moisture Content (%)	29.0	21.0	22.0		
Compactive Effort	Standard	Standard	Standard		
Moisture Ratio (%)	104.5	97.5	95.5		
Moisture Variation (%)	1.0 wet	0.5 dry	1.0 dry		
Hilf Density Ratio (%)	96.0	97.5	100.5		
legend * adjusted for oversize material					

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00178

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION

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Approved Signatory: Bryce Slinn

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 16/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data				
Sample ID	ABTM16S-00635	ABTM16S-00636		
Field Sample ID	63	64		
Client Sample ID	63	64		
Date Tested	15/02/2016	15/02/2016		
Location	Stage 4	Stage 4		
	Layer 3	Layer 3		
	Grid N4	Grid M4		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	20.5	19.0		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.06	1.98		
Field Dry Density (t/m³)	1.71	1.66		
Peak Converted Wet Density* (t/m³)	2.00	2.00		
Optimum Moisture Content (%)	22.5	21.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	92.0	88.5		
Moisture Variation (%)	1.5 dry	2.5 dry		
Hilf Density Ratio (%)	103.0	99.0		
legend * adjusted for oversize material				

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00192

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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By S

Approved Signatory: Bryce Slinn

(Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 17/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-00705	ABTM16S-00706	ABTM16S-00707
Field Sample ID	65	66	67
Client Sample ID	65	66	67
Date Tested	16/02/2016	16/02/2016	16/02/2016
Time Tested	13:55	14:05	14:15
Location	Stage 4 Layer 3	Stage 4 Layer 3	Stage 4 Layer 3
	Grid L4 (E)	Grid K5	Grid J5
Field and Laboratory Data			
Depth of Test (mm)	275	275	275
Depth of Layer (mm)	300	300	300
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	19.2	22.0	21.3
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	1.97	1.94	2.01
Field Dry Density (t/m³)	1.65	1.59	1.66
Peak Converted Wet Density* (t/m³)	1.98	1.99	2.01
Optimum Moisture Content (%)	21.5	22.5	21.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	89.5	97.0	99.0
Moisture Variation (%)	2.0 dry	0.5 dry	0.5 dry
Hilf Density Ratio (%)	99.5	98.0	100.0
legend * adjusted for oversize material			

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00197

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
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Approved Signatory: Bryce Slinn (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 18/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data				
Sample ID	ABTM16S-00731	ABTM16S-00732		
Field Sample ID	68	69		
Client Sample ID	68	69		
Date Tested	17/02/2016	17/02/2016		
Time Tested	15:05	15:25		
Location	Stage 4	Stage 4		
	Layer 4	Layer 4		
	Grid N4	Grid M4		
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	18.0	21.9		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.01	1.88		
Field Dry Density (t/m³)	1.70	1.54		
Peak Converted Wet Density* (t/m³)	2.00	1.89		
Optimum Moisture Content (%)	20.0	25.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	89.5	86.0		
Moisture Variation (%)	2.0 dry	3.5 dry		
Hilf Density Ratio (%)	100.5	99.5		
legend * adjusted for oversize material				

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00200

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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by Sevandonston

Approved Signatory: G. Samaradiwakara (Associate Engineering Technician) NATA Accredited Laboratory Number:431

Date of Issue: 19/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-00747	ABTM16S-00748		
Field Sample ID	00070	00071		
-		****		
Client Sample ID	S-000747	S-000748		
Date Tested	18/02/2016	18/02/2016		
Time Tested	13:40	14:00		
Location	Stage 4	Stage 4		
	Layer 4	Layer 4		
	Grid M4	Grid L4		
	Retest of 69			
Field and Laboratory Data				
Depth of Test (mm)	275	275		
Depth of Layer (mm)	300	300		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	22.8	12.5		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.05	2.04		
Field Dry Density (t/m³)	1.67	1.81		
Peak Converted Wet Density* (t/m³)	1.95	2.08		
Optimum Moisture Content (%)	23.0	14.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	98.0	86.0		
Moisture Variation (%)	0.5 dry	2.0 dry		
Hilf Density Ratio (%)	105.0	98.0		
legend * adjusted for oversize material				



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00209

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 22/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

BTM16S-00778	ABTM16S-00793
BTM16S-00778	ARTM169 00703
	AD 1101103-00793
00073	00075
19/02/2016	19/02/2016
14:00	14:40
Stage 4	Stage 4
Layer 3	Layer 3
Grid M5	Grid L5
275	275
300	300
0	0
18.3	32.0
S 1289.2.1.1	AS 1289.2.1.1
1.89	1.82
1.60	1.38
1.93	1.91
21.5	34.0
Standard	Standard
86.0	93.5
3.0 dry	2.0 dry
98.0	95.5
	19/02/2016 14:00 Stage 4 Layer 3 Grid M5 275 300 0 18.3 S 1289.2.1.1 1.89 1.60 1.93 21.5 Standard 86.0 3.0 dry



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00218

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

K.B. Patel

Approved Signatory: Krushik Patel

(Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 24/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data		
Sample ID	ABTM16S-00819	
Field Sample ID	00075	
Date Tested	23/02/2016	
Time Tested	12:40	
Location	Stage 4	
	Layer 5	
	Grid N4	
Field and Laboratory Data		
Depth of Test (mm)	275	
Depth of Layer (mm)	300	
Oversize Wet (%)	0	
Field Moisture Content (%)	36.9	
Field Moisture Content Method	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.92	
Field Dry Density (t/m³)	1.40	
Peak Converted Wet Density* (t/m³)	1.93	
Optimum Moisture Content (%)	37.5	
Compactive Effort	Standard	
Moisture Ratio (%)	99.0	
Moisture Variation (%)	0.5 dry	
Hilf Density Ratio (%)	99.5	
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00231

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431 Date of Issue: 25/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data			
Sample ID	ABTM16S-00854	ABTM16S-00857	
Field Sample ID	00076	00077	
Date Tested	24/02/2016	24/02/2016	
Time Tested	14:15	14:35	
Location	Stage 4	Stage 4	
	Layer 4	Layer 4	
	Grid O2	Grid O4 (E)	
Soil Description	Light tan and brown coloured clay, silt and crushed rock	Light tan and brown coloured clay, silt and crushed rock	
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	20.0	21.6	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.04	1.82	
Field Dry Density (t/m³)	1.70	1.50	
Peak Converted Wet Density* (t/m³)	2.03	1.96	
Optimum Moisture Content (%)	20.0	22.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	99.0	96.5	
Moisture Variation (%)	0.0	1.0 dry	
Hilf Density Ratio (%)	100.5	93.0	
legend * adjusted for oversize material			

Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00246

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 26/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

		_
Sample Data		
Sample ID	ABTM16S-00888	
Field Sample ID	00078	
Date Tested	25/02/2016	
Time Tested	14:30	
Location	Stage 4	
	Layer 4	_
	Grid O2 (E)	Ī
	Retest of #77	
Soil Description	Clay, silt and crushed rock	
Field and Laboratory Data		
Depth of Test (mm)	275	
Depth of Layer (mm)	300	
Oversize Wet (%)	8	
Field Moisture Content (%)	15.0	
Field Moisture Content Method	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.00	
Field Dry Density (t/m³)	1.73	
Peak Converted Wet Density* (t/m³)	1.94	
Optimum Moisture Content (%)	17.5	Ī
Compactive Effort	Standard	
Moisture Ratio (%)	86.0	
Moisture Variation (%)	2.5 dry	
Hilf Density Ratio (%)	103.0	
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00253

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 29/02/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data		
Sample ID	ABTM16S-00909	
Field Sample ID	00079	
Date Tested	26/02/2016	
Time Tested	13:30	
Location	Stage 4	
	Layer 4	
	Grid O3	
Soil Description	Orange-brown clay, silt	
Field and Laboratory Data		
Depth of Test (mm)	275	
Depth of Layer (mm)	300	
Oversize Wet (%)	0	
Field Moisture Content (%)	19.5	
Field Moisture Content Method	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.93	
Field Dry Density (t/m³)	1.62	
Peak Converted Wet Density* (t/m³)	2.06	
Optimum Moisture Content (%)	19.5	
Compactive Effort	Standard	
Moisture Ratio (%)	100.0	
Moisture Variation (%)	0.0	
Hilf Density Ratio (%)	94.0	
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00261

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
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ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 1/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-00931	ABTM16S-00932	
Field Sample ID	00080	00081	
Client Sample ID	00080	00081	
Date Tested	29/02/2016	29/02/2016	
Time Tested	13:15	13:30	
Location	Stage 4	Stage 4	
	Layer 4	Layer 4	
	Grid O3	Grid O4	
	restest of Test #79		
Soil Description	Orange-brown silt, clay and crushed rock.	Orange-brown silt, clay and crushed rock.	
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	18.2	22.4	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.08	1.93	
Field Dry Density (t/m³)	1.76	1.58	
Peak Converted Wet Density* (t/m³)	2.00	1.83	
Optimum Moisture Content (%)	18.5	25.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	98.5	87.5	
Moisture Variation (%)	0.5 dry	3.0 dry	
Hilf Density Ratio (%)	104.0	105.5	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00273

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION NATA Accredited Laboratory Number:431

Accredited for compliance with ISO/IEC 17025.

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K.B. Patul

Approved Signatory: Krushik Patel (Senior Technician)

Date of Issue: 2/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements:

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data	
Sample ID	ABTM16S-00959
Field Sample ID	00084
Date Tested	1/03/2016
Time Tested	12:45
Location	Stage 4
	Layer 5
	Grid O2
	Box 760
Field and Laboratory Data	
Depth of Test (mm)	275
Depth of Layer (mm)	300
Oversize Wet (%)	0
Field Moisture Content (%)	22.6
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m³)	1.89
Field Dry Density (t/m³)	1.54
Peak Converted Wet Density* (t/m³)	1.80
Optimum Moisture Content (%)	26.0
Compactive Effort	Standard
Moisture Ratio (%)	87.5
Moisture Variation (%)	3.0 dry
Hilf Density Ratio (%)	105.0
legend * adjusted for oversize material	



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: __+61 3 8413 6999

Report No: HDR:ABTM16W00281

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION NATA Accredited Laboratory Number:431

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

Date of Issue: 3/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-00994	ABTM16S-00995	
Field Sample ID	83	84	
Client Sample ID	83	84	
Date Tested	2/03/2016	2/03/2016	
Location	Layer 4	Layer 4	
	Grid N5	Grid M5	
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	19.4	21.6	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.00	1.98	
Field Dry Density (t/m³)	1.67	1.63	
Peak Converted Wet Density* (t/m³)	2.01	2.06	
Optimum Moisture Content (%)	20.0	22.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	96.5	98.5	
Moisture Variation (%)	0.5 dry	0.5 dry	
Hilf Density Ratio (%)	99.5	96.0	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00295

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)
NATA Accredited Laboratory Number: 431

Date of Issue: 7/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data		
Sample ID	ABTM16S-01022	ABTM16S-01023
Field Sample ID	00085	00086
Client Sample ID	85	86
Date Tested	4/03/2016	4/03/2016
Time Tested	12:45	13:13
Location	Layer 5	Layer 5
	Grid N5	Grid L5
Field and Laboratory Data		
Depth of Test (mm)	225	225
Depth of Layer (mm)	250	250
Oversize Wet (%)	0	0
Field Moisture Content (%)	23.2	18.8
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	1.89	1.92
Field Dry Density (t/m³)	1.53	1.61
Peak Converted Wet Density* (t/m³)	1.98	2.01
Optimum Moisture Content (%)	23.5	19.5
Compactive Effort	Standard	Standard
Moisture Ratio (%)	98.0	97.0
Moisture Variation (%)	0.5 dry	0.5 dry
Hilf Density Ratio (%)	95.5	95.5
legend * adjusted for oversize material		



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00318

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W00318'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

Accredited for compliance with ISO/IEC 17025 The results of the tests, calibrations and/or measurements included in this document are traceable NATA WORLD RECOGNISED
ACCREDITATION

to Australian/national standards K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 8/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-01103	ABTM16S-01104	
Field Sample ID	87	88	
Client Sample ID	87	88	
Date Tested	7/03/2016	7/03/2016	
Time Tested	12:45	12:55	
Location	Layer 4	Layer 4	
	Grid L5	Grid N5	
Field and Laboratory Data			
Depth of Test (mm)	200	200	
Depth of Layer (mm)	225	225	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	12.7	22.0	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.07	1.98	
Field Dry Density (t/m³)	1.84	1.62	
Peak Converted Wet Density* (t/m³)	2.08	2.03	
Optimum Moisture Content (%)	13.5	21.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	93.0	102.0	
Moisture Variation (%)	1.0 dry	0.5 wet	
Hilf Density Ratio (%)	99.5	97.5	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00330

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

PO Box 40 Kew VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 10/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction, +-3% OMC (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-01135	ABTM16S-01136	
Field Sample ID	00089	00090	
Date Tested	9/03/2016	9/03/2016	
Time Tested	12:45	13:15	
Location	Grid N5	Grid N5	
	Layer 4	Layer 4	
Field and Laboratory Data			
Depth of Test (mm)	225	225	
Depth of Layer (mm)	250	250	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	22.1	19.3	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.88	1.92	
Field Dry Density (t/m³)	1.54	1.61	
Peak Converted Wet Density* (t/m³)	1.97	2.01	
Optimum Moisture Content (%)	23.5	20.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	95.0	97.5	
Moisture Variation (%)	1.0 dry	0.5 dry	
Hilf Density Ratio (%)	95.5	95.5	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00357

Issue No: 1

HILF Density Ratio Report

Client: COFFEY GEOTECHNICS PTY LTD (ABBOTSFORD)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 16/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-01240	ABTM16S-01241	
Field Sample ID	00091	00092	
Date Tested	15/03/2016	15/03/2016	
Time Tested	13:00	13:30	
Location	Grid N5	Grid L5	
	Layer 5	Layer 5	
Field and Laboratory Data			
Depth of Test (mm)	225	225	
Depth of Layer (mm)	250	250	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	19.7	20.7	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.99	1.99	
Field Dry Density (t/m³)	1.66	1.65	
Peak Converted Wet Density* (t/m³)	2.03	2.04	
Optimum Moisture Content (%)	20.0	21.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	99.5	99.0	
Moisture Variation (%)	0.0	0.0	
Hilf Density Ratio (%)	98.0	98.0	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00371

Issue No: 1

HILF Density Ratio Report

Client: COFFEY GEOTECHNICS PTY LTD (ABBOTSFORD)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 18/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM DRY DENSITY RATIO OF 100% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-01281	ABTM16S-01282	
Field Sample ID	0093	0094	
Date Tested	17/03/2016	17/03/2016	
Time Tested	09:30	10:00	
Location	Layer 3	Layer 3	
	Grid O4	Grid O5	
	Bucket No.: 605	Bucket No.: 764	
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	23.7	19.5	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.95	1.95	
Field Dry Density (t/m³)	1.58	1.63	
Peak Converted Wet Density* (t/m³)	2.00	1.93	
Optimum Moisture Content (%)	26.5	22.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	89.5	87.0	
Moisture Variation (%)	2.5 dry	3.0 dry	
Hilf Density Ratio (%)	98.0	101.0	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00389

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

WORLD RECOGNISED ACCREDITATION

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by Semmedication

Approved Signatory: G. Samaradiwakara (Associate Engineering Technician) NATA Accredited Laboratory Number:431

Date of Issue: 22/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements:

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data					
Sample ID	ABTM16S-01331	ABTM16S-01332			
Field Sample ID	95	96			
Date Tested	21/03/2016	21/03/2016			
Time Tested	11:00	11:30			
Location	layer 4	layer 4			
	grid O4	grid O5			
Field and Laboratory Data					
Depth of Test (mm)	275	275			
Depth of Layer (mm)	300	300			
Field Moisture Content (%)	18.7	19.1			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m³)	1.85	1.94			
Field Dry Density (t/m³)	1.56	1.63			
Peak Converted Wet Density* (t/m³)	1.86	1.92			
Optimum Moisture Content (%)	22.5	21.5			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	82.5	89.5			
Moisture Variation (%)	4.0 dry	2.0 dry			_
Hilf Density Ratio (%)	99.5	101.0			
legend * adjusted for oversize material					



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00393

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

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ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431 Date of Issue: 23/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements:

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material:

Sample Data			
Sample ID	ABTM16S-01340	ABTM16S-01342	
Field Sample ID	0097	0098	
Date Tested	22/03/2016	22/03/2016	
Location	Retest of 95	Grid O4	
	Grid O4	Layer 5	
	Layer 4		
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	19.7	19.2	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.87	2.01	
Field Dry Density (t/m³)	1.56	1.69	
Peak Converted Wet Density* (t/m³)	1.91	2.00	
Optimum Moisture Content (%)	22.5	19.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	86.5	99.0	
Moisture Variation (%)	3.0 dry	0.0	
Hilf Density Ratio (%)	98.0	101.0	
legend * adjusted for oversize material			



Coffey Testing Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 92 114 364 046 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W00425

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 24/03/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: Insitu

Sample Data			
Sample ID	ABTM16S-01434	ABTM16S-01435	
Field Sample ID	0099	00100	
Client Sample ID	99	100	
Date Tested	23/03/2016	23/03/2016	
Time Tested	12:45	13:00	
Location	Grid O4	Grid O3	
	Layer 5	Layer 4	
Field and Laboratory Data			
Depth of Test (mm)	275	275	
Depth of Layer (mm)	300	300	
AS Sieve Size (mm)	19.0	19.0	
Field Moisture Content (%)	21.7	19.9	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.86	1.88	
Field Dry Density (t/m³)	1.53	1.57	
Peak Converted Wet Density* (t/m³)	1.92	1.91	
Optimum Moisture Content (%)	22.0	20.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	98.5	99.5	
Moisture Variation (%)	0.5 dry	0.0	
Hilf Density Ratio (%)	97.0	98.5	
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01019

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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ACCREDITATION

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431 Date of Issue: 21/07/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-03484	ABTM16S-03485	
Field Sample ID	101	102	
Date Tested	20/07/2016	20/07/2016	
Location	Layer 4	Layer 3	
	Grid I5	Grid J5	
Soil Description	Silty Clay		
Field and Laboratory Data			
Depth of Test (mm)	100	100	
Depth of Layer (mm)	125	125	
AS Sieve Size (mm)	19.0	19.0	
Field Moisture Content (%)	23.1	18.9	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.13	1.94	
Field Dry Density (t/m³)	1.73	1.63	
Peak Converted Wet Density* (t/m³)	1.98	1.97	
Optimum Moisture Content (%)	23.0	20.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	100.0	95.5	
Moisture Variation (%)	0.0	1.0 dry	
Hilf Density Ratio (%)	107.5	98.5	
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01030

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

Date of Issue:

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-03506		
Field Sample ID	103	104	
Client Sample ID	103	104	
Date Tested	21/07/2016	21/07/2016	
Field and Laboratory Data			
Depth of Test (mm)	175	175	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Field Moisture Content (%)	17.8	21.6	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.00	1.94	
Field Dry Density (t/m³)	1.70	1.60	
Peak Converted Wet Density* (t/m³)	2.00	1.99	
Optimum Moisture Content (%)	18.5	23.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	97.5	92.5	
Moisture Variation (%)	0.5 dry	1.5 dry	
Hilf Density Ratio (%)	100.0	97.5	
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01043

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 27/07/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Stockpile

Material: General Fill

Sample Data				
Sample ID	ABTM16S-03563	ABTM16S-03564	ABTM16S-03565	
Field Sample ID	105	106	107	
Date Tested	26/07/2016	26/07/2016	26/07/2016	
Location	Grid J5	Grid J5	Grid K5	
	Layer 4	Layer 5	Layer 5	
Field and Laboratory Data				
Depth of Test (mm)	125	275	275	
Depth of Layer (mm)	150	300	300	
AS Sieve Size (mm)	19.0	19.0	19.0	
Field Moisture Content (%)	25.5	15.8	26.2	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.97	1.95	2.05	
Field Dry Density (t/m³)	1.57	1.68	1.62	
Peak Converted Wet Density* (t/m³)	1.90	1.91	1.97	
Optimum Moisture Content (%)	29.5	18.5	29.0	
Compactive Effort	Standard	Standard	Standard	
Moisture Ratio (%)	86.0	84.5	90.0	
Moisture Variation (%)	3.5 dry	3.0 dry	2.5 dry	
Hilf Density Ratio (%)	103.5	102.5	104.0	
legend * adjusted for oversize material				



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01045

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION

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Approved Signatory: Ketankumar Patel (Senior Geotechnician)

NATA Accredited Laboratory Number:431 Date of Issue: 28/07/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data			
Sample ID	ABTM16S-03568	ABTM16S-03569	ABTM16S-03570
Field Sample ID	108	109	110
Date Tested	27/07/2016	27/07/2016	27/07/2016
Location	Grid J6	Grid K6	Retest of 105
	Layer 3	Layer 3	Grid J5
			Layer 4
Field and Laboratory Data			
Depth of Test (mm)	275	275	225
Depth of Layer (mm)	300	300	250
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	2	0
Field Moisture Content (%)	12.7	20.3	20.5
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	1.99	2.10	2.06
Field Dry Density (t/m³)	1.77	1.74	1.71
Peak Converted Wet Density* (t/m³)	2.23	2.00	1.96
Optimum Moisture Content (%)	12.5	22.0	22.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	101.5	93.0	91.5
Moisture Variation (%)	0.0	1.5 dry	2.0 dry
Hilf Density Ratio (%)	89.0	105.0	105.0
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01051

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 29/07/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Material:

Sample Data		
Sample ID	ABTM16S-03583	
Field Sample ID	111	
Date Tested	28/07/2016	
Location	Retest of 108	
	Grid J6	
	Layer 3	
Field and Laboratory Data		
Depth of Test (mm)	275	
Depth of Layer (mm)	300	
AS Sieve Size (mm)	19.0	
Field Moisture Content (%)	16.8	
Field Moisture Content Method	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.96	
Field Dry Density (t/m³)	1.68	
Peak Converted Wet Density* (t/m³)	2.02	
Optimum Moisture Content (%)	15.0	
Compactive Effort	Standard	
Moisture Ratio (%)	111.0	
Moisture Variation (%)	1.5 wet	
Hilf Density Ratio (%)	97.5	
legend * adjusted for oversize material		



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01178

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431

Date of Issue: 17/08/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-03965	ABTM16S-03966	
Field Sample ID	00145	00146	
Client Sample ID	112	113	
Date Tested	16/08/2016	16/08/2016	
Time Tested	14:25	14:30	
Location	Grid N4	Grid O4	
	Layer 4	Layer 4	
Field and Laboratory Data			
Depth of Test (mm)	225	225	
Depth of Layer (mm)	250	250	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	25.1	27.4	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.01	2.00	
Field Dry Density (t/m³)	1.61	1.57	
Peak Converted Wet Density* (t/m³)	1.98	1.99	
Optimum Moisture Content (%)	25.0	26.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	101.0	106.0	
Moisture Variation (%)	0.0	1.5 wet	
Hilf Density Ratio (%)	101.5	100.5	
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01190

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal: SPIIRE/AMEX CORPORATION

Project No.: INFOABTM00385AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1

Lot No.: TRN:



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K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 18/08/2016

Sample Details

Location: Little Green Estate, Tarneit, Vic

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1

Sampling Method: Submitted by client

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-03993	ABTM16S-03994	
Field Sample ID	00201	00202	
Client Sample ID	114	115	
Date Tested	17/08/2016	17/08/2016	
Time Tested	11:55	12:10	
Location	Grid N 2	Grid O2	
	Layer 6	Layer 6	
Field and Laboratory Data			
Depth of Test (mm)	175	175	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	18.7	18.8	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.82	2.06	
Field Dry Density (t/m³)	1.53	1.73	
Peak Converted Wet Density* (t/m³)	2.04	2.06	
Optimum Moisture Content (%)	18.5	19.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	101.0	99.5	
Moisture Variation (%)	0.0	0.0	
Hilf Density Ratio (%)	89.0	100.0	
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01187

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal: SPIIRE/AMEX CORPORATION

Project No.: INFOABTM00385AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1

Lot No.: TRN:



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K.B. Patel

Approved Signatory: Krushik Patel

(Senior Technician)

NATA Accredited Laboratory Number:431

Date of Issue: 18/08/2016

Sample Details

Location: Little Green Estate, Tarneit, Vic

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1

Sampling Method: Submitted by client

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-03989	ABTM16S-03990	
Field Sample ID	00199	00200	
Client Sample ID	116	117	
Date Tested	17/08/2016	17/08/2016	
Time Tested	13:50	14:15	
Location	Grid O 4	Grid O 3	
	Layer 1	Layer 1	
Field and Laboratory Data			
Depth of Test (mm)	175	175	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	15.0	22.7	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.98	1.97	
Field Dry Density (t/m³)	1.72	1.60	
Peak Converted Wet Density* (t/m³)	2.02	1.98	
Optimum Moisture Content (%)	15.5	25.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	96.5	90.0	
Moisture Variation (%)	0.5 dry	2.5 dry	
Hilf Density Ratio (%)	98.0	99.5	
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01201

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01201'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data						
Sample ID	ABTM16S-04015	ABTM16S-04016	ABTM16S-04017	ABTM16S-04018	ABTM16S-04019	ABTM16S-04020
•	118		120	121	122	123
Field Sample ID		119				.=-
Date Tested	18/08/2016	18/08/2016	18/08/2016	18/08/2016	18/08/2016	18/08/2016
Time Tested	07:45	08:00	08:15	08:30	08:45	11:55
Location	0 4	O 3	O 5	N 2	02	N 2
	Layer 4	Layer 5	Layer 5	Layer 7	Layer 7	retest of 121
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	16.7	22.5	20.4	18.0	19.0	20.9
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	1.96	1.92	1.94	2.03	1.98	1.96
Field Dry Density (t/m³)	1.68	1.57	1.61	1.72	1.66	1.62
Peak Converted Wet Density* (t/m³)	2.02	2.00	2.04	2.01	1.98	1.96
Optimum Moisture Content (%)	17.5	23.0	21.0	18.0	21.0	23.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	96.5	99.0	98.0	98.5	91.5	91.5
Moisture Variation (%)	0.5 dry	0.5 dry	0.5 dry	0.5 dry	1.5 dry	2.0 dry
Hilf Density Ratio (%)	97.0	96.0	95.0	101.0	99.5	100.0
legend * adjusted for oversize material						



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Report No: HDR:ABTM16W01201

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01201'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician)
NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data						
Sample ID	ABTM16S-04021	ABTM16S-04022	ABTM16S-04023	ABTM16S-04024	ABTM16S-04025	
Field Sample ID	124	125	126	127	128	
Date Tested	18/08/2016	18/08/2016	18/08/2016	18/08/2016	18/08/2016	
Time Tested	02:00	02:15	02:30	02:50	03:10	
Location	O 3	O 4	O 5	N 2	O 2	
	Layer 6	Layer 5	Layer 6	Layer 8	Layer 8	
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	0	0	0	0	
Field Moisture Content (%)	23.3	25.1	21.7	18.7	17.9	
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	1.96	1.94	1.92	1.93	1.90	
Field Dry Density (t/m³)	1.59	1.55	1.58	1.63	1.61	
Peak Converted Wet Density* (t/m³)	2.02	2.01	2.03	1.93	1.94	
Optimum Moisture Content (%)	23.0	24.5	22.0	19.5	22.0	
Compactive Effort	Standard	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	101.0	101.5	98.0	95.0	80.5	
Moisture Variation (%)	0.0	0.5 wet	0.5 dry	1.0 dry	4.0 dry	
Hilf Density Ratio (%)	97.0	96.5	95.0	100.0	98.0	
legend * adjusted for oversize material						



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Report No: HDR:ABTM16W01225

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
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ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

K.B. Patel

Approved Signatory: Krushik Patel (Senior Technician) NATA Accredited Laboratory Number:431 Date of Issue: 24/08/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1

Sampling Method:

Source: On Site

Material: General Fill

Sample Data					
Sample ID	ABTM16S-04047	ABTM16S-04070	ABTM16S-04071	ABTM16S-04072	ABTM16S-04073
Field Sample ID	00158	00159	00160	00161	00162
Client Sample ID	129	130	131	132	133
Date Tested	23/08/2016	23/08/2016	23/08/2016	23/08/2016	23/08/2016
Time Tested	01:15	01:30	01:40	01:55	02:10
Location	O5 West	O4 West	O3 West	O3 East	O4 East
	Layer 7	Layer 6	Layer 7	Layer 4	Layer 4
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	37.5	19.0	19.0
Oversize Wet (%)			20		
Field Moisture Content (%)	24.6	17.7	15.9	26.7	24.9
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.97	1.92	2.00	1.90	1.92
Field Dry Density (t/m³)	1.58	1.63	1.73	1.50	1.53
Peak Converted Wet Density* (t/m³)	1.85	2.02	2.04	1.94	1.88
Optimum Moisture Content (%)	27.5	18.0	16.0	25.0	28.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	89.0	99.5	100.5	106.5	88.5
Moisture Variation (%)	3.0 dry	0.0	0.0	1.5 wet	3.0 dry
Hilf Density Ratio (%)	106.5	95.0	98.0	98.0	102.0
legend * adjusted for oversize material					



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Report No: HDR:ABTM16W01243

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01243'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data						
Sample ID	ABTM16S-04133	ABTM16S-04134	ABTM16S-04135	ABTM16S-04136	ABTM16S-04137	ABTM16S-04138
Field Sample ID	00172	00173	00174	00175	00176	00177
Client Sample ID	134	135	136	137	138	139
Date Tested	24/08/2016	24/08/2016	24/08/2016	24/08/2016	24/08/2016	24/08/2016
Time Tested	09:50	10:05	10:30	10:45	11:10	11:30
Location	N3 North	N3 South	N2	O3 East	O4 East	O5 East
	Layer 5	Layer 5	Layer 8	Layer 5	Layer 5	Layer 5
			Retest 128			
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	23.2	15.2	26.7	26.9	26.3	22.4
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	2.02	2.04	1.85	1.88	1.96	1.84
Field Dry Density (t/m³)	1.64	1.77	1.46	1.48	1.55	1.50
Peak Converted Wet Density* (t/m³)	2.05	2.09	1.97	2.00	1.91	1.97
Optimum Moisture Content (%)	22.0	15.0	25.0	26.5	28.5	23.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	104.5	101.0	106.0	101.5	92.5	98.0
Moisture Variation (%)	1.0 wet	0.0	1.5 wet	0.5 wet	2.0 dry	0.5 dry
Hilf Density Ratio (%)	98.5	98.0	94.0	94.0	102.5	93.5
legend * adjusted for oversize material						



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Report No: HDR:ABTM16W01252

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01252'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
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ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data			
Sample ID	ABTM16S-04164	ABTM16S-04165	ABTM16S-04166
Field Sample ID	00181	00182	00183
Client Sample ID	143	144	145
Date Tested	25/08/2016	25/08/2016	25/08/2016
Time Tested	09:00	10:00	10:45
Location	O2	N3 South	N3 North
	Layer 10	Layer 6	Layer 6
Field and Laboratory Data			
Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
Oversize Wet (%)	0	3	9
Field Moisture Content (%)	30.5	25.3	17.0
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m³)	1.88	1.99	1.92
Field Dry Density (t/m³)	1.44	1.58	1.64
Peak Converted Wet Density* (t/m³)	1.87	1.89	1.95
Optimum Moisture Content (%)	33.5	27.5	19.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	91.0	92.0	87.0
Moisture Variation (%)	2.5 dry	2.0 dry	2.5 dry
Hilf Density Ratio (%)	100.5	105.0	99.0
legend * adjusted for oversize material			



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01275

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01275'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 **Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data						
Sample ID	ABTM16S-04204	ABTM16S-04205	ABTM16S-04206	ABTM16S-04207	ABTM16S-04218	ABTM16S-04219
Field Sample ID	00184	00185	00187	00188	00189	00190
Client Sample ID	146	147	148	149	150	151
Date Tested	26/08/2016	26/08/2016	26/08/2016	26/08/2016	26/08/2016	26/08/2016
Time Tested	08:30	08:45	09:10	12:45	15:15	15:30
Location	O3 East	O5 East	N2	N2	J6	16
	Retest 137	Retest 139	Retest 136	Layer 10	Layer 1	Layer1
	Layer 5	Layer 5	Layer 9			
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	23.9	19.8	19.8	23.4	22.3	20.6
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	1.98	1.93	2.06	1.99	1.98	1.97
Field Dry Density (t/m³)	1.60	1.61	1.72	1.62	1.62	1.64
Peak Converted Wet Density* (t/m³)	1.87	1.91	1.96	1.89	1.90	1.96
Optimum Moisture Content (%)	25.0	22.5	22.0	24.0	25.0	22.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	96.5	88.0	89.0	97.0	89.0	90.5
Moisture Variation (%)	1.0 dry	2.5 dry	2.5 dry	1.0 dry	2.5 dry	2.0 dry
Hilf Density Ratio (%)	106.0	101.0	104.5	105.5	104.0	101.0
legend * adjusted for oversize material						



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Report No: HDR:ABTM16W01280

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01280'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data					
Sample ID	ABTM16S-04225	ABTM16S-04226	ABTM16S-04227	ABTM16S-04228	
Field Sample ID	00191	00192	00193	00194	
Client Sample ID	152	153	154	155	
Date Tested	29/08/2016	29/08/2016	29/08/2016	29/08/2016	
Time Tested	09:30	14:15	15:10	15:30	
Location	K6	16	J6	16	
	Layer 1	Layer 2	Layer 3	Layer 3	
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	10	8	13	
Field Moisture Content (%)	21.3	19.8	18.3	17.3	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.88	1.98	1.95	2.03	
Field Dry Density (t/m³)	1.55	1.65	1.65	1.73	
Peak Converted Wet Density* (t/m³)	1.82	1.93	1.99	2.01	
Optimum Moisture Content (%)	26.5	23.5	21.0	18.0	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	81.0	85.0	87.0	95.5	
Moisture Variation (%)	5.0 dry	3.0 dry	2.5 dry	0.5 dry	
Hilf Density Ratio (%)	103.5	103.0	98.0	101.0	
legend * adjusted for oversize material					



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01283

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01283'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

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

The results of the tests, calibrations and/or

measurements included in this document are traceable to Australian/national standards

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data						
Sample ID	ABTM16S-04235	ABTM16S-04236	ABTM16S-04237	ABTM16S-04238	ABTM16S-04239	ABTM16S-04240
Field Sample ID	00195	00196	00197	00198	00199	00200
Client Sample ID	156	157	158	159	160	161
Date Tested	30/08/2016	30/08/2016	30/08/2016	30/08/2016	30/08/2016	30/08/2016
Time Tested	08:40	08:55	09:10	10:45	11:00	13:45
Location	N4	N3 North	N3 South	16	J6	K6
	Layer 4	Layer 6	Layer 6	Layer 4	Layer 4	Retest 152
						Layer 1
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	4	0	10	5	0
Field Moisture Content (%)	20.3	21.4	16.2	20.6	22.1	23.1
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	1.96	1.98	1.99	1.89	1.91	2.05
Field Dry Density (t/m³)	1.63	1.63	1.71	1.57	1.56	1.66
Peak Converted Wet Density* (t/m³)	1.95	1.98	1.97	1.91	2.03	2.00
Optimum Moisture Content (%)	23.0	24.0	19.0	24.0	21.5	23.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	87.5	88.5	85.5	86.0	102.5	99.0
Moisture Variation (%)	3.0 dry	2.5 dry	2.5 dry	3.0 dry	0.5 wet	0.0
Hilf Density Ratio (%)	100.5	100.0	101.0	99.0	94.0	102.5
legend * adjusted for oversize material						



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01283

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01283'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

measurements included in this document are traceable

Accredited for compliance with ISO/IEC 17025

The results of the tests, calibrations and/or to Australian/national standards

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431 Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

ABTM16S-04241	ABTM16S-04274				
00201	00202				
162	163				
30/08/2016	30/08/2016				
14:30	14:45				
J6	16				
Layer 5	Layer 5				
175	175				
200	200				
19.0	19.0				
14	4				
23.5	17.2				
AS 1289.2.1.1	AS 1289.2.1.1				
2.01	1.93				
1.63	1.65				
2.03	1.96				
26.0	21.0				
Standard	Standard				
90.0	82.5				
2.0 dry	3.5 dry				
99.5	98.5				
	00201 162 30/08/2016 14:30 J6 Layer 5 175 200 19.0 14 23.5 AS 1289.2.1.1 2.01 1.63 2.03 26.0 Standard 90.0 2.0 dry	00201 00202 162 163 30/08/2016 30/08/2016 14:30 14:45 J6 I6 Layer 5 Layer 5 175 200 200 19.0 14 4 23.5 17.2 AS 1289.2.1.1 AS 1289.2.1.1 2.01 1.93 1.63 1.65 2.03 1.96 26.0 21.0 Standard Standard 90.0 82.5 2.0 dry 3.5 dry	00201 00202 162 163 30/08/2016 30/08/2016 14:30 14:45 J6 I6 Layer 5 Layer 5 175 200 19.0 19.0 14 4 23.5 17.2 AS 1289.2.1.1 2.01 1.93 1.63 1.65 2.03 1.96 26.0 21.0 Standard Standard 90.0 82.5 2.0 dry 3.5 dry	00201 00202 162 163 30/08/2016 30/08/2016 14:30 14:45 J6 I6 Layer 5 Layer 5 200 200 19.0 19.0 14 4 23.5 17.2 AS 1289.2.1.1 2.01 1.93 1.63 1.65 2.03 1.96 26.0 21.0 Standard Standard 90.0 82.5 2.0 dry 3.5 dry	00201 00202 162 163 30/08/2016 30/08/2016 14:30 14:45 J6 I6 Layer 5 Layer 5 175 200 19.0 19.0 14 4 23.5 17.2 AS 1289.2.1.1 AS 1289.2.1.1 2.01 1.93 1.63 1.65 2.03 1.96 26.0 21.0 Standard Standard 90.0 82.5 2.0 dry 3.5 dry



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01299

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01299'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

The results of the tests, calibrations and/or

Accredited for compliance with ISO/IEC 17025

measurements included in this document are traceable to Australian/national standards

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data					
Sample ID	ABTM16S-04303	ABTM16S-04304	ABTM16S-04305	ABTM16S-04306	
Field Sample ID	00204	00205	00206	00207	
Client Sample ID	164	165	166	167	
Date Tested	31/08/2016	31/08/2016	31/08/2016	31/08/2016	
Time Tested	08:15	08:45	09:10	09:30	
Location	16	J6	K6	K6	
	Layer 6	Layer 6	Resample of 163	Layer 2	
			Layer 1		
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	8	11	6	
Field Moisture Content (%)	20.7	21.5	26.6	17.8	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.88	1.87	1.91	1.89	
Field Dry Density (t/m³)	1.56	1.54	1.50	1.61	
Peak Converted Wet Density* (t/m³)	1.93	1.97	2.01	1.98	
Optimum Moisture Content (%)	23.0	22.0	26.5	20.0	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	90.5	98.5	100.5	90.0	
Moisture Variation (%)	2.0 dry	0.5 dry	0.0	2.0 dry	
Hilf Density Ratio (%)	98.0	95.0	95.0	96.0	
legend * adjusted for oversize material					



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01316

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01316'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

WORLD RECOGNISED ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic

(Senior Geotechnician)
NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data					
Sample ID	ABTM16S-04405	ABTM16S-04406	ABTM16S-04407	ABTM16S-04408	
Field Sample ID	00211	00212	00213	00214	
Client Sample ID	168	169	170	171	
Date Tested	1/09/2016	1/09/2016	1/09/2016	1/09/2016	
Time Tested	07:45	08:00	08:15	08:30	
Location	16	J6	J6	K6	
	Layer 7	Retest of 161	Layer 7	Layer 3	
		Layer 4			
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	
Oversize Wet (%)	0	0	0	0	
Field Moisture Content (%)	14.8	11.9	23.4	24.6	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.06	2.00	1.98	1.96	
Field Dry Density (t/m³)	1.79	1.79	1.61	1.57	
Peak Converted Wet Density* (t/m³)	1.92	1.91	2.02	1.97	
Optimum Moisture Content (%)	19.0	12.0	23.0	26.0	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	77.5	98.0	102.5	94.0	
Moisture Variation (%)	4.0 dry	0.0	0.5 wet	1.5 dry	
Hilf Density Ratio (%)	107.0	105.0	98.5	99.5	
legend * adjusted for oversize material					



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01340

Accredited for compliance with ISO/IEC 17025

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01340'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Marko Tomasevic

(Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data					
Sample ID	ABTM16S-04452	ABTM16S-04453	ABTM16S-04454	ABTM16S-04455	
Field Sample ID	00215	00216	00217	00218	
Client Sample ID	172	173	174	175	
Date Tested	6/09/2016	6/09/2016	6/09/2016	6/09/2016	
Time Tested	10:45	12:50	13:05	13:30	
Location	16	K6	J6	16	
	Retest #168	Layer 4	Layer 8	Layer 8	
	Layer 7				
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	
Oversize Wet (%)	2	11	0	0	
Field Moisture Content (%)	20.6	24.3	17.2	17.9	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.06	2.00	2.01	1.99	
Field Dry Density (t/m³)	1.71	1.61	1.71	1.69	
Peak Converted Wet Density* (t/m³)	1.97	1.97	1.94	1.94	
Optimum Moisture Content (%)	23.0	26.5	21.5	21.0	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	90.0	92.5	80.0	84.5	
Moisture Variation (%)	2.0 dry	1.5 dry	4.0 dry	3.0 dry	
Hilf Density Ratio (%)	105.0	101.5	103.5	102.5	
legend * adjusted for oversize material					



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Report No: HDR:ABTM16W01367

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01367'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-04514	ABTM16S-04517		
Field Sample ID	00221	00224		
Client Sample ID	176	177		
Date Tested	8/09/2016	8/09/2016		
Time Tested	14:30	15:15		
Location	J6 Retest of #174	M6 East		
	Layer 8	Layer 1		
Field and Laboratory Data				
Depth of Test (mm)	175	175		
Depth of Layer (mm)	200	200		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	18.1	21.7		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.05	1.93		
Field Dry Density (t/m³)	1.74	1.59		
Peak Converted Wet Density* (t/m³)	2.06	1.91		
Optimum Moisture Content (%)	18.0	22.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	99.0	97.5		
Moisture Variation (%)	0.0	0.5 dry		
Hilf Density Ratio (%)	99.5	101.0		
legend * adjusted for oversize material				



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01418

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australia (national standards

to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 20/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data				
Sample ID	ABTM16S-04623	ABTM16S-04624		
Field Sample ID	178	179		
Date Tested	19/09/2016	19/09/2016		
Time Tested	14:30	15:00		
Location	L6	M6		
	Layer 1	Layer 1		
Field and Laboratory Data				
Depth of Test (mm)	175	175		
Depth of Layer (mm)	200	200		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	4	7		
Field Moisture Content (%)	26.5	23.8		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	1.96	1.97		
Field Dry Density (t/m³)	1.55	1.59		
Peak Converted Wet Density* (t/m³)	1.95	1.98		
Optimum Moisture Content (%)	25.5	23.0		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	103.5	103.5		
Moisture Variation (%)	1.0 wet	0.5 wet		
Hilf Density Ratio (%)	100.5	99.5		
legend * adjusted for oversize material				



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01420

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION Date of Issue: 21/09/2016

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Marko Tomasevic

(Senior Geotechnician) NATA Accredited Laboratory Number:431

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data				
Sample ID	ABTM16S-04627	ABTM16S-04628		
Field Sample ID	00226	00227		
Client Sample ID	180	181		
Date Tested	20/09/2016	20/09/2016		
Time Tested	14:20	15:00		
Location	N6	O6		
	Layer 1	Layer 1		
Field and Laboratory Data				
Depth of Test (mm)	175	175		
Depth of Layer (mm)	200	200		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	7	6		
Field Moisture Content (%)	18.7	18.2		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	1.93	1.90		
Field Dry Density (t/m³)	1.63	1.61		
Peak Converted Wet Density* (t/m³)	1.97	1.99		
Optimum Moisture Content (%)	21.5	20.0		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	87.0	90.5		
Moisture Variation (%)	2.5 dry	2.0 dry		
Hilf Density Ratio (%)	98.5	95.5		
legend * adjusted for oversize material				



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01427

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

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Approved Signatory: Marko Tomasevic (Senior Geotechnician) NATA Accredited Laboratory Number:431

Date of Issue: 23/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data						
Sample ID	ABTM16S-04652	ABTM16S-04653	ABTM16S-04654	ABTM16S-04655	ABTM16S-04656	
Field Sample ID	00230	00231	00232	00233	00234	
Client Sample ID	182	183	184	185	186	
Date Tested	22/09/2016	22/09/2016	22/09/2016	22/09/2016	22/09/2016	
Time Tested	11:50	12:30	12:45	14:15	14:30	
Location	L5 South	M4 North	O6	L6	M6	
	Layer 2	Layer 5	Layer 2	Layer 2	Layer 2	
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	0	4	9	0	
Field Moisture Content (%)	23.5	18.8	16.2	22.4	20.3	
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	2.03	2.03	1.93	1.94	2.00	
Field Dry Density (t/m³)	1.64	1.71	1.66	1.58	1.66	
Peak Converted Wet Density* (t/m³)	2.01	2.03	1.98	2.02	1.91	
Optimum Moisture Content (%)	23.0	17.5	18.0	22.0	22.5	
Compactive Effort	Standard	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	102.5	108.0	90.0	102.0	91.0	
Moisture Variation (%)	0.5 wet	1.5 wet	2.0 dry	0.5 wet	2.0 dry	
Hilf Density Ratio (%)	101.0	99.5	97.0	95.5	105.0	
legend * adjusted for oversize material						



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01438

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: NATA WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431 Date of Issue: 26/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data						
Sample ID	ABTM16S-04673	ABTM16S-04674	ABTM16S-04675	ABTM16S-04676	ABTM16S-04677	
Field Sample ID	00236	00237	00238	00239	00240	
Client Sample ID	187	188	189	190	191	
Date Tested	23/09/2016	23/09/2016	23/09/2016	23/09/2016	23/09/2016	
Time Tested	12:15	12:30	12:45	13:00	13:15	
Location	L5 South	M4 North	O6	O6	N6	
	Layer 3	Layer 6	Layer 4	Layer 3	Layer 2	
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	
Oversize Wet (%)	6	3	0	0	0	
Field Moisture Content (%)	23.4	23.5	21.4	19.8	16.3	
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	1.93	1.96	2.02	2.00	2.05	
Field Dry Density (t/m³)	1.56	1.59	1.66	1.67	1.76	
Peak Converted Wet Density* (t/m³)		1.97	1.93	1.94	1.93	
Optimum Moisture Content (%)	22.5	23.5	23.5	20.5	19.5	
Compactive Effort	Standard	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	104.0	99.5	90.0	98.0	84.5	
Moisture Variation (%)	1.0 wet	0.0	2.0 dry	0.5 dry	3.0 dry	
Hilf Density Ratio (%)	98.5	99.5	104.5	103.0	106.5	
legend * adjusted for oversize material						



Coffey Corporate Services Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01449

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 27/09/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data					
Sample ID	ABTM16S-04709	ABTM16S-04710	ABTM16S-04711	ABTM16S-04712	
Field Sample ID	00241	00242	00243	00244	
Client Sample ID	192	193	194	195	
Date Tested	26/09/2016	26/09/2016	26/09/2016	26/09/2016	
Time Tested	14:20	14:35	14:50	15:05	
Location	N6	M6	L6	O6	
	Layer 3	Layer 3	Layer 3	Layer 5	
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	0	0	0	
Field Moisture Content (%)	22.0	21.8	20.4	22.0	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.98	1.94	2.02	1.91	
Field Dry Density (t/m³)	1.62	1.59	1.68	1.56	
Peak Converted Wet Density* (t/m³)	1.99	2.08	1.95	1.98	
Optimum Moisture Content (%)	22.0	19.5	21.0	22.5	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	99.0	112.5	96.0	98.0	
Moisture Variation (%)	0.0	2.5 wet	1.0 dry	0.5 dry	
Hilf Density Ratio (%)	99.0	93.5	103.5	96.0	
legend * adjusted for oversize material					



Coffey Services Australia Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01538

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA

WORLD RECOGNISED

ACCREDITATION

Accredited for compliance with ISO/IEC 17025 - Testing.

The results of the tests, calibrations and/or measurements included in this document are traceable

Approved Signatory: Shaun Price (Senior Geotechnical Technician) NATA Accredited Laboratory Number:431

Date of Issue: 23/03/2017

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

0 I D (
Sample Data				
Sample ID	ABTM16S-04909	ABTM16S-04910	ABTM16S-04911	
Field Sample ID	00255	00256	00257	
Client Sample ID	196	197	198	
Date Tested	12/10/2016	12/10/2016	12/10/2016	
Time Tested	08:15	08:30	08:45	
Location	N6	M6	L6	
	Layer 4	Layer 4	Layer 4	
Field and Laboratory Data				
Depth of Test (mm)	175	175	175	
Depth of Layer (mm)	200	200	200	
Oversize Wet (%)	0	0	0	
Field Moisture Content (%)	22.2	23.6	19.0	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.98	1.98	1.97	
Field Dry Density (t/m³)	1.62	1.60	1.65	
Peak Converted Wet Density* (t/m³)	1.92	1.88	1.83	
Optimum Moisture Content (%)	24.5	26.5	25.0	
Compactive Effort	Standard	Standard	Standard	
Moisture Ratio (%)	90.0	89.5	76.5	
Moisture Variation (%)	2.5 dry	2.5 dry	5.5 dry	
Hilf Density Ratio (%)	103.0	105.5	108.0	
legend * adjusted for oversize material				



Coffey Services Australia Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01541

Issue No: 2

This report replaces all previous issues of report no 'HDR:ABTM16W01541'.

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 18/10/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 **Sampling Method:** AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data						
Sample ID	ABTM16S-04922	ABTM16S-04923	ABTM16S-04924	ABTM16S-04925	ABTM16S-04926	ABTM16S-04927
Field Sample ID	00258	00259	00260	00261	00262	00263
Client Sample ID	199	200	201	202	203	204
Date Tested	13/10/2016	13/10/2016	13/10/2016	13/10/2016	13/10/2016	13/10/2016
Time Tested	09:15	09:30	09:45	15:00	15:15	15:30
Location	N5	M5	L5	M6-East	M6-West	L6
	Layer 6	Layer 6	Layer 6	Layer 5	Layer 3	Layer 5
					Retest of #193	
Field and Laboratory Data						
Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	20.3	20.9	21.6	22.0	21.4	21.2
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.98	1.97	1.98	2.01	2.01	1.98
Field Dry Density (t/m³)	1.64	1.63	1.63	1.65	1.65	1.64
Peak Converted Wet Density* (t/m³)	2.00	1.93	1.92	1.86	1.88	1.83
Optimum Moisture Content (%)	22.5	23.0	24.0	25.0	24.5	26.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	89.5	90.0	90.5	88.0	87.5	82.5
Moisture Variation (%)	2.5 dry	2.0 dry	2.0 dry	3.0 dry	3.0 dry	4.5 dry
Hilf Density Ratio (%)	98.5	102.5	103.0	108.5	107.0	108.0
legend * adjusted for oversize material						



Coffey Services Australia Pty Ltd 3G Marine Parade Abbotsford VIC 3067 ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01543

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

Project No.: INFOABTM00532AA

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN:

NATA
WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Approved Signatory: Marko Tomasevic

(Senior Geotechnician)
NATA Accredited Laboratory Number:431

Date of Issue: 18/10/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site

Material: General Fill

Sample Data					
Sample ID	ABTM16S-04934	ABTM16S-04935	ABTM16S-04936	ABTM16S-04937	
Field Sample ID	00264	00265	00266	00267	
Client Sample ID	205	206	207	208	
Date Tested	14/10/2016	14/10/2016	14/10/2016	14/10/2016	
Time Tested	07:30	07:45	08:00	14:30	
Location	N5	M5	L5	N6 South	
	Layer 7	Layer 7	Layer 7	Layer 7	
Field and Laboratory Data					
Depth of Test (mm)	175	175	175	175	
Depth of Layer (mm)	200	200	200	200	
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	
Oversize Wet (%)	0	0	0	0	
Field Moisture Content (%)	23.1	24.3	27.3	22.7	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	1.97	2.04	1.99	2.01	
Field Dry Density (t/m³)	1.60	1.64	1.56	1.64	
Peak Converted Wet Density* (t/m³)	1.89	1.94	1.87	1.93	
Optimum Moisture Content (%)	25.5	27.0	30.0	25.0	
Compactive Effort	Standard	Standard	Standard	Standard	
Moisture Ratio (%)	91.0	90.0	91.5	90.0	
Moisture Variation (%)	2.0 dry	2.5 dry	2.5 dry	2.5 dry	
Hilf Density Ratio (%)	104.0	105.0	106.0	104.5	
legend * adjusted for oversize material					



Coffey Services Australia Pty Ltd 3G Marine Parade Abbotsford VIC 3067

ABN 55 139 460 521 Phone: +61 3 8413 6900 Fax: +61 3 8413 6999

Report No: HDR:ABTM16W01557

Issue No: 1

HILF Density Ratio Report

Client: Coffey Geotechnics Pty Ltd (Abbotsford)

Level 1, 436 Johnston Street Abbotsford VIC 3101

Principal:

INFOABTM00532AA Project No.:

Project Name: GEOTABTF09878AA - Little Green Estate - Level 1 - Stage 4

Lot No.: TRN: WORLD RECOGNISED
ACCREDITATION

Accredited for compliance with ISO/IEC 17025.

The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards

Approved Signatory: Marko Tomasevic (Senior Geotechnician)

NATA Accredited Laboratory Number:431

Date of Issue: 19/10/2016

Sample Details

Location: Little Green, VIC

Client Request ID:

Specification Requirements: MINIMUM HILF DENSITY RATIO OF 95% of Standard Compaction (as advised by client)

Field Test procedures: AS 1289.5.8.1

Laboratory Test procedures: AS 1289.5.7.1, AS 1289.2.1.1 Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: On Site Material: General Fill

Sample Data				
Sample ID	ABTM16S-04967	ABTM16S-04968		
Field Sample ID	00270	00271		
Client Sample ID	209	210		
Date Tested	18/10/2016	18/10/2016		
Time Tested	09:30	09:45		
Location	L5 North-East	L5 South-East		
	Layer 7	Layer 7		
Field and Laboratory Data				
Depth of Test (mm)	175	175		
Depth of Layer (mm)	200	200		
AS Sieve Size (mm)	19.0	19.0		
Oversize Wet (%)	0	0		
Field Moisture Content (%)	20.7	17.5		
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1		
Field Wet Density (t/m³)	2.09	2.04		
Field Dry Density (t/m³)	1.73	1.74		
Peak Converted Wet Density* (t/m³)	2.08	2.03		
Optimum Moisture Content (%)	21.0	17.5		
Compactive Effort	Standard	Standard		
Moisture Ratio (%)	98.0	100.5		
Moisture Variation (%)	0.5 dry	0.0		
Hilf Density Ratio (%)	100.5	101.0		
legend * adjusted for oversize material				

BY NUCLEAR GAUGE METHOD



Terrafirma Laboratories - Deer Park Laboratory

Factory 6 / 22-24 Westwood Drive, Deer Park Phone No: 8348 5596

Client Coffey Services Australia Pty Ltd

Client address 436 Johnston St, Abbotsford, 3067

Project GEOTABTF09878AA Little Green Estate

Location Tarniet

Feature	Lot Fill

Layer thickness (mm) 200

report No	9227-1R
date of issue	24-Oct-2016
tested by	JN, WF
time	9.15 AM
date	21-Oct-2016
checked by	RS

Test No		210	211	212	213	
location Lot No/ Line No		N5	N5	O6	O6	
Sampling procedures AS1289.1.1,1.2.1-Clause 6	i.4(b)					
depth from F.S.L.	m	Layer 9	Layer 9	Layer 6	Layer 6	
measurement depth	mm	175	175	175	175	
field wet density	t/m³	2.01	1.97	1.98	1.98	
field dry density	t/m3	1.70	1.63	1.63	1.63	
field moisture content	%	18.4	20.7	21.3	21.3	
laboratory compaction procedure AS1289 5	.7.1					
compactive effort		standard	standard	standard	standard	
oversize material retained on AS sieve	mm	19.0	19.0	19.0	19.0	
percent of oversize material	wet	4	4	6	3	
peak converted wet density	t/m³	-	-	-	-	
adjusted peak converted wet density	t/m ³	2.05	1.98	2.04	2.01	
moisture variation from OMC (-dry,+wet)%		0.0	-1.0	0.5	-0.5	
Moisture ratio	%	100.0	95.5	102.5	97.0	
Hilf density ratio (R _{HD})	%	98.0	99.5	96.5	98.5	

material description

Silty CLAY



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian national standards. requirements.

Accredited for compliance with ISO/IEC 17025

RS

Approved Signature

BY NUCLEAR GAUGE METHOD



Terrafirma Laboratories - Deer Park Laboratory

Factory 6 / 22-24 Westwood Drive, Deer Park Phone No: 8348 5596

Client Coffey Services Australia Pty Ltd

Client address 436 Johnston St, Abbotsford, 3067
Project GEOTABTF09878AA Little Green Estate

Location Tarniet

Feature	Block Fill

Layer thickness (mm) 300

report No	9227-2
date of issue	27-Feb-2017
tested by	WH
time	ALL DAY
date	22-Feb-2017
checked by	RS

Test No		RW1	RW2	RW3	RW4	
location		05 North	05 South	4	3	
Sampling procedures AS1289.1.1,1.2.1-Clause 6.	.4(b)					
depth from F.S.L.	m	Layer 1	Layer 1	Layer 1	Layer 1	
measurement depth	mm	275	275	275	275	
field wet density	t/m ³	1.92	1.92	1.93	1.92	
field dry density	t/m3	1.63	1.60	1.60	1.52	
field moisture content	%	17.5	19.6	20.7	26.7	
laboratory compaction procedure AS1289 5.	7.1					
compactive effort		standard	standard	standard	standard	
oversize material retained on AS sieve	mm	19.0	19.0	19.0	19.0	
percent of oversize material	wet	4	6	0	4	
peak converted wet density	t/m ³	-	-	1.95	-	
adjusted peak converted wet density	t/m ³	1.98	2.00	-	1.92	
moisture variation from OMC (-dry,+wet)%		-0.5	-1.5	-0.5	-0.5	
Moisture ratio	%	98.0	91.0	97.0	97.5	
Hilf density ratio (R _{HD})	%	97.0	95.5	99.0	100.0	

material description

Silty CLAY



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Accredited for compliance with ISO/IEC 17025

RS

Approved Signature

BY NUCLEAR GAUGE METHOD



Terrafirma Laboratories - Deer Park Laboratory

Factory 6 / 22-24 Westwood Drive, Deer Park Phone No: 8348 5596

Client Coffey Services Australia Pty Ltd
Client address 436 Johnston St, Abbotsford, 3067

Project GEOTABTF09878AA Little Green Estate

Location Tarniet

Feature	Block F	ill		
Layer thickness (mm)	30	00		

report No 9227-3

date of issue 27-Feb-2017

tested by WH

time ALL DAY

date 23-Feb-2017

checked by RS

Test No		RW5/220	RW6/221	RW7/222	RW8/223	
location		03 North	03 South	4	5	
Sampling procedures AS1289.1.1,1.2.1-Clause 6.	.4(b)					
depth from F.S.L.	m	Layer 2	Layer 2	Layer 2	Layer 2	
measurement depth	mm	275	275	275	275	
field wet density	t/m ³	1.93	1.90	1.90	1.91	
field dry density	t/m3	1.62	1.57	1.60	1.59	
field moisture content	%	19.5	20.6	19.0	20.1	
laboratory compaction procedure AS1289 5.	7.1					
compactive effort		standard	standard	standard	standard	
oversize material retained on AS sieve	mm	19.0	19.0	19.0	19.0	
percent of oversize material	wet	0	0	0	0	
peak converted wet density	t/m ³	1.92	1.9	1.93	1.9	
adjusted peak converted wet density	t/m ³	-	-	-	-	
moisture variation from OMC (-dry,+wet)%		-2.0	0.5	-3.0	-2.0	
Moisture ratio	%	90.5	102.0	86.5	91.5	
Hilf density ratio (R _{HD})	%	100.5	99.5	98.5	100.5	

material description

Silty CLAY



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Accredited for compliance with ISO/IEC 17025



Approved Signature

BY NUCLEAR GAUGE METHOD



Terrafirma Laboratories - Deer Park Laboratory

Factory 6 / 22-24 Westwood Drive, Deer Park Phone No: 8348 5596

Client Coffey Services Australia Pty Ltd
Client address 436 Johnston St, Abbotsford, 3067

Project GEOTABTF09878AA Little Green Estate

Location Tarniet

Feature	Block Fill
Layer thickness (mm)	200

report No 9227-4
date of issue 28-Feb-2017
tested by WH
time ALL DAY
date 24-Feb-2017
checked by RS

Test No		224,RW9	225,RW10	226,RW11		
location Chainage(m)		3	4	5		
Sampling procedures AS1289.1.1,1.2.1-Clause 6.4	(b)					
depth from F.S.L.	m	Layer 3	Layer 3	Layer 3		,
measurement depth	mm	175	175	175		
field wet density	t/m ³	1.94	1.96	1.94		
field dry density	t/m3	1.66	1.71	1.64		
field moisture content	%	16.8	14.4	18.1		
laboratory compaction procedure AS1289 5.7	'.1					
compactive effort		standard	standard	standard		
oversize material retained on AS sieve	mm	19.0	19.0	19.0		
percent of oversize material	wet	8	12	8		
peak converted wet density	t/m ³	-	=	=	-	
adjusted peak converted wet density	t/m ³	2.01	2.01	1.97		
moisture variation from OMC (-dry,+wet)%		-2.5	-2.5	-1.5		
Moisture ratio	%	85.5	84.5	90.5		
Hilf density ratio (R _{HD})	%	96.5	98.0	98.5		

material description

Silty CLAY



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian national standards. requirements.

Accredited for compliance with ISO/IEC 17025

Approved Signature

BY NUCLEAR GAUGE METHOD



Terrafirma Laboratories - Deer Park Laboratory

Factory 6 / 22-24 Westwood Drive, Deer Park Phone No: 8348 5596

Client Coffey Services Australia Pty Ltd

Client address 436 Johnston St, Abbotsford, 3067
Project GEOTABTF09878AA Little Green Estate

Location Tarniet

Feature	Lot Fill

Layer thickness (mm) 300

report No	9227-6
date of issue	06-Mar-2017
tested by	WH
time	All Day
date	27-Feb-2017
checked by	RS

Test No		227	228	229	230	231	232
location Lot	No	Grid 03	Grid 04	Grid 05	Grid 03	Grid 04	Grid 05
Sampling procedures AS1289.1.1,1.2.1-Claus	se 6.4(b)				1		
depth from F.S.L.	m	Layer 4	Layer 4	Layer 4	Layer 5	Layer 5	Layer 5
measurement depth	mm	275	275	275	275	275	275
field wet density	t/m ³	1.93	1.89	1.89	1.89	1.92	1.90
field dry density	t/m3	1.61	1.47	1.63	1.61	1.66	1.61
field moisture content	%	20.1	28.7	16.0	17.2	15.6	18.2
laboratory compaction procedure AS128	9 5.7.1						
compactive effort		standard	standard	standard	standard	standard	standard
oversize material retained on AS sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
percent of oversize material	wet	8	3	11	5	6	11
peak converted wet density	t/m ³	-	-	-	-	-	-
adjusted peak converted wet density	t/m ³	1.87	1.87	1.92	1.99	2.02	1.99
moisture variation from OMC (-dry,+wet)	%	-3.0	2.5	-3.0	1.5	-2.5	1.0
Moisture ratio	%	86.5	110.0	84.0	109.5	85.5	106.0
Hilf density ratio (R _{HD})	%	103.0	101.5	98.5	95.0	95.0	95.0

material description

Silty CLAY



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian national standards. requirements.

Accredited for compliance with ISO/IEC 17025

RS

Approved Signature

COMPACTION ASSESSMENT





Terrafirma Laboratories - Deer Park Laboratory

Factory 6 / 22-24 Westwood Drive, Deer Park Phone No: 8348 5596

Client Coffey Services Australia Pty Ltd

Client address 436 Johnston St, Abbotsford, 3067

Project GEOTABTF09878AA Little Green Estate

Location Tarniet

Feature	Lot Fill

Layer thickness (mm) 300

report No	9227-5
date of issue	06-Mar-2017
tested by	WH
time	All Day
date	28-Feb-2017
checked by	RS

Test No		233	234	1		
location Lot	t No	Grid 05	Grid 04			
Sampling procedures AS1289.1.1,1.2.1-Clar	use 6.4(b)					
depth from F.S.L.	m	Layer 6	Layer 6			
measurement depth	mm	275	275			
field wet density	t/m ³	1.88	1.90			
field dry density	t/m3	1.61	1.58			
field moisture content	%	17.0	20.3			
laboratory compaction procedure AS12	39 5.7.1					
compactive effort		standard	standard			
oversize material retained on AS sieve	mm	19.0	19.0			
percent of oversize material	wet	0	0			
peak converted wet density	t/m³	1.95	1.93			
adjusted peak converted wet density	t/m ³	<u> </u>				
moisture variation from OMC (-dry,+wet	.)%	-2.5	-2.0		<u> </u>	
Moisture ratio	%	86.0	90.5			
Hilf density ratio (R _{HD})	%	96.5	98.5			

material description

Silty CLAY



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian national standards. requirements.

Accredited for compliance with ISO/IEC 17025

RS

Approved Signature

R Schembri

Appendix B - "Little Green Residential Precinct 1 Stage 4 - Civil works 7 & 8" civil drawings

LITTLE GREEN STAGE 7 PEET NO. 1895 PTY LTD

GENERAL NOTES:

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) ZONE 55.
- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES AND ARE ACCURATE TO WITHIN ±0.05m.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT, THE ROAD & DRAINAGE SPECIFICATION, APPROVED MUNICIPALITY SPECIFICATIONS AND STANDARD DRAWINGS AND TO THE SATISFACTION OF THE SUPERINTENDENT AND THE MUNICIPAL ENGINEER OR HIS REPRESENTATIVE.
- ROAD CHAINAGES REFER TO ROAD CENTRELINES. CHAINAGES FOR INTERSECTIONS AND CUL-DE-SACS REFER TO THE LIP OF KERB
- THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL LOCAL SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A 30. TACTILE GROUND SURFACE INDICATORS ARE TO BE INSTALLED IN ACCORDANCE WITH THE GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT
- WHERE REQUIRED ANY BUILDINGS, TROUGHS, FENCES AND OTHER STRUCTURES ON SITE ARE TO BE REMOVED AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL IS TO BE INCLUDED IN THE OVERALL EARTHWORKS FIGURE UNLESS A SPECIFIC ITEM FOR REMOVAL IS DENOTED IN THE SCHEDULE.
- ALL EXCAVATED ROCK AND SURPLUS SPOIL TO BE REMOVED AND DISPOSED OFF SITE UNLESS NOTED OTHERWISE.
- ALL FILLING ON LOTS AND WITHIN ROAD RESERVES GREATER THAN 200mm IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH 34. THE CONTRACTOR IS REQUIRED TO OBTAIN A 'PERMIT TO WORK' FROM MELBOURNE TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS.
- FILLING MATERIAL IS TO BE IN ACCORDANCE WITH THE SPECIFICATION, AS 3798-2007 & TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT.
- 10. ALL BATTERS SHALL BE 1 IN 6, UNLESS OTHERWISE SHOWN.
- NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE FOR PUBLIC OPEN SPACE UNLESS OTHERWISE DIRECTED OR APPROVED BY THE SUPERINTENDENT.
- 12. TBM'S TO BE RE-ESTABLISHED BY THE LICENSED SURVEYOR IF FOUND TO BE MISSING AT THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR CARE AND MAINTENANCE OF T.B.M.'S THEREAFTER.
- 13. AT LEAST 3 DAYS PRIOR TO COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 1.50m DEEP, A NOTIFICATION FORM MUST BE SENT TO WORKSAFE. THE CONTRACTOR IS TO COMPLY WITH WORKSAFE, THE MINES (TRENCHES) REGULATION 1982, THE MINES ACT 1958 AND OCCUPATIONAL HEALTH AND SAFETY ACT 1985, 2004.
- 14. ALL SERVICE TRENCHES UNDER DRIVEWAYS, FOOTPATHS AND PARKING BAYS TO BE BACKFILLED WITH CLASS 2 CRUSHED ROCK. SERVICE TRENCHES LESS THAN 750mm BEHIND KERB AND CHANNEL OR PAVED TRAFFIC AREAS ARE ALSO TO BE BACKFILLED WITH COMPACTED CLASS 2 CRUSHED ROCK.
- 15. WHERE REQUIRED, ALL EXISTING DAMS, DEPRESSIONS AND DRAINS ARE TO BE BREACHED, DRAINED, DESLUDGED AND SHALL BE EXCAVATED TO A CLEAN FIRM BASE. THE SURFACE SHALL BE INSPECTED, APPROVED AND LEVELED BY THE ENGINEER PRIOR TO COMMENCEMENT OF FILLING. THE FILL SHALL BE APPROVED SELECTED ON SITE MATERIAL OR APPROVED IMPORTED MATERIAL. THE FILL SHALL BE PLACED UNDER CONTROLLED MOISTURE CONDITIONS IN ACCORDANCE WITH THE SPECIFICATION
- 16. NO BLASTING TO BE CARRIED OUT WITHIN THE MUNICIPALITY WITHOUT OBTAINING COUNCILS PERMISSION.
- 17. GAS AND WATER CONDUITS ARE TO BE , Ø50mm . CLASS 12 P.V.C. – SINGLE SERVICE Ø100mm . CLASS 12 P.V.C. – DUAL SERVICE (DRINKING AND NON DRINKING WATER)

WITH THE FOLLOWING MINIMUM COVER TO FINISHED SURFACE LEVELS: ROAD PAVEMENT - 0.80m VERGE, FOOTPATHS - 0.45m

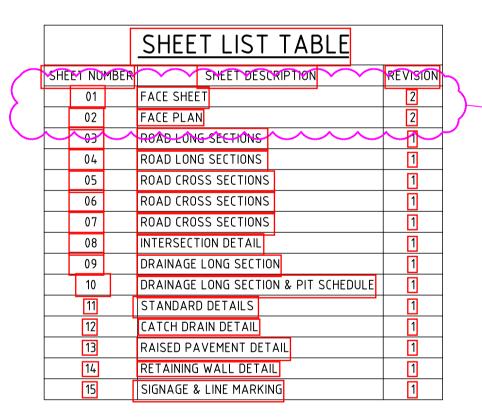
- 18. ALL SERVICE CONDUIT TRENCHES UNDER ROAD PAVEMENTS TO BE BACKFILLED IN ACCORDANCE WITH RELEVANT MUNICIPALITY OR ROAD AUTHORITY SPECIFICATION.
- 19. AG/SUBSOIL DRAIN TO BE LAID BEHIND KERB WHERE REQUIRED IN ACCORDANCE WITH THE COUNCIL STANDARD DRAWINGS AND CONNECTED TO UNDERGROUND DRAINAGE.
- 20. ALL STORMWATER DRAINS ARE TO BE CLASS '2' R.C. PIPES UNLESS OTHERWISE SHOWN. ALL R.C. JOINTS ARE TO BE RUBBER RING JOINTED (R.R.J.).
- 21. CENTRELINES OF ALL EASEMENT DRAINS ARE OFFSET 1.0m OR 2.2m (WHERE OUTSIDE OF SEWER) FROM THE PROPERTY LINE UNLESS SHOWN OTHERWISE
- 22. WHERE CURVED PIPE ALIGNMENTS ARE SHOWN ON THE FACE PLANS THEY ARE TO BE LAID PARALLEL TO THE BACK OF KERB, EXCEPT WHERE A RADIUS HAS BEEN SPECIFICALLY NOMINATED. CURVED PIPES ARE TO BE APPROVED BY COUNCIL AND IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- 23. WATER TAPPINGS TO BE LOCATED IN CENTRE OF ALLOTMENTS UNLESS OTHERWISE
- 24. TELSTRA IS TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS
- 25. PAVEMENT DEPTHS MAY BE MODIFIED AS DIRECTED BY THE SUPERINTENDENT. PAVEMENT TO BE BOXED OUT TO MINIMUM DEPTH DENOTED, INSPECTED AND IF

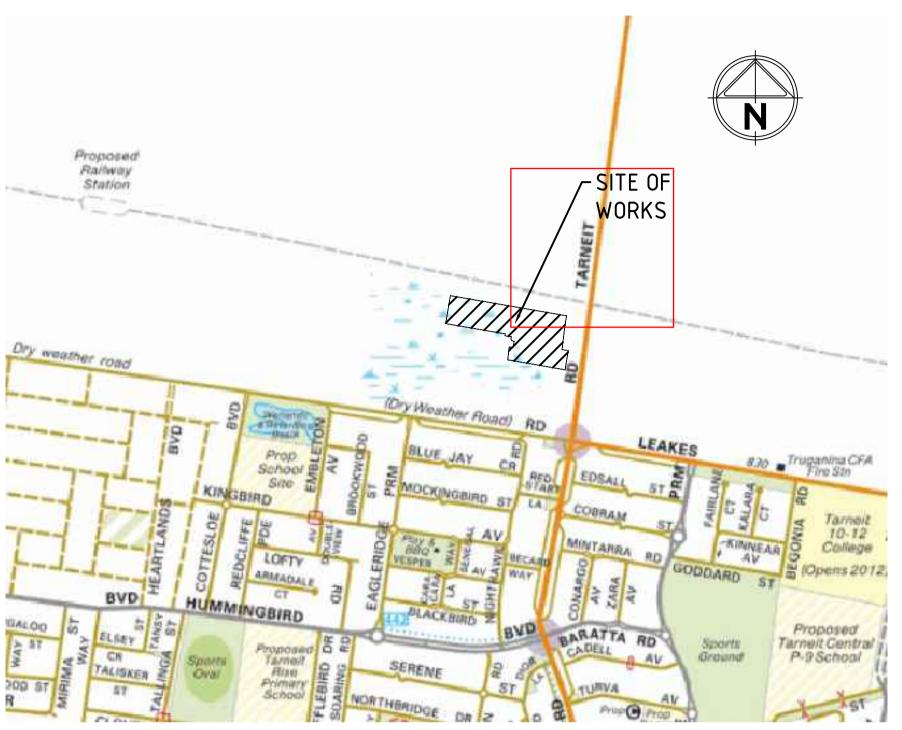
SUBGRADE IS IN QUESTION, FURTHER TESTING CARRIED OUT TO DETERMINE FINAL PAVEMENT DEPTH.

- WHERE PAVEMENT IS CONSTRUCTED ON FILLING, FILL MATERIAL IS TO BE APPROVED BY THE SUPERINTENDENT AND COUNCIL. FILLING TO BE CONSTRUCTED IN LAYERS 150mm THICK WITH COMPACTION ACHIEVING 95% AUSTRALIAN STANDARD DENSITY.
- 27. WHEN PAVEMENT EXCAVATION IS IN ROCK, ALL LOOSE MATERIAL (INCLUDING ROCKS AND CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.
- 28. LINEMARKING AND SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AS 1742 SERIES UNLESS NOTED OTHERWISE. STREET SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL STANDARDS.
- MAINTAINED IN ACCORDANCE WITH AS 1742-3.

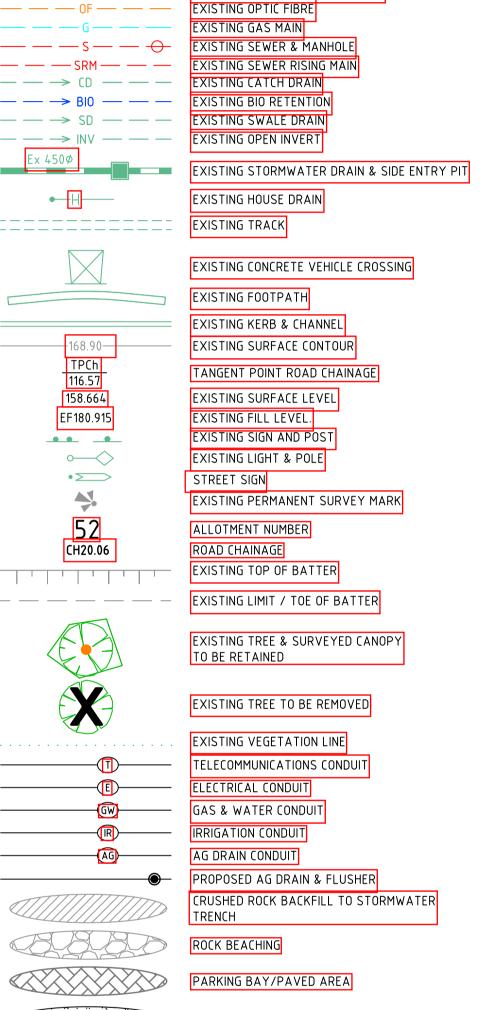
29. ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE SUPPLIED AND

- DISABILITY DISCRIMINATION ACT AND RELEVANT COUNCIL STANDARD DRAWINGS.
- 31. CONTRACTOR TO PROVIDE AN ENVIRONMENTAL MANAGEMENT PLAN INCLUDING SILT AND SEDIMENT RUNOFF PROTECTION ETC. PRIOR TO THE COMMENCEMENT OF WORKS.
- 32. ALL TREES AND SHRUBS ARE TO BE RETAINED UNLESS OTHERWISE SHOWN. IF ROAD AND DRAINAGE CONSTRUCTION NECESSITATES THEIR REMOVAL, WRITTEN PERMISSION MUST BE OBTAINED FROM THE SUPERINTENDENT.
- 33. TREES NOT SPECIFIED FOR REMOVAL ARE TO BE PROTECTED WITH APPROPRIATE EXCLUSION FENCING PRIOR TO COMMENCEMENT OF ANY WORKS.
- WATER'S SURVEILLANCE OFFICER AT THE PRE-COMMENCEMENT MEETING. THE CONTRACTOR IS REQUIRED TO ENSURE THAT THE 'PERMIT TO WORK' IS KEPT UP TO DATE FOR THE DURATION OF THE CONTRACT.





REPRODUCED WITH PERMISSION



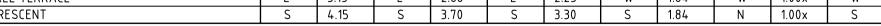
LEGEND

— — W— → — —	EXISTING WATER MAIN, VALVE AND HYDRANT		PROPOSED WATER MAIN
— — — WR — — —	EXISTING WATER RECYCLED		PROPOSED WATER RECYCLED
— — E — — —	EXISTING UNDERGROUND ELECTRICITY	——Е—	PROPOSED UNDERGROUND ELECTRICITY
— — — OE — → →	EXISTING OVERHEAD ELECTRICITY, POLE AND STAY	OE	PROPOSED OVERHEAD ELECTRICITY &
— — T — — —	EXISTING TELSTRA & SERVICE PIT	T	PROPOSED TELSTRA
— — OF — — —	EXISTING OPTIC FIBRE	OF	PROPOSED OPTIC FIBRE CONDUIT
—— —— G —— ——	EXISTING GAS MAIN	———— G ————	PROPOSED GAS MAIN
<u> </u>	EXISTING SEWER & MANHOLE	s	PROPOSED SEWER AND MANHOLE
— — — SRM — — —	EXISTING SEWER RISING MAIN		PROPOSED SEWER RISING MAIN
— — > CD — — —	EXISTING CATCH DRAIN		PROPOSED CATCH DRAIN
— → BIO — — —	EXISTING BIO RETENTION	→ BIO —	PROPOSED BIO RETENTION
— → SD — — —	EXISTING SWALE DRAIN	→ SD —	PROPOSED SWALE DRAIN
— — > INV — — —	EXISTING OPEN INVERT	→ INV — 450¢	PROPOSED OPEN INVERT
Ex 450¢	EXISTING STORMWATER DRAIN & SIDE ENTRY PIT		PROPOSED STORMWATER DRAIN & PIT PROPOSED DRAINAGE INLET
•— H	EXISTING HOUSE DRAIN	•- <u>H</u>	PROPOSED HOUSE DRAIN
	EXISTING TRACK		PROPOSED STORMWATER PIT NUMBER
	EXISTING CONCRETE VEHICLE CROSSING		PROPOSED DRIVEWAY
	EXISTING FOOTPATH		PROPOSED FOOTPATH
	EXISTING KERB & CHANNEL	SM2	KERB & CHANNEL + TYPE
168.90	EXISTING SURFACE CONTOUR	168.90	FINISHED SURFACE CONTOUR MINOR
TPCh 116.57	TANGENT POINT ROAD CHAINAGE	169.00	FINISHED SURFACE CONTOUR MAJOR
158.664	EXISTING SURFACE LEVEL	FS158.385	FINISHED SURFACE LEVEL
EF180.915	EXISTING FILL LEVEL.	T167.15	TOP/TOE OF BATTER LEVEL
	EXISTING SIGN AND POST	<u> </u>	PROPOSED SIGN & POST
\circ	EXISTING LIGHT & POLE	\longrightarrow	PROPOSED LIGHT & POLE (BY OTHERS)
• >	STREET SIGN	• >	STREET SIGN
	EXISTING PERMANENT SURVEY MARK	\$.	PROPOSED PERMANENT SURVEY MARK
r _O	ALL OTMENT NUMBER	-	TEMPORARY BENCH MARK (TBM)
CH20.06	ALLOTMENT NUMBER ROAD CHAINAGE	+	PROPOSED BOLLARD
<u></u>	EXISTING TOP OF BATTER		TOP OF BATTER
	EXISTING LIMIT / TOE OF BATTER		LIMIT / TOE OF BATTER
			RIDGE / CHANGE OF GRADE
	EXISTING TREE & SURVEYED CANOPY	(R2)———	INTERSECTION SET-OUT POINT
	TO BE RETAINED	1 in 150	LOT GRADE
	EVICTUS TREE TO RE REMOVED		ROAD RESERVE
	EXISTING TREE TO BE REMOVED		LOT BOUNDARY
	EXISTING VEGETATION LINE		EASEMENT
			SAW CUT PAVEMENT
	TELECOMMUNICATIONS CONDUIT		LIMIT OF WORKS
E	ELECTRICAL CONDUIT		EXISTING FENCE
	GAS & WATER CONDUIT	<u></u>	PROPOSED ESTATE FENCING
	IRRIGATION CONDUIT		VEHICLE EXCLUSION FENCE
	AG DRAIN CONDUIT		PROTECTIVE TREE FENCING
———	PROPOSED AG DRAIN & FLUSHER		
	CRUSHED ROCK BACKFILL TO STORMWATER TRENCH		FUTURE STORMWATER DRAIN & PIT MWC DRAIN & PIT
AAAA	ROCK BEACHING		PROPOSED SLEEPER RETAINING WALL
AYAYAYAYA			PROPOSED ROCK RETAINING WALL
	PARKING BAY/PAVED AREA		EXCAVATION GREATER THAN 200mm
	GRANITIC SAND/SAND FILTER		FILLING GREATER THAN 200mm
	EXPOSED AGGREGATE CONCRETE		FILLING GREATER THAN 300mm

SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		RECYCLED WATER		GAS		(TELECOM)		ELECTRICITY			
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	PC	LE	U/G C	ABLE
	SIDL	011311	SIDL	UIT SET	SIDL	011311	SIDL	011311	SIDE	OFFSET	SIDE	OFFSET
STYLE WAY	S	3.15	S	2.68	S	2.25	N	1.84	N	1.00x	N	2.55
ORANGETREE TERRACE	E	3.15	E	2.68	Е	2.25	W	1.84	W	1.00x	W	2.55
MODERN CRESCENT	S	4.15	S	3.70	S	3.30	S	1.84	N	1.00x	S	2.40

- 1. TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRG'S
- 2. GAS AND WATER MAINS TO BE CONSTRUCTED IN A COMMON TRENCH.
- 3. × = OFFSET FROM BACK OF KERB



LITTLE GREEN STAGE 7 **FACE SHEET**

> PEET NO. 1895 PTY LTD WYNDHAM CITY COUNCIL

WARNING

BEWARE OF UNDERGROUND/OVERHEAD SERVICES

THE LOCATION OF SERVICES ARE APPROXIMATE ONLY

AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING

SERVICES ARE SHOWN.SPECIAL CONSIDERATION

SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES.

Drg No 302831R01

2 REMOVED NORTH RRL BUFFER FOOT 1 AS CONSTRUCTED 0 CONSTRUCTION ISSUE B AMENDMENTS AS PER COUNCIL & V. A ISSUED TO COUNCIL		App'd	Date
1 AS CONSTRUCTED 0 CONSTRUCTION ISSUE		M.Z.	31/05/16
1 AS CONSTRUCTED	ALIDATORS COMMENTS	M.Z.	8/07/16
		M.Z.	2/08/16
2 REMOVED NORTH RRL BUFFER FOOT		M.Z.	16/01/17
	PATH	M.Z.	1/03/17

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NOT TO SCALE

Map Reference MELWAY 359 B12 Sheet Number 01 Drg Status PRELIMINARY

30/05/16

31/05/16

Designed

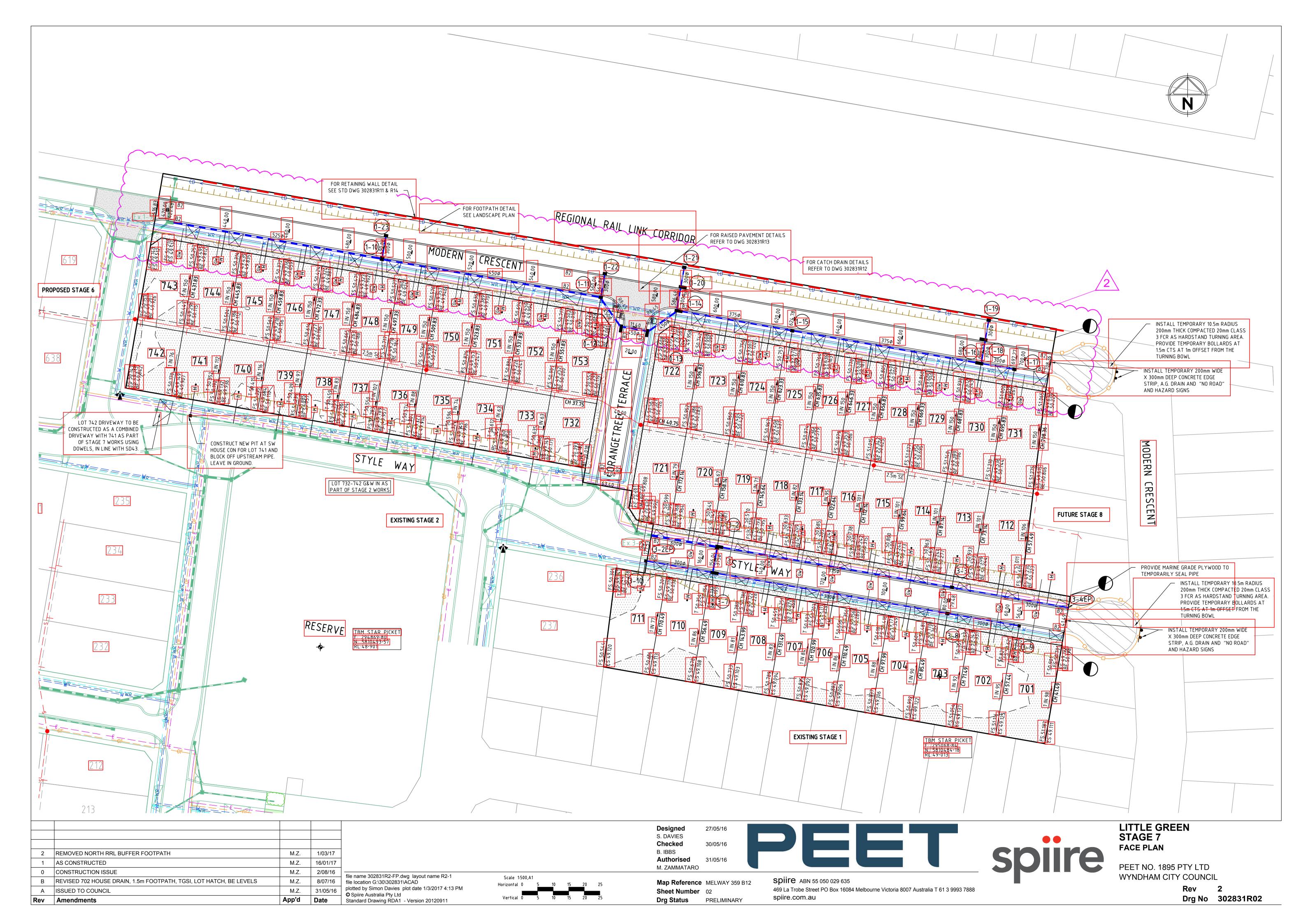
S. DAVIES Checked

Authorised

M. ZAMMATARO

B. IBBS

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



LITTLE GREEN STAGE 8 PEET NO. 1895 PTY LTD

GENERAL NOTES:

- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND ALL COORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA) ZONE 55.
- ALL EXISTING SURFACE LEVELS SHOWN ON THE ENGINEERING DRAWINGS HAVE BEEN INTERPOLATED FROM A DIGITAL TERRAIN MODEL. THESE LEVELS HAVE BEEN USED AS THE BASIS FOR ALL ENGINEERING DESIGN AND DETERMINATION OF QUANTITIES AND ARE ACCURATE TO WITHIN ±0.05m.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH AS2124-1992 GENERAL CONDITIONS OF CONTRACT, THE ROAD & DRAINAGE SPECIFICATION, APPROVED MUNICIPALITY SPECIFICATIONS AND STANDARD DRAWINGS AND TO THE SATISFACTION OF THE SUPERINTENDENT AND THE MUNICIPAL ENGINEER OR HIS REPRESENTATIVE.
- ROAD CHAINAGES REFER TO ROAD CENTRELINES. CHAINAGES FOR INTERSECTIONS AND CUL-DE-SACS REFER TO THE LIP OF KERB
- THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL LOCAL SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE OFFERED AS A 30. GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT
- WHERE REQUIRED ANY BUILDINGS, TROUGHS, FENCES AND OTHER STRUCTURES ON SITE ARE TO BE REMOVED AS DIRECTED BY THE ENGINEER. THE COST OF REMOVAL IS TO BE INCLUDED IN THE OVERALL EARTHWORKS FIGURE UNLESS A SPECIFIC ITEM FOR REMOVAL IS DENOTED IN THE SCHEDULE.
- ALL EXCAVATED ROCK AND SURPLUS SPOIL TO BE REMOVED AND DISPOSED OFF SITE UNLESS NOTED OTHERWISE.
- ALL FILLING ON LOTS AND WITHIN ROAD RESERVES GREATER THAN 200mm IS TO BE UNDERTAKEN USING LEVEL 1 SUPERVISION AND BE COMPLETED IN ACCORDANCE WITH AS 3798-2007. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND REPLACED WITH TOPSOIL (WHERE REQUIRED) TO OBTAIN THE FINAL LEVELS SHOWN ON THE DRAWINGS.
- FILLING MATERIAL IS TO BE IN ACCORDANCE WITH THE SPECIFICATION, AS 3798-2007 & TO THE SATISFACTION OF COUNCIL AND THE SUPERINTENDENT
- 10. ALL BATTERS SHALL BE 1 IN 6, UNLESS OTHERWISE SHOWN.
- NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE FOR PUBLIC OPEN SPACE UNLESS OTHERWISE DIRECTED OR APPROVED BY THE SUPERINTENDENT.
- 12. TBM'S TO BE RE-ESTABLISHED BY THE LICENSED SURVEYOR IF FOUND TO BE MISSING AT THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR CARE AND MAINTENANCE OF T.B.M.'S THEREAFTER.
- 13. AT LEAST 3 DAYS PRIOR TO COMMENCING WORK ON EXCAVATIONS IN EXCESS OF 1.50m DEEP, A NOTIFICATION FORM MUST BE SENT TO WORKSAFE. THE CONTRACTOR IS TO COMPLY WITH WORKSAFE, THE MINES (TRENCHES) REGULATION 1982, THE MINES ACT 1958 AND OCCUPATIONAL HEALTH AND SAFETY ACT 1985, 2004.
- 14. ALL SERVICE TRENCHES UNDER DRIVEWAYS, FOOTPATHS AND PARKING BAYS TO BE BACKFILLED WITH CLASS 2 CRUSHED ROCK. SERVICE TRENCHES LESS THAN 750mm BEHIND KERB AND CHANNEL OR PAVED TRAFFIC AREAS ARE ALSO TO BE BACKFILLED WITH COMPACTED CLASS 2 CRUSHED ROCK.
- 15. WHERE REQUIRED, ALL EXISTING DAMS, DEPRESSIONS AND DRAINS ARE TO BE BREACHED, DRAINED, DESLUDGED AND SHALL BE EXCAVATED TO A CLEAN FIRM BASE. THE SURFACE SHALL BE INSPECTED. APPROVED AND LEVELED BY THE ENGINEER PRIOR TO COMMENCEMENT OF FILLING. THE FILL SHALL BE APPROVED SELECTED ON SITE MATERIAL OR APPROVED IMPORTED MATERIAL. THE FILL SHALL BE PLACED UNDER CONTROLLED MOISTURE CONDITIONS IN ACCORDANCE WITH THE SPECIFICATION
- 16. NO BLASTING TO BE CARRIED OUT WITHIN THE MUNICIPALITY WITHOUT OBTAINING COUNCILS PERMISSION.
- 17. GAS AND WATER CONDUITS ARE TO BE , Ø50mm . CLASS 12 P.V.C. – SINGLE SERVICE Ø100mm . CLASS 12 P.V.C. – DUAL SERVICE (DRINKING AND NON DRINKING WATER)

WITH THE FOLLOWING MINIMUM COVER TO FINISHED SURFACE LEVELS ROAD PAVEMENT - 0.80m VERGE, FOOTPATHS - 0.45m

- 18. ALL SERVICE CONDUIT TRENCHES UNDER ROAD PAVEMENTS TO BE BACKFILLED IN ACCORDANCE WITH RELEVANT MUNICIPALITY OR ROAD AUTHORITY SPECIFICATION.
- 19. AG/SUBSOIL DRAIN TO BE LAID BEHIND KERB WHERE REQUIRED IN ACCORDANCE WITH THE COUNCIL STANDARD DRAWINGS AND CONNECTED TO UNDERGROUND DRAINAGE.
- 20. ALL STORMWATER DRAINS ARE TO BE CLASS '2' R.C. PIPES UNLESS OTHERWISE SHOWN. ALL R.C. JOINTS ARE TO BE RUBBER RING JOINTED (R.R.J.).
- 21. CENTRELINES OF ALL EASEMENT DRAINS ARE OFFSET 1.0m OR 2.2m (WHERE OUTSIDE OF SEWER) FROM THE PROPERTY LINE UNLESS SHOWN OTHERWISE
- 22. WHERE CURVED PIPE ALIGNMENTS ARE SHOWN ON THE FACE PLANS THEY ARE TO BE LAID PARALLEL TO THE BACK OF KERB, EXCEPT WHERE A RADIUS HAS BEEN SPECIFICALLY NOMINATED. CURVED PIPES ARE TO BE APPROVED BY COUNCIL AND IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
- 23. WATER TAPPINGS TO BE LOCATED IN CENTRE OF ALLOTMENTS UNLESS OTHERWISE
- 24. TELSTRA IS TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS
- 25. PAVEMENT DEPTHS MAY BE MODIFIED AS DIRECTED BY THE SUPERINTENDENT PAVEMENT TO BE BOXED OUT TO MINIMUM DEPTH DENOTED, INSPECTED AND IF

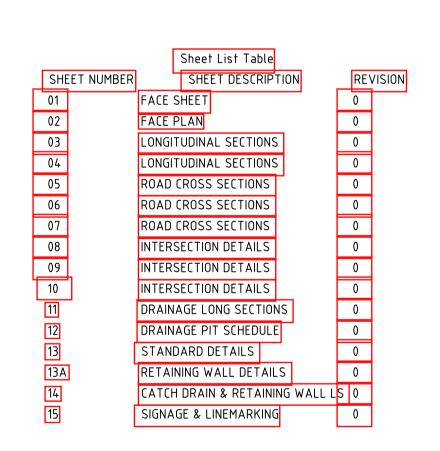
Amendments

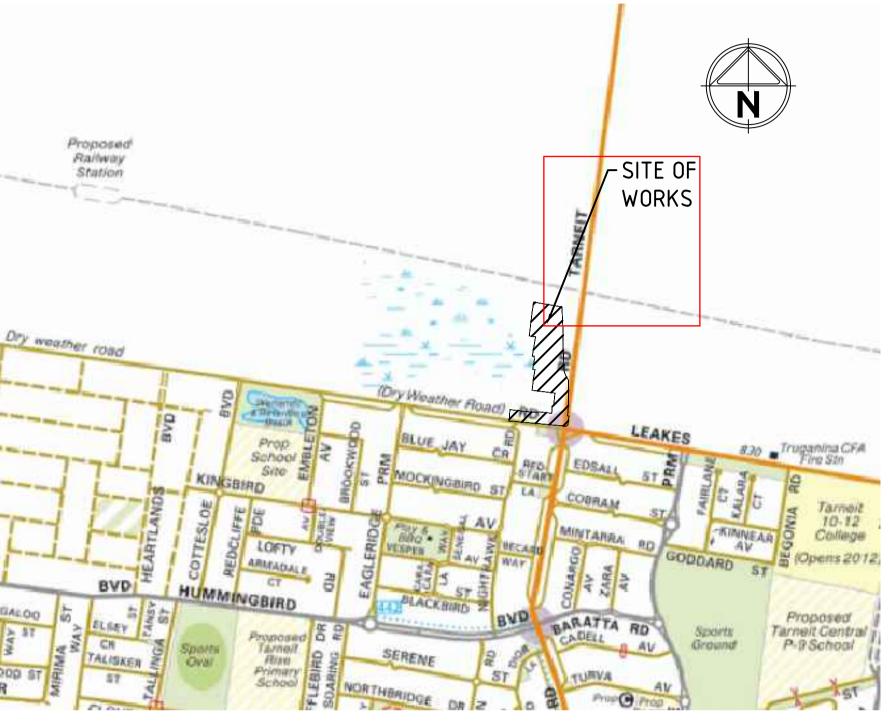
SUBGRADE IS IN QUESTION, FURTHER TESTING CARRIED OUT TO DETERMINE FINAL PAVEMENT DEPTH.

- 26. WHERE PAVEMENT IS CONSTRUCTED ON FILLING, FILL MATERIAL IS TO BE APPROVED BY THE SUPERINTENDENT AND COUNCIL. FILLING TO BE CONSTRUCTED IN LAYERS 150mm THICK WITH COMPACTION ACHIEVING 95% AUSTRALIAN STANDARD DENSITY.
- 27. WHEN PAVEMENT EXCAVATION IS IN ROCK, ALL LOOSE MATERIAL (INCLUDING ROCKS AND CLAY) MUST BE REMOVED. THE SUB-GRADE MUST THEN BE REGULATED WITH COUNCIL APPROVED MATERIAL.
- 28. LINEMARKING AND SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AS 1742 SERIES UNLESS NOTED OTHERWISE. STREET SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH COUNCIL STANDARDS.

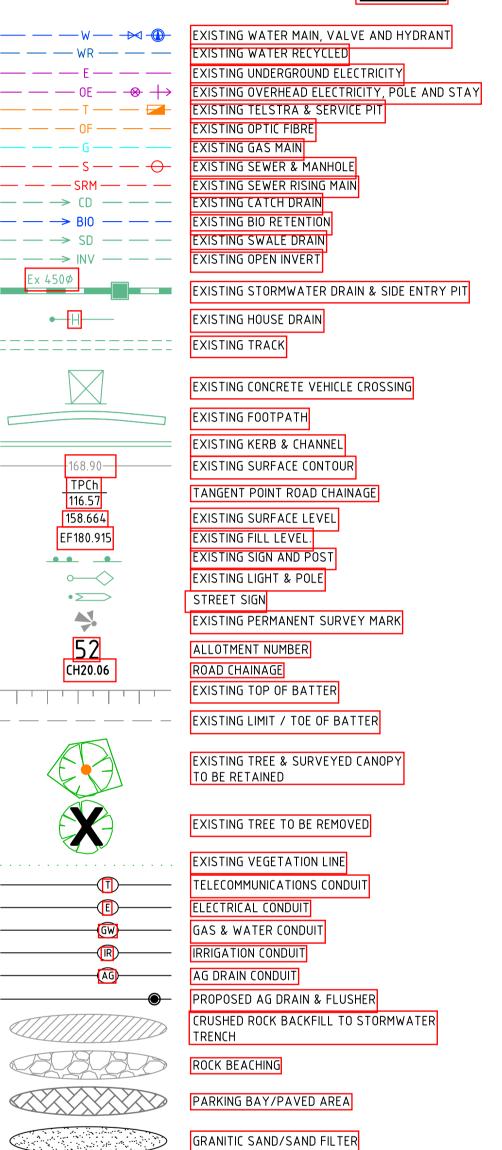
29. ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE SUPPLIED AND

- MAINTAINED IN ACCORDANCE WITH AS 1742-3.
- TACTILE GROUND SURFACE INDICATORS ARE TO BE INSTALLED IN ACCORDANCE WITH THE DISABILITY DISCRIMINATION ACT AND RELEVANT COUNCIL STANDARD DRAWINGS.
- 31. CONTRACTOR TO PROVIDE AN ENVIRONMENTAL MANAGEMENT PLAN INCLUDING SILT AND SEDIMENT RUNOFF PROTECTION ETC. PRIOR TO THE COMMENCEMENT OF WORKS.
- 32. ALL TREES AND SHRUBS ARE TO BE RETAINED UNLESS OTHERWISE SHOWN. IF ROAD AND DRAINAGE CONSTRUCTION NECESSITATES THEIR REMOVAL, WRITTEN PERMISSION MUST BE OBTAINED FROM THE SUPERINTENDENT.
- 33. TREES NOT SPECIFIED FOR REMOVAL ARE TO BE PROTECTED WITH APPROPRIATE EXCLUSION FENCING PRIOR TO COMMENCEMENT OF ANY WORKS.
- 34. THE CONTRACTOR IS REQUIRED TO OBTAIN A 'PERMIT TO WORK' FROM MELBOURNE WATER'S SURVEILLANCE OFFICER AT THE PRE-COMMENCEMENT MEETING. THE CONTRACTOR IS REQUIRED TO ENSURE THAT THE 'PERMIT TO WORK' IS KEPT UP TO DATE FOR THE DURATION OF THE CONTRACT.



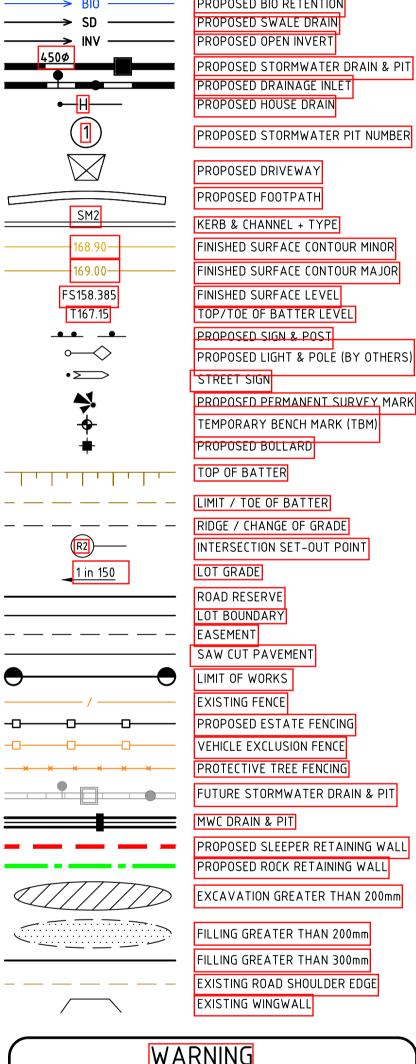


REPRODUCED WITH PERMISSION



EXPOSED AGGREGATE CONCRETE

LEGEND



PROPOSED WATER MAIN

ROPOSED GAS MAIN

ROPOSED CATCH DRAIN

PROPOSED WATER RECYCLED

ROPOSED OPTIC FIBRE CONDUIT

PROPOSED SEWER AND MANHOLE

ROPOSED SEWER RISING MAIN

ROPOSED UNDERGROUND ELECTRICITY

ROPOSED OVERHEAD ELECTRICITY & POLI

SERVICE LOCATION TABLE

ROAD NAME	POTABLE WATER		RECYCLED WATER		GAS		(TELECOM)		ELECTRICITY			
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	U/G SIDE	CABLE OFFSET	SIDE PO	OLE OFFSET
STYLE WAY	S	3.15	S	2.68	S	2.25	N	1.84	N	2.55	N	1.00×
MODERN CRESCENT (NORTH-SOUTH)	E	3.15	Ē	2.68	E	2.25	W	1.84	W	2.55	W	1.00x
MODERN CRESCENT (EAST-WEST)	S	4.15	S	3.70	S	3.30	S	1.84	S	2.40	N	1.00x
MAINTOP WAY	N	3.15	N	2.68	N	2.25	S	1.84	5	2.55	S	1.00x
APPLEGATE CRESCENT	W	3.35	W	2.85	W	2.35	W	1.84	Ē	1.25x	E	1.00x

TELECOMMUNICATIONS AND ELECTRICITY CABLES TO BE CONSTRUCTED IN A COMMON TRENCH IN ACCORDANCE WITH ELECTRICITY AUTHORITY STANDARD DRG's. GAS AND WATER MAINS TO BE CONSTRUCTED IN A COMMON TRENCH × = OFFSET FROM BACK OF KERB



Designed S. DAVIES 01/07/16 Checked B. IBBS Authorised 01/07/16 M. ZAMMATARO



LITTLE GREEN STAGE 8 **FACE SHEET**

> PEET NO. 1895 PTY LTD WYNDHAM CITY COUNCIL

BEWARE OF UNDERGROUND/OVERHEAD SERVICES

THE LOCATION OF SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON

SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING

SERVICES ARE SHOWN.SPECIAL CONSIDERATION SHOULD BE GIVEN TO CONSTRUCTION PROCEDURES

UNDER OVERHEAD ELECTRICITY TRANSMISSION LINES

Drg No 302850R01

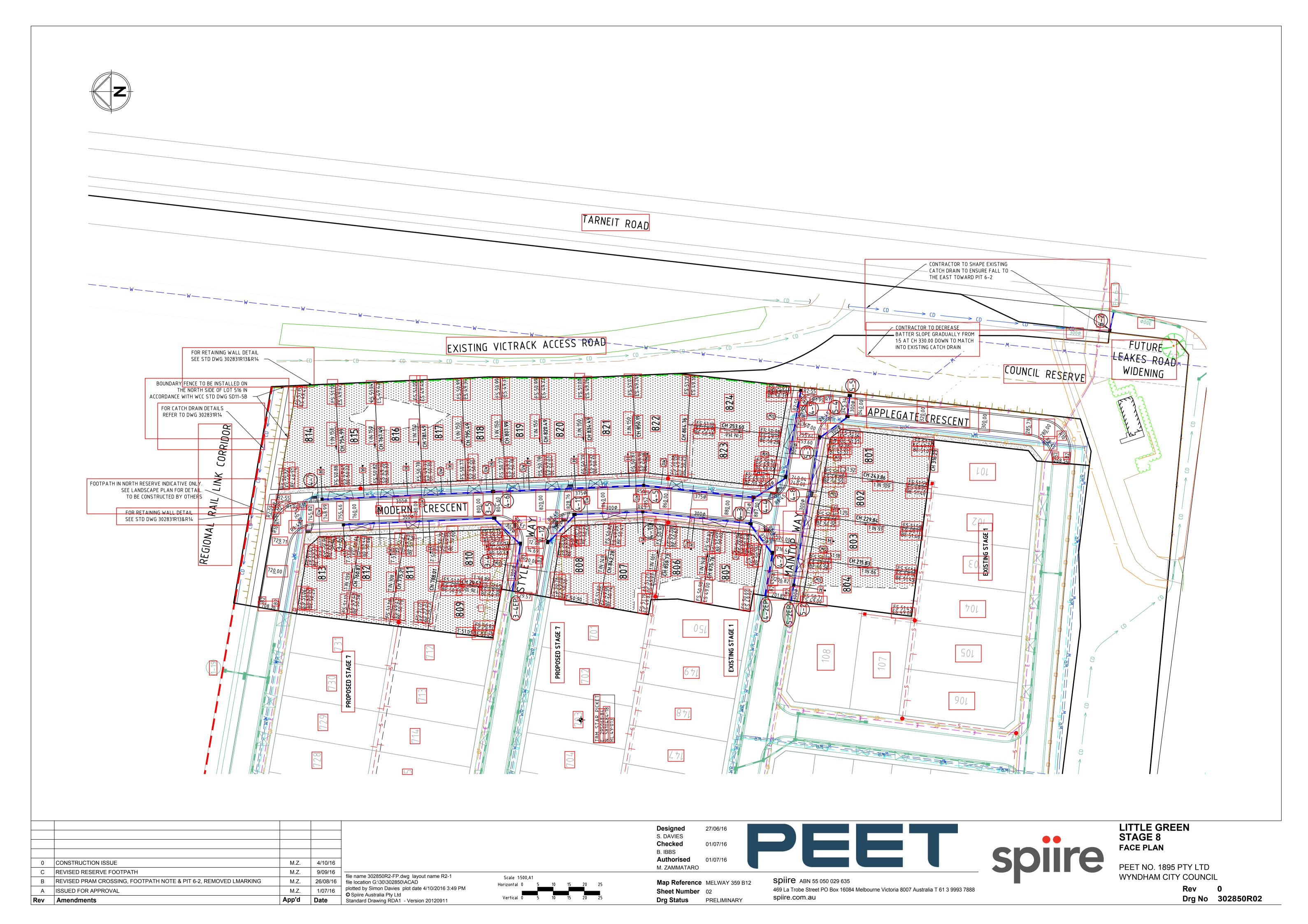
0	CONSTRUCTION ISSUE	M.Z.	4/10/16	
D	REVISED RETAINING WALL DETAILS TO MATCH STRUCTURAL DESIGN	M.Z.	27/09/16	
С	REVISED RESERVE FOOTPATH	M.Z.	9/09/16	
В	REVISED AS PER COUNCIL AND VALIDATOR COMMENTS	M.Z.	26/08/16	file
Α	ISSUED FOR APPROVAL	M.Z.	1/07/16	plo ©

file name 302850R1-FS.dwg layout name R1-1 file location G:\30\302850\ACAD plotted by Simon Davies plot date 4/10/2016 3:48 PM Spiire Australia Pty Ltd Standard Drawing RDA1 - Version 20120911

NOT TO SCALE

Map Reference MELWAY 359 B12 Sheet Number 01 Drg Status PRELIMINARY

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







Α	REMOVED INTERSECTION LINEMARKING & GIVEWAY SIGNS ISSUED FOR APPROVAL	M.Z.	26/08/16 1/07/16
	REMOVED INTERSECTION LINEMARKING & GIVEWAY SIGNS	M.Z.	26/08/16
В			
0	CONSTRUCTION ISSUE	M.Z.	4/10/16

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file location G:\30\302850\ACAD
plotted by Simon Davies plot date 4/10/2016 3:50 PM
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Checked 01/07/16
B. IBBS
Authorised 01/07/16
M. ZAMMATARO

Map Reference MELWAY 359 B12

Designed

Sheet Number 15

Drg Status PRELIMINARY



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LITTLE GREEN
STAGE 8
SIGNAGE & LINEMARKING

PEET NO. 1895 PTY LTD WYNDHAM CITY COUNCIL

> Rev 0 Drg No 302850R15

Stage 4 – Stripped surface Survey levels client: drawn PEET 1895 Pty Ltd description approved date I.I. Source: Stage 4 – Stripped surface survey levels as S.P. approved STAGE 4 BULK (CIVIL STAGES 7 AND 8) LEVEL 1 LITTLE GREEN ESTATE 23/3/2017 date extracted from CAD files STRIPPED SURFACE SURVEY PLAN

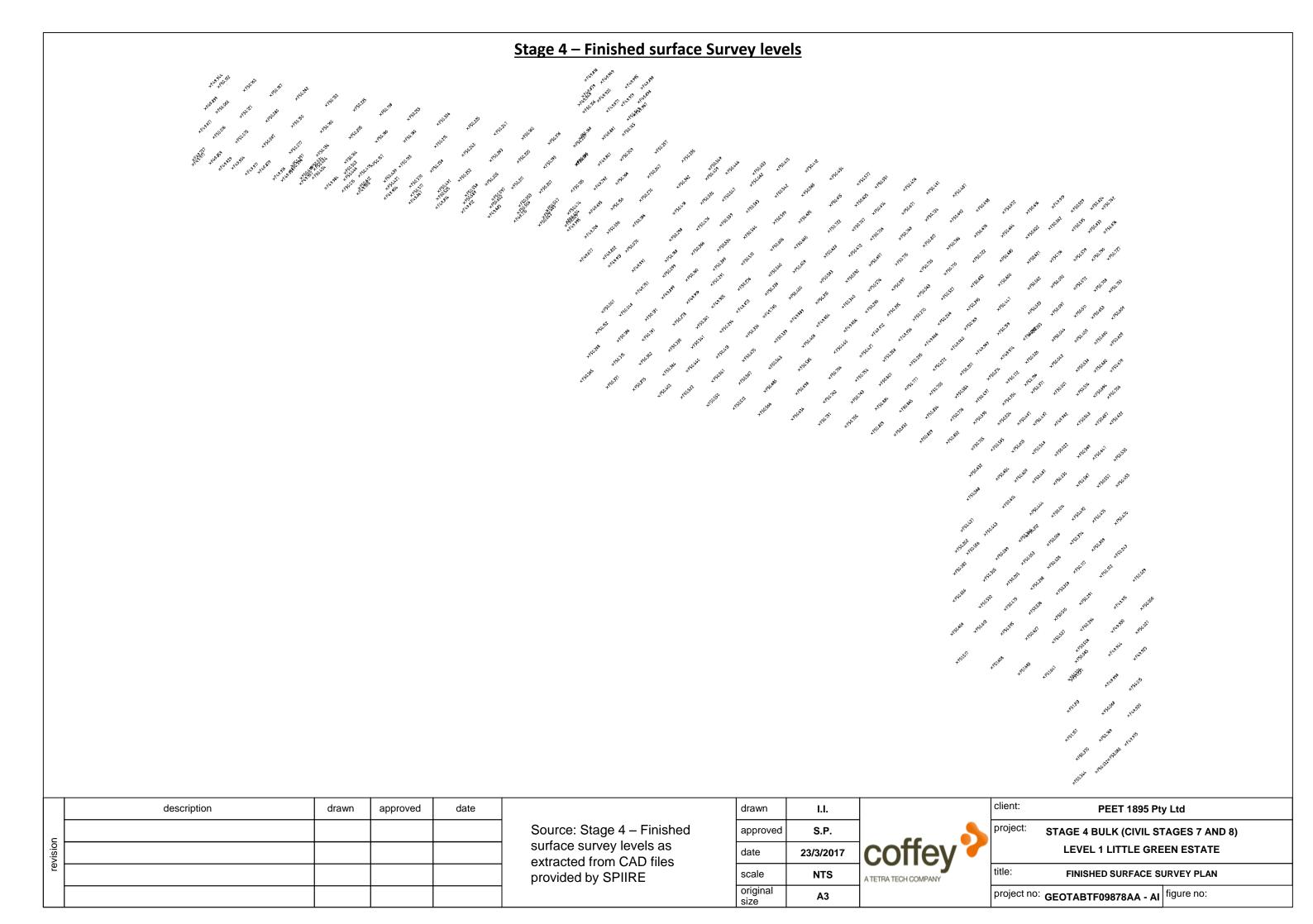
provided by SPIIRE

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project no: **GEOTABTF09878AA - AI** figure no:



Appendix C - Summary of imported fill material

Fill source	Dates observed	Estimated volume (m ₃) by Coffey /olume (m	3 Stage placed
Ravenshall Prison	25/09/2015	1250	3
Ravenshall Prison	28/09/2015	1000	3
Ravenshall Prison	30/09/2015	1500	3
Ravenshall Prison	1/10/2015	950	3
Caroline Springs	6/10/2015	150	3
Werribee, Caroline Springs	7/10/2015	210	3
St Albans, Caroline Springs,	8/10/2015	880	3
St Albans, Caroline Springs,	9/10/2015	820	3
St Albans, Werribee	10/10/2015	1500	3
St Albans, Werribee	12/10/2015	1400	3
St Albans, Vinedex Sunshine	13/10/2015	650	3
St Albans, Vinedex Sunshine, Ravenshall Prison	14/10/2015	2300	3
St Albans, Werribee	15/10/2015	X	3
St Albans, Vinedex Sunshine	16/10/2015	X	3
Vinedex Sunshine, St Albans	20/10/2015	160	3
Ravenshall Prison, St Albans	21/10/2015	2190	3
South Yarra, Ravenshall Prison, St Albans	22/10/2015	810	1 & 3
South Yarra, Ravenshall Prison	23/10/2015	550	1 & 3
South Yarra. Ravenshall Prison, Werribee	26/10/2015	1900	1 & 3
Coburg, South Melbourne, Werribee Plaza	27/10/2015	1150	1 & 3
Coburg, South Melbourne	28/10/2015	1150	1 & 3
Altona, South Melbourne, Werribee	29/10/2015	2020	1 & 3
Altona, Coburg, On-site (Stage 1 only)	30/10/2015	1040	1 & 3
Coburg, South Melbourne, On-site (Stage 1 only)	4/11/2015	740	1 & 3
St Albams, Coburg, South Melbourne, On-site (Stage 1 only)	10/11/2015	1380	1 & 3
Ravenhall Prison, Ivanhoe, Laverton, On-site (Stage 1 only)	16/11/2015	940	1 & 3
Ivanhoe, Ravenhall Prison,	18/11/2015	2180	1 & 3
Melton, South Melbourne, Ravenhall Prison	19/11/2015	3000	3
Coburg, South Melbourne, Ravenhall Prison	20/11/2015	2880	3
Coburg	23/11/2015	840	3
South Melbourne, Ravenhall Prison, on-site (Stage 1 only)	24/11/2015	940	1 & 3
South Melbourne, Ravenhall Prison, on-site (Stage 1 only)	25/11/2015	1340	1 & 3
South Melbourne, Ravenhall Prison, on-site (Stage 1 only)	26/11/2015	1840	1 & 3
Ravenhall Prison, Niddrie	27/11/2015	1680	3
Ravenhall Prison	28/11/2015	600	3

GEOTABTF09878AA - LITTLE GREEN - IMPORT MATERIAL SUMMARY

Page 2 of 2

Fill source	Dates observed	Estimated volume (m3) by Coffey /olume (m3	Stage placed
Galvin Park, Ravenhall Prison	30/11/2015	2060	3 & 4
Ravenhall Prison	1/12/2015	1460	3 & 4
Coburg, Ravenhall Prison	2/12/2015	1810	3 & 4
South Yarra, St Albans	8/12/2015	1100	3 & 4
Coburg	11/12/2015	530	3 & 4
Coburg, St Albans	15/12/2015	230	3 & 4
Ravenhall Prison, St Albans	16/12/2015	1550	3 & 4
St Albans	4/01/2016	60	3 & 4
St Albans	5/01/2016	20	4
Coburg, St Albans	6/01/2016	790	3 & 4
Coburg	7/01/2016	1080	3 & 4
Coburg	8/01/2016	200	3 & 4

GEOTABTF09878AA - LITTLE GREEN - IMPORT MATERIAL SUMMARY (DRAFT)

Fill source	Dates observed	Estimated volume (m3) by Coffey	Stage placed	Environmental report Geotech report	Comment
х	1/05/2015	х	х		
	2/05/2015				
X X	3/05/2015	x	x		
Werribee Plaza, Point Cook	4/05/2015	X	1		
Werribee Plaza, Point Cook, Trugania, Broadmedows, Tarneit	5/05/2015	2500-3000	1		
Epping, Werribee plaza, Point Cook, Truganina, Broadmedows, Tarneit	6/05/2015	2500-3000	1		
Epping, Werribee plaza, Point Cook, Truganina, Broadmedows, Tarneit	7/05/2015	X	1		
Х	8/05/2015 9/05/2015	x	1		
			1		
x Epping, Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, Preston	10/05/2015 11/05/2015	X X	1		
Epping, wernbee Piaza, Point Cook, Truganina, Broadmedows, Tarrieit, Preston X	12/05/2015	x x	1		
Epping, Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, Preston, Werribee Hospital	13/05/2015	2900	1		
x	14/05/2015	X	1		
	15/05/2015		•		
	16/05/2015				
Epping, Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, Preston, Werribee Hospital	17/05/2015	x	1		
x	18/05/2015	x	1		
Epping, Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, Preston, Werribee Hospital	19/05/2015	x	1		
х	20/05/2015	x	1		
Werribee Plaza, Point Cook	21/05/2015	1980	1		
Tarneit, Broadmeadows	22/05/2015	x	1		
	23/05/2015				
Tarneit, Broadmeadows	24/05/2015	x	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	25/05/2015	x	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	26/05/2015	x	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	27/05/2015	X	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	28/05/2015	X	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	29/05/2015 30/05/2015	X X	1		
wernbee Piaza, Point Cook, Truganina, broadmedows, Tarneit, "BMD sources	30/05/2015	X	1		
	1/06/2015				
X	2/06/2015	x	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	3/06/2015	×	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	4/06/2015	x	1		
	5/06/2015				
	6/06/2015				
	7/06/2015				
	8/06/2015				
	9/06/2015				
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	10/06/2015	x	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	11/06/2015	x	1		
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	12/06/2015	x	1		
	13/06/2015				
	14/06/2015				
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	15/06/2015	x	1		
Х	16/06/2015	x	1		
X	17/06/2015	x	1		
	18/06/2015				
	19/06/2015 20/06/2015				
	20/06/2015				
Werribee Plaza, Point Cook, Truganina, Broadmedows, Tarneit, *BMD sources	22/06/2015	x	1		
BMD roadworks (parallel road)	23/06/2015	x x	1		
BMD roadworks (parallel road)	24/06/2015	×	1		
BMD roadworks (parallel road)	25/06/2015	x	1		
BMD roadworks (parallel road)	26/06/2015	x	1		
(Harana)	27/06/2015		•		
	28/06/2015				
BMD roadworks (parallel road)	29/06/2015	x	1		
BMD roadworks (parallel road)	30/06/2015	x	1		
BMD roadworks (parallel road)	1/07/2015	x	1		
BMD roadworks (parallel road), local BMD project	2/07/2015	x	1		
BMD roadworks (parallel road), local BMD project	3/07/2015	x	1		
	4/07/2015				
	5/07/2015				
	6/07/2015				
DMD and develop (annulled and No. 1, 1949)	7/07/2015				
BMD roadworks (parallel road), local BMD project	8/07/2015	x	1		

			_
BMD roadworks (parallel road), local BMD project	9/07/2015	X	1
BMD roadworks (parallel road), local BMD project	10/07/2015	x	1
	11/07/2015		
	12/07/2015		
	13/07/2015		
	14/07/2015		
	15/07/2015		
	16/07/2015		
	17/07/2015		
	18/07/2015		
	19/07/2015		
	20/07/2015		
	21/07/2015		
	22/07/2015		
	23/07/2015		
Wootten road (local BMD project)	24/07/2015	X	1 & 2
	25/07/2015		
	26/07/2015		
Wootten road (local BMD project)	27/07/2015	X	2
Wootten road (local BMD project)	28/07/2015	x	2
Wootten road (local BMD project)	29/07/2015	 X	2
Ivanhoe. Ravenhall Prison	30/07/2015	1640	2
X	31/07/2015	x	2
	1/08/2015		
	2/08/2015		
X	3/08/2015	x	2
Werribee Plaza	4/08/2015	2520	2
			2
Х	5/08/2015	x	
Werribee Plaza	6/08/2015	1970	2
Werribee Plaza	7/08/2015	2300	2
Womboo Fided	8/08/2015	2000	-
	9/08/2015		
Werribee Plaza, Ivanhoe	10/08/2015	1700	2
Werribee Plaza, Ivanhoe	11/08/2015	200	2
Werribee Plaza, Ivanhoe	12/08/2015	920	2
Werribee Plaza, Ivanhoe, South Yarra (Landtrack)	13/08/2015	840	2
Werribee Plaza, Ivanhoe, South Yarra (Landtrack)	14/08/2015	940	2
Weitibee Flaza, Wallibe, South Farra (Landilack)		340	2
	15/08/2015		
	16/08/2015		
Leakes roadworks	17/08/2015	1534.5	1 & 2
Leakes roadworks, Werribee Plaza, Essendon	18/08/2015	2163	1 & 2
Leakes roadworks, Werribee Plaza, Essendon	19/08/2015	2704	2
Leakes radworks, Werribee Plaza	20/08/2015	3721	2
Leakes roadworks, Ravenhall Prison	21/08/2015	2620	2
	22/08/2015		
	23/08/2015		
Werribee Plaza, South Yarra (Landtrack)	24/08/2015	2530	2
Werribee Plaza, Ivanhoe Prison	25/08/2015	1330	2
Glen Iris (Chappell street), Leakes roadworks	26/08/2015	1000	2
Glen Iris (Chappell street), Leakes roadworks	27/08/2015	1000	2
Glen Iris (Chappell street), Leakes roadworks	28/08/2015	730	2
	29/08/2015		
	30/08/2015		
South Yarra, Ranvenshall Prison, Wooten road	31/08/2015	780	2
Werribee Plaza, Ravenhall Prison	1/09/2015	1740	2
Werribee Plaza, South Yarra (Chapel street)	2/09/2015	1430	2
X	3/09/2015	x	x
X	4/09/2015	x	X
	5/09/2015		
	6/09/2015		
x			
×	7/09/2015	X	X
	8/09/2015		
X	9/09/2015	x	2
X	10/09/2015	X	2
X.		^	2
	11/09/2015		
	12/09/2015		
	13/09/2015		
	14/09/2015		
	15/09/2015		
	16/09/2015		
	17/09/2015		
	18/09/2015		
	19/09/2015		
	20/09/2015		
	21/09/2015		
	22/09/2015		
	22/00/2010		

	23/09/2015		
X	24/09/2015	X	3
Ravenhall Prison	25/09/2015	1250	3
	26/09/2015		
	27/09/2015		
Ravenhall Prison	28/09/2015	1000	3
	29/09/2015		
Ravenhall Prison	30/09/2015	1500	3
Ravenhall Prison	1/10/2015	950	3
	2/10/2015		
	3/10/2015		
	4/10/2015		
	5/10/2015	450	
Caroline Springs	6/10/2015	150	3
Werribee, Caroline Springs	7/10/2015	210	3
St Albans, Caroline Springs,	8/10/2015	880	3
St Albans, Caroline Springs,	9/10/2015	820	3
St Albans, Werribee	10/10/2015	1500	3
	11/10/2015		
St Albans, Werribee	12/10/2015	1400	3
St Albans, Vinedex Sunshine	13/10/2015	650	3
St Albans, Vinedex Sunshine, Ravenhall Prison	14/10/2015	2300	3
St Albans, Werribee	15/10/2015	X	3
St Albans, Vinedex Sunshine	16/10/2015	X	3
	17/10/2015		
	18/10/2015		
X	19/10/2015	x	3
Vinedex Sunshine, St Albans	20/10/2015	160	3
Ravenhall Prison, St Albans	21/10/2015	2190	3
South Yarra, Ravenhall Prison, St Albans	22/10/2015	810	1 & 3
South Yarra, Ravenhall Prison	23/10/2015	550	1 & 3
South Farra, Naverillain Frison	24/10/2015	330	100
	25/10/2015		
South Yarra. Ravenhall Prison, Werribee	26/10/2015	1900	1 & 3
Coburg, South Melbourne, Werribee Plaza	27/10/2015	1150	1 & 3
Coburg, South Melbourne	28/10/2015	1150	1 & 3
Altona, South Melbourne, Werribee	29/10/2015	2020	1 & 3
Altona, Coburg, On-site (Stage 1 only)	30/10/2015	1040	1 & 3
3, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	31/10/2015		
	1/11/2015		
	2/11/2015		
	3/11/2015		
Coburg, South Melbourne, On-site (Stage 1 only)	4/11/2015	740	1 & 3
	5/11/2015		
	6/11/2015		
	7/11/2015		
	8/11/2015		
On-site (Stage 1 only)	9/11/2015		
St Albams, Coburg, South Melbourne, On-site (Stage 1 only)	10/11/2015	1380	1 & 3
On-site (Stage 1 only)	11/11/2015	1000	
On-site (Stage 1 only)	12/11/2015		
On-site (Stage 1 only)			
On-site (Stage 1 only)	13/11/2015		
	14/11/2015		
	15/11/2015		
Ravenhall Prison, Ivanhoe, Laverton, On-site (Stage 1 only)	16/11/2015	940	1 & 3
On-site (Stage 1 only)	17/11/2015		3
Ivanhoe, Ravenhall Prison,	18/11/2015		1 & 3
Melton, South Melbourne, Ravenhall Prison	19/11/2015	3000	3
Coburg, South Melbourne, Ravenhall Prison	20/11/2015	2880	3
obburg, coult moleculite, nuroimain i noon	21/11/2015	2000	· ·
	22/11/2015		
Coburg	23/11/2015	840	3
South Melbourne, Ravenhall Prison, on-site (Stage 1 only)	24/11/2015	940	1 & 3
South Melbourne, Ravenhall Prison, on-site (Stage 1 only)	25/11/2015	1340	1 & 3
South Melbourne, Ravenhall Prison, on-site (Stage 1 only)	26/11/2015	1840	1 & 3
Ravenhall Prison, Niddrie	27/11/2015	1680	3
Ravenhall Prison	28/11/2015	600	3
	29/11/2015		
Galvin Park, Ravenhall Prison	30/11/2015	2060	3 & 4
Ravenhall Prison	1/12/2015	1460	3 & 4
Coburg, Ravenhall Prison	2/12/2015	1810	3 & 4
South Yarra, St Albans	3/12/2015	1310	4
South Yarra, Ravenhall Prison	4/12/2015	1760	4
	5/12/2015		
	6/12/2015		

7/12/2015

South Yarra, St Albans	8/12/2015	1100	3 & 4
Werribee Plaza, St Albans, Coburg	9/12/2015	2370	4
Werribee Plaza, St Albans, Coburg	10/12/2015	1590	4
Coburg	11/12/2015	530	3 & 4
	12/12/2015		
Oaksina Ot Albana	13/12/2015	000	
Coburg, St Albans	14/12/2015	630	4 3 & 4
Coburg, St Albans Ravenhall Prison, St Albans	15/12/2015 16/12/2015	230 1550	3 & 4
South Yarra, South Melbourne	17/12/2015	1580	4
Werribee Plaza, Essendon, South Melbourne, South Yarra, St Albans	18/12/2015	5160	4
Tromboo Fidea, Essonasti, Sodii Moissano, Sodii Fand, Stribano	19/12/2015	0.00	•
	20/12/2015		
Port Melbourne, South Yarra	21/12/2015	1950	4
Ravenhall Prison, South Melbourne	22/12/2015	2020	4
	23/12/2015		
	24/12/2015		
	25/12/2015		
	26/12/2015		
	27/12/2015		
	28/12/2015 29/12/2015		
	30/12/2015		
	31/12/2015		
	1/01/2016		
	2/01/2016		
	3/01/2016		
St Albans	4/01/2016	60	3 & 4
St Albans	5/01/2016	20	4
Coburg, St Albans	6/01/2016	790	3 & 4
Coburg	7/01/2016	1080	3 & 4
Coburg	8/01/2016	200	3 & 4
	9/01/2016		
Couth Malhauran	10/01/2016	420	4
South Melbourne South Melbourne	11/01/2016	430	4
South Melbourne	12/01/2016 13/01/2016	750 0	4
South Yarra, Werribee	14/01/2016	1120	4
Ravenhall Prison	15/01/2016	740	4
TOTAL TROUT	16/01/2016		·
	17/01/2016		
Ravenhall Prison, South Melbourne	18/01/2016	1050	4
Ravenhall Prison, South Melbourne, South Yarra, onsite BMD	19/01/2016	2210	4
	20/01/2016	0	
Ravenhall Prison, South Yarra, onsite BMD	21/01/2016	1350	4
Ravenhall Prison	22/01/2016	320	4
	23/01/2016		
	24/01/2016		
	25/01/2016 26/01/2016		
Ravenhall Prison, St. Albans	27/01/2016	2320	4
Raverillali Filsoff, St. Albalis	28/01/2016	0	4
	29/01/2016	0	
	30/01/2016	Ü	
	31/01/2016		
	1/02/2016		
Essendon, South Melbourne, South Yarra	2/02/2016	1810	4
Onsite BMD, Werribee, South Melbourne	3/02/2016	1230	4
Onsite BMD, St. Albans, South Melbourne	4/02/2016	2990	4
Onsite BMD, St. Albans, Boral processed St. Albans	5/02/2016	1880	4
BMD onsite	6/02/2016	180	4
	8/02/2016		
Onsite BMD, St. Albans, South Melbourne, Werribee, Essendon	9/02/2016	1490	4
	10/02/2016		
Onsite BMD, St. Albans, South Melbourne, Essendon	11/02/2016 12/02/2016	1240	4
Essendon, onsite BMD, St. Albans	15/02/2016	1120	4
Essendon Essendon	16/02/2016	1700	4
Essendon, St. Albans	17/02/2016	630	4
Onsite BMD	18/02/2016	350	4
Onsite BMD	19/02/2016	1640	4
		- · -	•