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Level One Report AS3798

Client:

Shadforth Civil Pty Ltd

Project:

Riverbank Estate, Stage - 16C

Address:

Boss Drive, Morayfield Qld

Job No. J21/22



Version	Date	Author	Initials	Reviewer	mitials
1	17/09/2021	Matt Webb	Mu	Jacob Jones	14

Form No: W169 - Version 4 (14/05/2021)





CONSTRUCTION







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1.0 Introduction

Wagner Soil Testing has recently completed a Level One Overview of Earthworks, in accordance with the requirements of AS3798 — "Guidelines on Earthworks for Commercial and Residential Developments" for Shadforth Civil Pty Ltd.

Controlled fill (as defined in AS 2870) was placed by Shadforth. Stripping instructions, proof rolling, and compaction control testing was carried out by Wagner Soil Testing (on a fulltime basis) during all earthwork's operations. Our onsite supervision component excludes assessments of fill quality and engineering properties that are outside the requirements of AS3798 – 2007, including CBR values and soil reactivity.

2.0 Site Description

The site is located at Boss Drive, Morayfield Qld. The general location of the site is shown in the attached site plans (Appendix 1). The site is bound by Residential Properties.

3.0 Foundation Preparation

3.1 Site Stripping

Vegetation, topsoil, and organic rich materials were stripped and stockpiled onsite prior to the commencement of filling operations. As a safety factor several test pits were excavated in the proposed fill area to assess subsurface conditions & no significant issues were noted during this phase.

3.2 Proof Rolling

All stripped areas were proof rolled prior to any fill placement. Any compressible areas with apparent movement were excavated to a firm base before any fill being placed.

4.0 Controlled Filling

Fill materials (Onsite) were compacted using a medium sized pad foot roller in layers not exceeding 0.3m loose. The natural ground in the areas of filling generally comprised of Sandy, Silty, Clay (CL-CI). The fill material used was generally as above. Moisture contents of all fill placed was monitored by Wagner Soil Testing. Total volumes of fill reached 43,512m³.



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5.0 Compaction Control Testing

Compaction Control Testing was carried out by Wagner Soil Testing. Testing was carried out in accordance with the requirements of **AS3798 Table 5.1 (Minimum Relative Compaction)** and **Table 8.1 (Frequency of Field Density Tests)**. During the works, Eighty Seven (87) Field Dry Densities were carried out on fill materials together with Dynamic Cone Penetrometers (DCP's) over the filled zones periodically & at the completion of earthworks operations to help quantify bearing capacities.

6.0 Field Density Results

All Nuclear Field Densities carried out on the fill indicated Density Ratios greater than the specified requirement of 95% (standard compaction) & AS3798 Table 5.1.

7.0 Report on Filling Operations

The results obtained from Compaction Control Testing, together with observations made during earthworks operations indicate that all fill materials were placed in a controlled manner in accordance with good engineering practices. The earthworks have been carried out to meet the requirements of Level 1 Certification as per AS3798 — "Guidelines on Earthworks for Commercial and Residential Developments".

8.0 Notes

Certified / Controlled (Level 1) Fill is only an assurance of its density. There are sites where long-term consolidations of fill can occur, unrelated to its actual density. Sites where fill has been placed over inferior material and sites where the depth of controlled fill varies dramatically over short distances are sites where differential consolidations must be considered. Although all Field Densities carried out reached density ratios greater than 95% as required, some material still may have bearing ratios below 100kPa as per AS2870 – Residential Slabs & Footings depending on material composition, and unfavourable site classifications and low subgrade design strengths still may be encountered.

All compacted fill is subject to secondary (creep) settlement, which is relational to the depth of the fill. Estimated secondary settlement may be of the order of 1% to 2% of the total fill height over 15 years. There is a possibility that additional fill has been placed after the date of the last field density test or at times when Wagner Soil Testing has not been notified that filling operations are in progress. The installation of services may cause disruption of the compacted fill.

Unless otherwise stated, Level 1 Certification does not address trench backfill operations, batter slope stability, retaining wall construction, global stability analysis, acid sulfate testing and or management. The "supervision" component of this Level 1 Report is not NATA endorsed. Wagner Soil Testing must be contacted if any site levels are modified whatsoever. It is the client's responsibility to maintain site drainage after the issue of this report.

A full geotechnical site investigation / classification and foundation design for the specific ground conditions should be carried out by suitably qualified or experienced personnel prior to building. This service can be provided, if required, by contacting Wagner Soil Testing.



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Constraints:

This report was produced for the sole use of Shadforth Civil Pty Ltd. This report should not be used by or depended upon for other projects or purposes on the same or other projects or by a third party. In the preparation of this report Wagner Soil Testing has relied upon information provided by the client and or their agents.

The results provided in this report are indicative of the subsurface conditions on the site only at the specific sampling or testing locations, and then only to the depths investigated along with the time the work was carried out. It is known that subsurface conditions can suddenly change due to irregular geological processes and as a result of human influences. Such changes may occur after Wagner Soil Testing's field testing has been completed.

Certain ground conditions and the materials behaviour observed or contained at the test locations may alter from those which may be encountered elsewhere on the site. Should variations in subsurface conditions be encountered, then additional advice should be sought from Wagner Soil Testing and if required, amendments made.

Wagner Soil Testing cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome, or conclusion given in this report.

To establish a geotechnical model as per AS1726-2017-5.2 we require extra testing. No differential settlement estimates have been calculated for this site.

For further technical support regarding this Geotechnical Report please contact Mr. Dean Wagner of Wagner Soil Testing.

Dean Wagner
Managing Director
Wagner Soil Testing



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Appendix 1 – General Layout Plan

NERBANK ESTATE

LOT 1010 BERRY STREET CABOOLTURE SOUTH STAGE 16C FOR PEET CABOOLTURE SYNDICATE LTD



LOCALITY PLAN

REGIONAL COUNCIL AREA OF SITE: 10.232 ha **MORETON BAY**

LOT INFORMATION **EXISTING LOTS**

RETICULATION NOTES AND DETAILS

SR RETICULATION COVER SHEET WATER RETICULATION LAYOUT PLAN

PROPOSED NO. OF LOTS: 32 LOT 1015 SP308292

OL LINE SETOUT LAYOUT PLAN AND SETOUT BULK EARTHWORKS SECTIONS AND DETAILS COMPENSATORY EARTHWORKS LAYOUT PLAN DRWING INDEX

RIVERBANK ESTATE

STAGE 16C

M.B.R.C. REF No. DA/39596/2019/V3RM

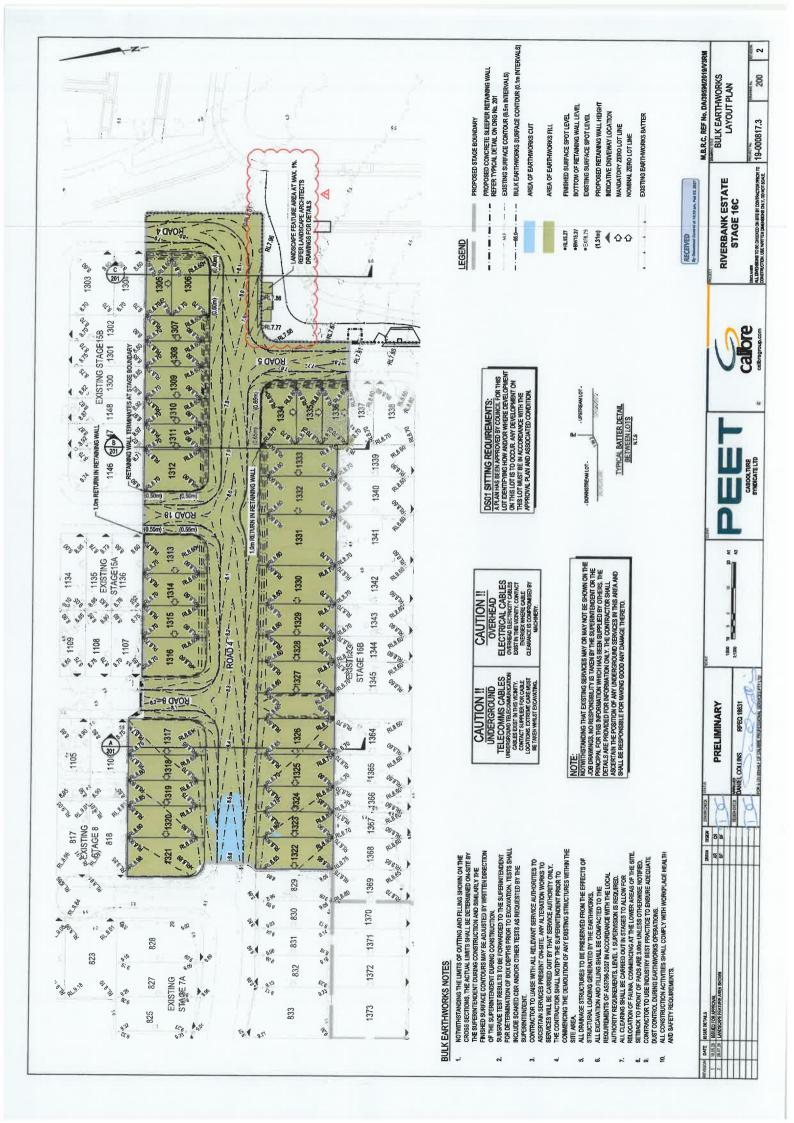
ISSUED FOR 11.12.20
CONSTRUCTION

16C

19-000817.3

CONSTRUCTION HOLD POINT PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL VERIFY LEVELS OF ALL EXISTING CROSSINGS AND CONNECTION POINTS.

CONSTRUCTION HOLD POINT
MAKE THE BASE FOR MANHOLES, BASPECTION PTS, CILLLES AND FIELD
MAKES FOR STORMWITE DRAWAGE AND SEMPERTOLATION HAVE
SHERN FOURED, FURTHER CONSTRUCTION SALL NOT PROCEEDURINT,





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Appendix 2 - Field Density Reports





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			19-Feb-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number:	1	Page	1 of 1	Order No:	Sam D

Test Methods	AS 1289 5.8.1/5.7.1/5	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))			
Lab Number	W21/1531	W21/1532	W21/1533			
Test Location	Lot 1328	Lot 1330	Lot 1332			
	Front of Lot	Front of Lot	Front of Lot			
	2nd Lift	2nd Lift	2nd Lift			
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill			
Material Source	Onsite	Onsite	Onsite			
Depth Tested	175	175	175			
Layer Thickness	200	200	200			
Date Tested	19-Feb-21	19-Feb-21	19-Feb-21			
Material Sampled	After Compaction	After Compaction	After Compaction			
Test Results						
Insitu Wet Density (t/m³)	1.96	1.99	2.01			
Insitu Moisture Content (%)	N/A	N/A	N/A			
PCWD (t/m³)	2.03	2.03	2.05			
Peak Added Moisture (%)	-0.2	-0.3	-0.2			
Moisture Correction (%)	-0.3	-0.4	-0.3			
Retaining Seive (mm)	19.0	19.0	19.0			
Percentage Oversize (wet)	0.0	0.0	0.0			
ge e rereize (ree)		VIO	0.0			
HILF DENSITY RATIO (%)	96.5	98.0	98.0			
MOISTURE VARIATION (%)						
Compaction Type	Standard	Standard	Standard			
Degree of Compaction	95%	95%	95%			
Remarks						
	Docket #36988					



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23/12/2020

Date 23/02/2021





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Lt	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane,	99 Sandalwood Lane, Forest Glen Qld 4556			19-Feb-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number:	2	Page	1 of 1	Order No:	Sam D

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Co	mpact) AS 1289	1.2.1 (6.4(b))	
Lab Number	W21/1534	W21/1535	W21/1536	
Test Location	Road 4	road 4	Road 4	
	Ch 460m	Ch 500m	Ch 540m	
	1st Lift	1st Lift	1st Lift	
Layer / Elevation	Embankment Fill	Embankment Fill	Embankment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	19-Feb-21	19-Feb-21	19-Feb-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	2.01	1.97	1.99	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m³)	2.05	2.03	2.04	
Peak Added Moisture (%)	+3.7	+1.8	+2.4	
Moisture Correction (%)	+4.0	+2.0	+2.7	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	98.0	97.0	97.5	
WOISTORE VARIATION (70)				
Compaction Type	Standard	Standard	Standard	
Degree of Compaction	95%	95%	95%	
Remarks		Dooket #26000		
		Docket #36988		



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, Fo	99 Sandalwood Lane, Forest Glen Qld 4556			22-Feb-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	florayfield, Qld			JJ
Report Number:	3	Page	1 of 2	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))		
Lab Number	W21/1549	W21/1550	W21/1551		
Test Location	Lot 1327	Lot 1328	Lot 1329		
	Centre Lot	Centre Lot	Centre Lot		
	3rd Lift	3rd Lift	3rd Lift		
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill		
Material Source	Onsite	Onsite	Onsite		
Depth Tested	175	175	175		
Layer Thickness	200	200	200		
Date Tested	22-Feb-21	22-Feb-21	22-Feb-21		
Material Sampled	After Compaction	After Compaction	After Compaction		
Test Results					
Insitu Wet Density (t/m³)	2.01	2.00	1.98		
Insitu Moisture Content (%)	N/A	N/A	N/A		
PCWD (t/m ³)	2.11	2.06	2.02		
Peak Added Moisture (%)	-1.1	-2.6	-2.7		
Moisture Correction (%)	-1.3	-3.1	-2.8		
Retaining Seive (mm)	19.0	19.0	19.0		
Percentage Oversize (wet)	0.0	0.0	0.0		
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	95.5	96.5	98.0		
(,0)					
Compaction Type	Standard	Standard	Standard		
Degree of Compaction	95%	95%	95%		
Remarks		Docket #36994			
	DOCKET #35994				



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd		
Client Address:	99 Sandalwood Lane, Forest Glen	99 Sandalwood Lane, Forest Glen Qld 4556		
Project:	Riverbank Estate Stage 16c		Tested by:	JL
Location:	Morayfield, Qld		Checked:	JJ
Report Number:	3B Page	1 of 3	Order No:	Sam D

Test Methods	AS 1289 5.8.1/5.7.1/5	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))			
Lab Number	W21/1537	W21/1538	W21/1539			
Test Location	Road 4	road 4	Road 4			
	Ch 420m	Ch 470m	Ch 530m			
	Final Level	Final Level	Final Level			
Layer / Elevation	Embankment Fill	Embankment Fill	Embankment Fill			
Material Source	Onsite	Onsite	Onsite			
Depth Tested	175	175	175			
Layer Thickness	200	200	200			
Date Tested	20-Mar-21	20-Mar-21	30-Mar-21			
Material Sampled	After Compaction	After Compaction	After Compaction			
Test Results						
Insitu Wet Density (t/m³)	2.03	2.03	2.01			
Insitu Moisture Content (%)	N/A	N/A	N/A			
PCWD (t/m³)	2.05	2.12	2.04			
Peak Added Moisture (%)	+2.0	+1.5	+3.0			
Moisture Correction (%)	+2.2	+1.8	+3.3			
Retaining Seive (mm)	19.0	19.0	19.0			
Percentage Oversize (wet)	0.0	0.0	0.0			
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	99.0	96.0	98.5			
2						
Compaction Type	Standard	Standard	Standard			
Degree of Compaction	95%	95%	95%			
Remarks		Docket #41147				



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23/12/2020

Date 28/03/2021





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lar	99 Sandalwood Lane, Forest Glen Qld 4556			22/02/2021
Project:	Riverbank Estate S	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number	4	Page	2 of 2	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co		1.2.1 (6.4(b))		
Lab Number	W21/1552	W21/1553	W21/1554		
Test Location	Lot 1330	Lot 1331	Lot 1332		
	Centre Lot	Centre Lot	Centre Lot		
	3rd Lift	3rd Lift	3rd Lift		
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill		
Material Source	Onsite	Onsite	Onsite		
Depth Tested	175	175	175		
Layer Thickness	200	200	200		
Date Tested	22-Feb-21	22-Feb-21	22-Feb-21		
Material Sampled	After Compaction	After Compaction	After Compaction		
Test Results					
Insitu Wet Density (t/m³)	1.973	2.025	2.003		
Insitu Moisture Content (%)	N/A	N/A	N/A		
PCWD (t/m³)	2.042	2.058	2.023		
Peak Added Moisture (%)	-1.4	-1.2	+0.2		
Moisture Correction (%)	-1.7	-1.4	+0.2		
Retaining Seive (mm)	19.0	19.0	19.0		
Percentage Oversize (wet)	0.0	0.0	0.0		
HILF DENSITY RATIO (%)	96.6	98.4	99.0		
MOISTURE VARIATION (%)					
Compaction Type	Standard	Standard	Standard		
Degree of Compaction	95%	95%	95%		
Remarks	Docket #36994				



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	9 Sandalwood Lane, Forest Glen Qld 4556			20-Mar-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	lorayfield, Qld			JJ
Report Number:	4B	Page	2 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Co		1.2.1 (6.4(b))	
Lab Number	W21/1540	W21/1541	W21/1542	
Test Location	Road 4	road 4	Road 4	
	Ch 555m	Ch 600m	Ch 650m	
	Final Level	Final Level	Final Level	
Layer / Elevation	Embankment Fill	Embankment Fill	Embankment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	20-Mar-21	20-Mar-21	30-Mar-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	2.01	2.00	2.03	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m ³)	2.07	2.04	2.06	
Peak Added Moisture (%)	+2.2	+0.3	+1.1	
Moisture Correction (%)	+2.4	+0.5	+1.4	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	97.0	98.0	98.5	
Compaction Type	Standard	Standard	Standard	
Degree of Compaction	95%	95%	95%	
Remarks	Docket #41147			



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Version: 3

23/12/2020

Date 28/03/2021





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Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			DW
Report Number:	5	Page	1 of 2	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1		
Sample Method	Earthworks Layer (Co		1.2.1 (6.4(b))
Lab Number	W21/1581	W21/1582	W21/1583
Test Location	Lot 1311	Lot 1312	Lot 1313
	Centre Lot	Centre Lot	Centre Lot
	2nd Lift	2nd Lift	2nd Lift
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	175	175	175
Layer Thickness	200	200	200
Date Tested	23-Feb-21	23-Feb-21	23-Feb-21
Material Sampled	After Compaction	After Compaction	After Compaction
Test Results			
Insitu Wet Density (t/m³)	1.98	2.01	2.02
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m ³)	2.07	2.07	2.07
Peak Added Moisture (%)	+0.5	+1.3	+1.3
Moisture Correction (%)	+0.6	+1.5	+1.5
Retaining Seive (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
HILF DENSITY RATIO (%)	95.5	97.5	98.0
MOISTURE VARIATION (%)			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks			
		Docket #36996	



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Form No: 95 Version: 3 23/12/2020

Date 25/02/2021





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Client:	Shadforth's Civil Pty Ltd			Job No:	J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			20-Mar-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number:	5B	Page	3 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))	
Lab Number	W21/1543	W21/1544	W21/1545	
Test Location	Road 8	Road 18	Road 5	
	Ch 25m	Ch 20m	Ch 30m	
	Final Level	Final Level	Final Level	
Layer / Elevation	Embankment Fill	Embankment Fill	Embankment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	20-Mar-21	20-Mar-21	30-Mar-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	2.05	2.03	2.04	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m³)	2.10	2.06	2.03	
Peak Added Moisture (%)	+0.2	+1.3	+1.0	
Moisture Correction (%)	+0.4	+1.5	+1.3	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	97.5	98.5	99.0	
Compaction Type	Standard	Standard	Standard	
Degree of Compaction Remarks	95%	95%	95%	
Cemans	Docket #41147			



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23/12/2020

Date 28/03/2021





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd		
Client Address:	99 Sandalwood Lane, Forest	9 Sandalwood Lane, Forest Glen Qld 4556		
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c		
Location:	Morayfield, Qld	Morayfield, Qld		
Report Number:	6 Pa	ge 2 of 2	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))	
Lab Number	W21/1584	W21/1585	W21/1586	
Test Location	Lot 1314	Lot 1315	Lot 1316	
	Centre Lot	Centre Lot	Centre Lot	
	2nd Lift	2nd Lift	2nd Lift	
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	23-Feb-21	23-Feb-21	23-Feb-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m3)	2.01	1.98	1.97	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m ³)	2.06	2.08	2.07	
Peak Added Moisture (%)	-0.5	-1.2	-2.4	
Moisture Correction (%)	-0.6	-1.4	-2.9	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	97.5	95.0	95.0	
HOIOTORE VARIATION (70)				
Compaction Type	Standard	Standard	Standard	
Degree of Compaction	95%	95%	95%	
Remarks	Docket #36996			



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Date 25/02/2021





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, I	99 Sandalwood Lane, Forest Glen Qld 4556			1-Mar-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number:	7	Page	1 of 2	Order No:	Sam

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1		
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))
Lab Number	W21/1924	W21/1925	W21/1926
Test Location	Lot 1333	Lot 1334	Lot 1335
	Centre Lot	Centre Lot	Centre Lot
	3rd Lift	3rd Lift	3rd Lift
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	175	175	175
Layer Thickness	200	200	200
Date Tested	1-Mar-21	1-Mar-21	1-Mar-21
Material Sampled	After Compaction	After Compaction	After Compaction
Test Results			
Insitu Wet Density (t/m³)	2.01	1.97	1.99
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m³)	2.08	2.08	2.08
Peak Added Moisture (%)	+2.3	+0.0	+1.3
Moisture Correction (%)	+2.5	+0.0	+1.5
Retaining Seive (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	96.5	95.0	95.5
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks			
	Docket #37183		



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty L	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane,	99 Sandalwood Lane, Forest Glen Qld 4556			1/03/2021
Project:	Riverbank Estate Stag	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number	8	Page	2 of 2	Order No:	Sam

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1		
Sample Method	Earthworks Layer (Compact)	AS 1289 1.2.1 (6.4(b))	
Lab Number	W21/1927		
Test Location	Lot 1336		
	Centre Lot		
	3rd Lift		
Layer / Elevation	Allotment Fill		
Material Source	Onsite		
Depth Tested	175		
Layer Thickness	200		
Date Tested	1-Mar-21		
Material Sampled	After Compaction		
Test Results			
Insitu Wet Density (t/m³)	2.026		
Insitu Moisture Content (%)	N/A		
PCWD (t/m³)	2.095		
Peak Added Moisture (%)	+4.1		
Moisture Correction (%)	+4.4		
Retaining Seive (mm)	19.0		
Percentage Oversize (wet)	0.0		
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	96.7		
MOIOTOIL FAIGHTION (70)			
Compaction Type	Standard		
Degree of Compaction	95%		
Remarks			
	Docket #37183		

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd					
Client Address:	99 Sandalwood Lane, Forest Glei	99 Sandalwood Lane, Forest Glen Qld 4556				
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c				
Location:	Morayfield, Qld	Morayfield, Qld				
Report Number:	15 Page	1 of 2	Order No:	Sam P		

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co	Earthworks Layer (Compact) AS 1289 1.2.1 (6.4(b))			
Lab Number	W21/1957	W21/1958	W21/1959		
Test Location	Lot 1305	Lot 1306	Lot 1307		
	Centre Lot	Centre Lot	Centre Lot		
	2nd Lift	2nd Lift	2nd Lift		
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill		
Material Source	Onsite	Onsite	Onsite		
Depth Tested	175	175	175		
Layer Thickness	200	200	200		
Date Tested	2-Mar-21	2-Mar-21	2-Mar-21		
Material Sampled	After Compaction	After Compaction	After Compaction		
Test Results					
Insitu Wet Density (t/m³)	1.97	2.01	1.99		
Insitu Moisture Content (%)	N/A	N/A	N/A		
PCWD (t/m³)	2.06	2.10	2.07		
Peak Added Moisture (%)	+0.1	+1.1	+0.3		
Moisture Correction (%)	+0.1	+1.2	+0.4		
Retaining Seive (mm)	19.0	19.0	19.0		
Percentage Oversize (wet)	0.0	0.0	0.0		
HILF DENSITY RATIO (%)	95.5	96.0	96.0		
MOISTURE VARIATION (%)					
Compaction Type	Standard	Standard	Standard		
Degree of Compaction	95%	95%	95%		
Remarks		B. 1			
		Docket #37186			



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd					
Client Address:	99 Sandalwood Lane, Fore	99 Sandalwood Lane, Forest Glen Qld 4556				
Project:	Riverbank Estate Stage 16	Riverbank Estate Stage 16c			JL	
Location:	Morayfield, Qld	Morayfield, Qld			JJ	
Report Number:	16 F	age	2 of 2	Order No:	Sam P	

arthworks Layer (Co 21/1960 t 1308 entre Lot d Lift Allotment Fill Onsite 175 200 2-Mar-21 After Compaction	mpact) AS 1289 1 W21/1961 Lot 1309 Centre Lot 2nd Lift Allotment Fill Onsite 175 200 2-Mar-21 After Compaction	1.2.1 (6.4(b)) W21/1962 Lot 1310 Centre Lot 2nd Lift Allotment Fill Onsite 175 200 2-Mar-21
21/1960 t 1308 entre Lot d Lift Allotment Fill Onsite 175 200 2-Mar-21	W21/1961 Lot 1309 Centre Lot 2nd Lift Allotment Fill Onsite 175 200 2-Mar-21	Lot 1310 Centre Lot 2nd Lift Allotment Fill Onsite 175 200
entre Lot d Lift Allotment Fill Onsite 175 200 2-Mar-21	Centre Lot 2nd Lift Allotment Fill Onsite 175 200 2-Mar-21	Centre Lot 2nd Lift Allotment Fill Onsite 175 200
d Lift Allotment Fill Onsite 175 200 2-Mar-21	2nd Lift Allotment Fill Onsite 175 200 2-Mar-21	2nd Lift Allotment Fill Onsite 175 200
Allotment Fill Onsite 175 200 2-Mar-21	Allotment Fill Onsite 175 200 2-Mar-21	Allotment Fill Onsite 175 200
Onsite 175 200 2-Mar-21	Onsite 175 200 2-Mar-21	Onsite 175 200
175 200 2-Mar-21	175 200 2-Mar-21	175 200
200 2-Mar-21	200 2-Mar-21	200
2-Mar-21	2-Mar-21	
		2-Mar-21
After Compaction	After Compaction	
		After Compaction
2.02	1.97	2.03
N/A	N/A	N/A
2.08	2.06	2.08
+2.2	+0.2	+2.3
+2.3	+0.2	+2.5
19.0	19.0	19.0
0.0	0.0	0.0
97.0	96.0	97.5
Standard	Standard	Standard
95%	95%	95%
	Docket #37186	
Docket #37186		
	+2.2 +2.3 19.0 0.0	+2.2 +0.2 +2.3 +0.2 19.0 19.0 0.0 0.0 97.0 96.0

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd				
Client Address:	99 Sandalwood Lane, I	99 Sandalwood Lane, Forest Glen Qld 4556				
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c				
Location:	Morayfield, Qld	Morayfield, Qld			JJ	
Report Number:	17	17 Page 1 of 3				

Earthworks Layer (Co W21/2185 Lot 1313 Centre Lot Final Level	W21/2186 Lot 1314	1.2.1 (6.4(b)) W21/2187	
Lot 1313 Centre Lot	Lot 1314		
Centre Lot			
		Lot 1315	
Final Level	Centre Lot	Centre Lot	
I mai Lovoi	Final Level	Final Level	
Allotment Fill	Allotment Fill	Allotment Fill	
Onsite	Onsite	Onsite	
175	175	175	
200	200	200	
9-Mar-21	9-Mar-21	9-Mar-21	
After Compaction	After Compaction	After Compaction	
1.96	2.00	1.99	
N/A	N/A	N/A	
2.05	2.07	2.08	
-0.1	+0.3	+0.3	
-0.1	+0.3	+0.3	
19.0	10.0	19.0	
0.0	0.0	0.0	
96.0	96.5	96.0	
Standard	Standard	Standard	
95%	95%	95%	
Docket #37192			
	175 200 9-Mar-21 After Compaction 1.96 N/A 2.05 -0.1 -0.1 19.0 0.0	175	

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23/12/2020

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd				
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556				
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c				
Location:	Morayfield, Qld	Morayfield, Qld			JJ	
Report Number:	18	Page	2 of 3	Order No:	Sam P	

vorks Layer (Co 2188 16 2 Lot e Lot evel lotment Fill Onsite 175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	ompact) AS 1289 1 W21/2189 Lot 1317 Centre Lot Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 1.97 N/A 2.07 +0.3	I.2.1 (6.4(b)) W21/2190 Lot 1318 Centre Lot Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 2.02 N/A 2.08	
e188 16 Lot Level lotment Fill Onsite 175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	W21/2189 Lot 1317 Centre Lot Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 1.97 N/A 2.07	Lot 1318 Centre Lot Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 2.02 N/A 2.08	
e Lot .evel lotment Fill Onsite 175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	Centre Lot Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 1.97 N/A 2.07	Centre Lot Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 2.02 N/A 2.08	
level lotment Fill Onsite 175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 1.97 N/A 2.07	Final Level Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 2.02 N/A 2.08	
Onsite 175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 1.97 N/A 2.07	Allotment Fill Onsite 175 200 9-Mar-21 After Compaction 2.02 N/A 2.08	
Onsite 175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	Onsite 175 200 9-Mar-21 After Compaction 1.97 N/A 2.07	Onsite 175 200 9-Mar-21 After Compaction 2.02 N/A 2.08	
175 200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	175 200 9-Mar-21 After Compaction 1.97 N/A 2.07	2.02 N/A 2.08	
200 9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	200 9-Mar-21 After Compaction 1.97 N/A 2.07	200 9-Mar-21 After Compaction 2.02 N/A 2.08	
9-Mar-21 r Compaction 2.01 N/A 2.10 +2.2	9-Mar-21 After Compaction 1.97 N/A 2.07	9-Mar-21 After Compaction 2.02 N/A 2.08	
2.01 N/A 2.10 +2.2	1.97 N/A 2.07	2.02 N/A 2.08	
2.01 N/A 2.10 +2.2	1.97 N/A 2.07	2.02 N/A 2.08	
N/A 2.10 +2.2	N/A 2.07	N/A 2.08	
N/A 2.10 +2.2	N/A 2.07	N/A 2.08	
2.10 +2.2	2.07	2.08	
+2.2			
	+0.3	.0.0	
.0.4	1 .0.0	+2.3	
+2.4	+0.3	+2.3	
19.0	19.0	19.0	
0.0	0.0	0.0	
96.0	95.5	97.0	
Standard	Standard	Standard	
		95%	
9370	95%	95%	
Docket #37192			
	96.0 Standard 95%	Standard Standard 95% 95%	



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23/12/2020





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty	Shadforth's Civil Pty Ltd			
Client Address:	99 Sandalwood Lane	99 Sandalwood Lane, Forest Glen Qld 4556			9/03/2021
Project:	Riverbank Estate Sta	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld			Checked:	JJ
Report Number	19				

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))		
Lab Number	W21/2191	W21/2192	W21/2193		
Test Location	Lot 1319	Lot 1320	Lot 1321		
	Centre Lot	Centre Lot	Centre Lot		
	Final Level	Final Level	Final Level		
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill		
Material Source	Onsite	Onsite	Onsite		
Depth Tested	175	175	175		
Layer Thickness	200	200	200		
Date Tested	9-Mar-21	9-Mar-21	9-Mar-21		
Material Sampled	After Compaction	After Compaction	After Compaction		
Test Results					
Insitu Wet Density (t/m³)	2.060	2.025	1.989		
Insitu Moisture Content (%)	N/A	N/A	N/A		
PCWD (t/m ³)	2.119	2.088	2.072		
Peak Added Moisture (%)	+3.3	+2.1	-1.8		
Moisture Correction (%)	+3.6	+2.3	-2.1		
Retaining Seive (mm)	19.0	19.0	19.0		
Percentage Oversize (wet)	0.0	0.0	0.0		
HILF DENSITY RATIO (%)	97.2	97.0	96.0		
MOISTURE VARIATION (%)					
Compaction Type	Standard	Standard	Standard		
Degree of Compaction	95%	95%	95%		
Remarks					
		Docket #37192			



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			
Client Address:	99 Sandalwood Lane, Forest Gler	99 Sandalwood Lane, Forest Glen Qld 4556			
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c			
Location:	Morayfield, Qld	Morayfield, Qld			
Report Number:	20 Page	1 of 3	Order No:	Sam P	

Earthworks Laver (Co	mnost) AC 1200 (
	Earthworks Layer (Compact) AS 1289 1.2.1 (6.4(b))			
W21/2204	W21/2205	W21/2206		
Lot 1305	Lot 1306	Lot 1307		
Centre Lot	Centre Lot	Centre Lot		
Final Level	Final Level	Final Level		
Allotment Fill	Allotment Fill	Allotment Fill		
Onsite	Onsite	Onsite		
	175	175		
	200	200		
10-Mar-21	10-Mar-21	10-Mar-21		
After Compaction	After Compaction	After Compaction		
1.95	1.98	1.97		
N/A	N/A	N/A		
2.04	2.05	2.05		
-1.1	-0.3	-0.1		
-1.3	-0.4	-0.1		
19.0	19.0	19.0		
0.0	0.0	0.0		
95.5	96.5	96.0		
Chandard	Chandand	Charden		
		Standard		
95%	95%	95%		
	Docket #37195			
	Lot 1305 Centre Lot Final Level Allotment Fill Onsite 175 200 10-Mar-21 After Compaction 1.95 N/A 2.04 -1.1 -1.3	Lot 1305		

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd		
Client Address:	99 Sandalwood Lane, Forest Gle	99 Sandalwood Lane, Forest Glen Qld 4556		
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c		
Location:	Morayfield, Qld	Morayfield, Qld		
Report Number:	21 Page	2 of 3	Order No:	Sam P

AS 1289 5.8.1/5.7.1/5.1.1				
Earthworks Layer (Co	Earthworks Layer (Compact) AS 1289 1.2.1 (6.4(b))			
W21/2207	W21/2207 W21/2208			
Lot 1308	Lot 1309	Lot 1310		
Centre Lot	Centre Lot	Centre Lot		
Final Level	Final Level	Final Level		
Allotment Fill	Allotment Fill	Allotment Fill		
Onsite	Onsite	Onsite		
175	175	175		
	200	200		
10-Mar-21	10-Mar-21	10-Mar-21		
After Compaction	After Compaction	After Compaction		
1.97	2.01	2.01		
N/A	N/A	N/A		
2.06	2.08	2.09		
-1.1	-0.2	-0.3		
-1.3	-0.2	-0.4		
19.0	19.0	19.0		
0.0	0.0	0.0		
95.5	96.5	96.0		
		Standard		
95%	95%	95%		
Docket #37195				
	W21/2207 Lot 1308 Centre Lot Final Level Allotment Fill Onsite 175 200 10-Mar-21 After Compaction 1.97 N/A 2.06 -1.1 -1.3	W21/2207		



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			10-Mar-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number:	22	Page	3 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5	5.1.1	
Sample Method	Earthworks Layer (Co	ompact) AS 1289 1	.2.1 (6.4(b))
Lab Number	W21/2210	W21/2211	
Test Location	Lot 1311	Lot 1312	
	Centre Lot	Centre Lot	
	Final Level	Final Level	
Layer / Elevation	Allotment Fill	Allotment Fill	
Material Source	Onsite	Onsite	
Depth Tested	175	175	
Layer Thickness	200	200	
Date Tested	10-Mar-21	10-Mar-21	
Material Sampled	After Compaction	After Compaction	
Test Results			
Insitu Wet Density (t/m³)	2.01	1.99	
Insitu Moisture Content (%)	N/A	N/A	
PCWD (t/m³)	2.08	2.08	
Peak Added Moisture (%)	+2.3	-0.2	
Moisture Correction (%)	+2.5	-0.2	
Retaining Seive (mm)	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	96.5	95.5	
MOISTORE VARIATION (%)			
Compaction Type	Standard	Standard	
Degree of Compaction	95%	95%	
Remarks		Dookst #2740r	
		Docket #37195	



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd		
Client Address:	99 Sandalwood Lane, Forest Glen (99 Sandalwood Lane, Forest Glen Qld 4556		
Project:	Riverbank Estate Stage 16c		Tested by:	JL
Location:	Morayfield, Qld	Morayfield, Qld		
Report Number:	23 Page	1 of 2	Order No:	Sam

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))	
Lab Number	W21/2573	W21/2574	W21/2575	
Test Location	Lot 1333	Lot 1334	Lot 1335	
	Centre Lot	Centre Lot	Centre Lot	
	Final Level	Final Level	Final Level	
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	15-Mar-21	15-Mar-21	15-Mar-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	2.01	1.97	1.99	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m³)	2.08	2.07	2.07	
Peak Added Moisture (%)	-2.3	-2.2	-1.2	
Moisture Correction (%)	-2.7	-2.6	-1.4	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	96.5	95.5	96.0	
7.0.0				
Compaction Type	Standard	Standard	Standard	
Degree of Compaction Remarks	95%	95%	95%	
Veillains	Docket #39001			



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty I	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane	99 Sandalwood Lane, Forest Glen Qld 4556			15/03/2021
Project:	Riverbank Estate Sta	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			JJ
Report Number	24	Page	2 of 2	Order No:	Sam

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1	
Sample Method	Earthworks Layer (Compact)	AS 1289 1.2.1 (6.4(b))
Lab Number	W21/2576	(5.1(2))
Test Location	Lot 1336	
	Centre Lot	
	Final Level	
Layer / Elevation	Allotment Fill	
Material Source	Onsite	
Depth Tested	175	
Layer Thickness	200	
Date Tested	15-Mar-21	
Material Sampled	After Compaction	
Test Results		
Insitu Wet Density (t/m³)	1.966	
Insitu Moisture Content (%)	N/A	
PCWD (t/m³)	2.065	
Peak Added Moisture (%)	+0.0	
Moisture Correction (%)	+0.0	
Retaining Seive (mm)	19.0	
Percentage Oversize (wet)	0.0	
HILF DENSITY RATIO (%)	95.2	
MOISTURE VARIATION (%)		
Compaction Type	Standard	
Degree of Compaction	95%	
Remarks		1 1 100001
	Do	ocket #39001



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			20-Mar-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JĿ
Location:	Morayfield, Qld	Morayfield, Qld			JJ ·
Report Number:	24B	Page	1 of 1	Order No:	Sam

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Co		1.2.1 (6.4(b))	
Lab Number	W21/2600	W21/2601	W21/2602	
Test Location	Lot 1330	Lot 1331	Lot 1332	
	Centre Lot	Centre Lot	Centre Lot	
	Final Level	Final Level	Final Level	
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	20-Mar-21	20-Mar-21	20-Mar-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	2.00	1.99	2.02	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m³)	2.04	2.01	2.07	
Peak Added Moisture (%)	+0.0	+0.5	+1.0	
Moisture Correction (%)	+0.0	+0.7	+1.3	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	98.0	99.0	97.5	
Compaction Type	Standard	Standard	Standard	
Degree of Compaction	95%	95%	95%	
Remarks	Docket #41147			



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, I	99 Sandalwood Lane, Forest Glen Qld 4556			26-May-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	72	Page	1 of 2	Order No:	Sam P

AS 1289 5.8.1/5.7.1/5.1.1			
Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))	
W21/6241	W21/6242	W21/6243	
Lot 1322	Lot 1323	Lot 1324	
Rear of Lot	Rear of Lot	Rear of Lot	
1.0m Below FL	1.0m Below FL	1.0m Below FL	
Allotment Fill	Allotment Fill	Allotment Fill	
Onsite	Onsite	Onsite	
175	175	175	
200	200	200	
26-May-21	26-May-21	26-May-21	
After Compaction	After Compaction	After Compaction	
2.07	2.01	2.08	
N/A	N/A	N/A	
2.10	2.07	2.10	
+3.7	+0.3	+3.8	
+4.0	+0.4	+4.1	
19.0	19.0	19.0	
0.0	0.0	0.0	
98.5	97.0	99.0	
Standard	Standard	Standard	
		95%	
3070		3570	
Docket #37913			
	Earthworks Layer (Co W21/6241 Lot 1322 Rear of Lot 1.0m Below FL Allotment Fill Onsite 175 200 26-May-21 After Compaction 2.07 N/A 2.10 +3.7 +4.0	Earthworks Layer (Compact) AS 1289	



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd				
Client Address:	99 Sandalwood Lane, Forest G	99 Sandalwood Lane, Forest Glen Qld 4556			
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c			
Location:	Morayfield, Qld		Tested by: Checked:		
Report Number:	73 Page	2 of 2	Order No:	Sam P	

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co		6.4(b))		
Lab Number	W21/6244	W21/6245	(-//		
Test Location	Lot 1325	Lot 1326			
	Rear of Lot	Rear of Lot			
	1.0m Below FL	1.0m Below FL			
Layer / Elevation	Allotment Fill	Allotment Fill			
Material Source	Onsite	Onsite			
Depth Tested	175	175			
Layer Thickness	200	200			
Date Tested	26-May-21	26-May-21			
Material Sampled	After Compaction	After Compaction			
Test Results					
Insitu Wet Density (t/m³)	2.04	2.00			
Insitu Moisture Content (%)	N/A	N/A			
PCWD (t/m³)	2.09	2.06			
Peak Added Moisture (%)	+3.7	+1.8			
Moisture Correction (%)	+4.0	+2.0			
Retaining Seive (mm)	19.0	19.0			
Percentage Oversize (wet)	0.0	0.0			
orderinage eversize (wet)	0.0	0.0			
HILF DENSITY RATIO (%)	97.5	97.0			
MOISTURE VARIATION (%)					
Compaction Type	Standard	Standard			
Degree of Compaction	95%	95%			
Remarks		V-Drain Backfill			
		Docket #37913			
	-				



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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	74	Page	1 of 3	Order No:	Sam P

arthworks Layer (Co 21/6338 at 1327 ear of Lot 5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction	W21/6339 Lot 1328 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.99 N/A	I.2.1 (6.4(b)) W21/6340 Lot 1329 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction
ear of Lot Ear of Lot Onsite 175 200 27/5/21 After Compaction 1.97 N/A 2.05	W21/6339 Lot 1328 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.99 N/A	W21/6340 Lot 1329 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction
ear of Lot 5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.97 N/A 2.05	Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.99 N/A	Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction
5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.97 N/A 2.05	0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.99 N/A	0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction
Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.97 N/A 2.05	Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.99 N/A	Allotment Fill Onsite 175 200 27/5/21 After Compaction
Onsite 175 200 27/5/21 After Compaction 1.97 N/A 2.05	Onsite 175 200 27/5/21 After Compaction 1.99 N/A	Onsite 175 200 27/5/21 After Compaction 2.02
175 200 27/5/21 After Compaction 1.97 N/A 2.05	175 200 27/5/21 After Compaction 1.99 N/A	175 200 27/5/21 After Compaction 2.02
200 27/5/21 After Compaction 1.97 N/A 2.05	200 27/5/21 After Compaction 1.99 N/A	200 27/5/21 After Compaction 2.02
27/5/21 After Compaction 1.97 N/A 2.05	27/5/21 After Compaction 1.99 N/A	27/5/21 After Compaction 2.02
1.97 N/A 2.05	After Compaction 1.99 N/A	After Compaction
1.97 N/A 2.05	1.99 N/A	2.02
N/A 2.05	N/A	
N/A 2.05	N/A	
2.05	N/A	
2.05		N/A
	2.02	2.09
-2.2	+0.0	+2.3
-2.6	+0.0	+2.5
19.0	19.0	19.0
0.0	0.0	0.0
96.5	98.5	97.0
Standard	Standard	Standard
95%	95%	95%
	V-Drain Backfill	
	Docket #37918	
֡	96.5 Standard	96.5 98.5 Standard Standard 95% 95% V-Drain Backfill

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			27/5/21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	75	Page	2 of 3	Order No:	Sam P

arthworks Layer (Co V21/6341 ot 1330 Rear of Lot .5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction	mpact) AS 1289 members and serious AS 1289 members are serious are serious as 1289 members are serious are ser	1.2.1 (6.4(b)) W21/6343 Lot 1332 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction		
ot 1330 Rear of Lot .5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 2.06 N/A	Lot 1331 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction	Lot 1332 Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction		
Rear of Lot .5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 2.06 N/A	Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction	Rear of Lot 0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction		
.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 2.06 N/A	0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction	0.5m Below FL Allotment Fill Onsite 175 200 27/5/21 After Compaction 1.97		
Allotment Fill Onsite 175 200 27/5/21 After Compaction 2.06 N/A	Allotment Fill Onsite 175 200 27/5/21 After Compaction	Allotment Fill Onsite 175 200 27/5/21 After Compaction		
Onsite 175 200 27/5/21 After Compaction 2.06 N/A	Onsite 175 200 27/5/21 After Compaction 2.02	Onsite 175 200 27/5/21 After Compaction 1.97		
175 200 27/5/21 After Compaction 2.06 N/A	175 200 27/5/21 After Compaction 2.02	175 200 27/5/21 After Compaction 1.97		
200 27/5/21 After Compaction 2.06 N/A	200 27/5/21 After Compaction 2.02	200 27/5/21 After Compaction 1.97		
27/5/21 After Compaction 2.06 N/A	27/5/21 After Compaction 2.02	27/5/21 After Compaction		
After Compaction 2.06 N/A	After Compaction 2.02	After Compaction		
2.06 N/A	2.02	1.97		
N/A				
N/A				
	N/A	21/2		
		N/A		
2.12	2.04	2.01		
+2.2	+2.2	-1.7		
+2.4	+2.5	+2.0		
19.0	19.0	19.0		
0.0	0.0	0.0		
97.0	99.0	98.0		
Standard	Standard	Standard		
		95%		
Docket #37918				
	+2.4 19.0	+2.2		

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd			
Client Address:	99 Sandalwood Lane, Forest Glen	99 Sandalwood Lane, Forest Glen Qld 4556		
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c		
Location:	Morayfield, Qld		Tested by: Checked:	
Report Number:	76 Page	3 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.	1.1		
Sample Method	Earthworks Layer (Cor	npact)	AS 1289	1.2.1 (6.4(b))
Lab Number	W21/6344			
Test Location	Lot 1333			
	Rear of Lot			
	0.5m Below FL			
Layer / Elevation	Allotment Fill			
Material Source	Onsite			
Depth Tested	175			
Layer Thickness	200			
Date Tested	27/5/21			
Material Sampled	After Compaction			
Test Results				
Insitu Wet Density (t/m³)	2.01			
Insitu Moisture Content (%)	N/A			
PCWD (t/m³)	2.10			
Peak Added Moisture (%)	+0.0			
Moisture Correction (%)	+0.0			
Retaining Seive (mm)	19.0			
Percentage Oversize (wet)	0.0			
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	96.0			
Composition T.				
Compaction Type	Standard			
Degree of Compaction Remarks	95%	1/15	. D. 1400	
remarks			in Backfill et #37918	

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd		
Client Address:	99 Sandalwood Lane, Forest Glen Ql	99 Sandalwood Lane, Forest Glen Qld 4556		
Project:	Riverbank Estate Stage 16c	Riverbank Estate Stage 16c		
Location:	Morayfield, Qld		Checked:	DS
Report Number:	77 Page	1 of 2	Order No:	Sam P

Earthworks Layer (Co W21/6397 Lot 1330 Rear of Lot Final Level	W21/6398 Lot 1331 Rear of Lot	1.2.1 (6.4(b)) W21/6399 Lot 1332
Lot 1330 Rear of Lot Final Level	Lot 1331 Rear of Lot	Lot 1332
Rear of Lot Final Level	Rear of Lot	
Final Level		D (1)
	Cinal Laural	Rear of Lot
Allotment Fill	Final Level	Final Level
10200000	Allotment Fill	Allotment Fill
Onsite	Onsite	Onsite
	175	175
	200	200
	28-May-21	28-May-21
After Compaction After Compaction		After Compaction
2.03	1.98	2.05
N/A	N/A	N/A
2.14	2.01	2.13
+0.5	+0.4	+0.6
+0.6	+0.5	+0.7
19.0	19.0	19.0
0.0	0.0	0.0
95.0	98.5	96.0
Standard	Standard	Standard
95%		95%
	Docket #37923	
	200 28-May-21 After Compaction 2.03 N/A 2.14 +0.5 +0.6	175

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	78	Page	2 of 2	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1				
Sample Method	Earthworks Layer (Co	ompact) AS 1289	1.2.1 (6.4(b))		
Lab Number	W21/6400	W21/6401	W21/6402		
Test Location	Lot 1333	Lot 1335	Lot 1336		
	Rear of Lot	South Side of Lot	Northside of Lot		
	Final Level	Final Level	Final Level		
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill		
Material Source	Onsite	Onsite	Onsite		
Depth Tested	175	175	175		
Layer Thickness	200	200	200		
Date Tested	28-May-21	28-May-21	28-May-21		
Material Sampled	After Compaction	After Compaction	After Compaction		
Test Results					
Insitu Wet Density (t/m³)	1.97	2.04	2.08		
Insitu Moisture Content (%)	N/A	N/A	N/A		
PCWD (t/m³)	2.00	2.13	2.15		
Peak Added Moisture (%)	+0.5	+0.5	+0.6		
Moisture Correction (%)	+0.6	+0.6	+0.7		
Retaining Seive (mm)	19.0	19.0	19.0		
Percentage Oversize (wet)	0.0	0.0	0.0		
(ver)	0.0	0.0	0.0		
HILF DENSITY RATIO (%)	98.0	96.0	96.5		
MOISTURE VARIATION (%)					
Compaction Type	Standard	Standard	Standard		
Degree of Compaction	95%	95%	95%		
Remarks	V-Drain Backfill				
		Docket #37923			

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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, I	99 Sandalwood Lane, Forest Glen Qld 4556			31-May-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	79	Page	1 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Compact) AS 1289 1.2.1 (6.4(b))			
Lab Number	W21/6626			
Test Location	Lot 1322	Lot 1323	Lot 1324	
	Centre of Lot	Centre of Lot	Centre of Lot	
	Final Level	Final Level	Final Level	
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	31-May-21	31-May-21	31-May-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	1.99	2.06	2.08	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m³)	2.01	2.01	2.01	
Peak Added Moisture (%)	+0.5	+0.6	+0.5	
Moisture Correction (%)	+0.6	+0.7	+0.6	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%) MOISTURE VARIATION (%)	99.5	102.5	103.5	
Compaction Type	Standard	Standard	Standard	
Degree of Compaction	95%	95%	95%	
Remarks		Docket #37928		
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Version: 3

23/12/2020

Date 8/06/2021





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Ltd	Shadforth's Civil Pty Ltd			J21/22
Client Address:	99 Sandalwood Lane, F	99 Sandalwood Lane, Forest Glen Qld 4556			31-May-21
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			JL
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	80	Page	2 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5	5.1.1		
Sample Method	Earthworks Layer (Compact) AS 1289 1.2.1 (6.4(b))			
Lab Number	W21/6629	W21/6630 W21/6631		
Test Location	Lot 1325	Lot 1326	Lot 1327	
	Centre of Lot	Centre of Lot	Centre of Lot	
	Final Level	Final Level	Final Level	
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill	
Material Source	Onsite	Onsite	Onsite	
Depth Tested	175	175	175	
Layer Thickness	200	200	200	
Date Tested	31-May-21	31-May-21	31-May-21	
Material Sampled	After Compaction	After Compaction	After Compaction	
Test Results				
Insitu Wet Density (t/m³)	2.04	2.00	2.03	
Insitu Moisture Content (%)	N/A	N/A	N/A	
PCWD (t/m³)	2.00	2.01	2.00	
Peak Added Moisture (%)	+0.5	+0.4	+0.4	
Moisture Correction (%)	+0.6	+0.5	+0.5	
Retaining Seive (mm)	19.0	19.0	19.0	
Percentage Oversize (wet)	0.0	0.0	0.0	
HILF DENSITY RATIO (%)	102.0	99.5	101.0	
MOISTURE VARIATION (%)				
Compaction Type	Standard	Standard	Standard	
Degree of Compaction	95%	95%	95%	
Remarks		Docket #37928		
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Authorised Signatory Accreditation No: 15070

Date 8/06/2021

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Form No: 95 Version: 3 23/12/2020





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REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	Shadforth's Civil Pty Lte	Shadforth's Civil Pty Ltd			
Client Address:	99 Sandalwood Lane, I	99 Sandalwood Lane, Forest Glen Qld 4556			
Project:	Riverbank Estate Stage	Riverbank Estate Stage 16c			
Location:	Morayfield, Qld	Morayfield, Qld			DS
Report Number:	81	Page	3 of 3	Order No:	Sam P

Test Methods	AS 1289 5.8.1/5.7.1/5.1.1			
Sample Method	Earthworks Layer (Compact) AS 1289 1.2.1 (6.4(b))			
Lab Number	W21/6632	W21/6633		
Test Location	Lot 1328	Lot 1329		
	Centre of Lot	Centre of Lot		
	Final Level	Final Level		
Layer / Elevation	Allotment Fill	Allotment Fill		
Material Source	Onsite	Onsite		
Depth Tested	175	175		
Layer Thickness	200	200		
Date Tested	31-May-21	31-May-21		
Material Sampled	After Compaction	After Compaction		
Test Results				
Insitu Wet Density (t/m³)	2.01	1.97		
Insitu Moisture Content (%)	N/A	N/A		
PCWD (t/m³)	2.02	2.01		
Peak Added Moisture (%)	+0.5	+0.5		
Moisture Correction (%)	+0.6	+0.6		
Retaining Seive (mm)	19.0	19.0		
Percentage Oversize (wet)	0.0	0.0		
HILF DENSITY RATIO (%)	99.5	98.0		
MOISTURE VARIATION (%)				
Compaction Type	Standard	Standard		
Degree of Compaction	95%	95%		
Remarks	Docket #37928			

NATA

Authorised Signatory Accreditation No: 15070

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Form No: 95

Version: 3

23/12/2020

Date 8/06/2021



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Appendix 3 – Typical Site Conditions





CONSTRUCTION

MATERIALS

TESTING



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Appendix 4 – Site Information



Information

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ABN: 49 416 679 791

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Important Information about your Report

As a client of Wagner Soil Testing Pty Ltd you should know that site subsurface conditions cause more construction problems than any other factor. These notes have been provided to help you interpret and understand the limitations of your report.

Your report is project specific

Your report has been developed on the basis of your unique project specific requirements as understood by Wagner Soil Testing and applies only to the site investigated. Project criteria typically include the general nature of the project; its size and configuration: the location of any structure on the site; other site improvements; the presence of underground utilities; and the additional risk imposed by scope-of-surface limitations imposed by the client. Your report should not be used if there are any changes to the project without first asking Wagner Soil Testing to assess how factors that changed subsequent to the date of the report affect the report's recommendations. Wagner Soil Testing cannot accept responsibility for problems that may occur due to changed factors if they are not consulted. Our report does not take into account any existing filled ground or any other unforeseen subsurface conditions that may change anticipated site classification.

Subsurface conditions can change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. Do not rely on a geotechnical engineering report whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always contact Wagner Soil Testing before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Interpretation of factual data

Site assessment identifies actual subsurface conditions only at those points where samples are taken and when they are taken. Data derived from literature and external data source review, sampling and subsequent laboratory testing are interpreted by geologists, engineers or scientists to provide an opinion about overall site conditions, their likely impact on the proposed development and recommended actions. Actual conditions may differ from those inferred to exist, because no professional, no matter how qualified, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than assumed based on the facts obtained. Nothing can be done to change the actual site conditions which exist, but steps can be taken to reduce the impact of unexpected conditions. For this reason, owners

should retain the services of Wagner Soil Testing through the development stage, to identify variances, conduct additional tests if required, and recommend solutions to problems encountered on site.

Your report will only give preliminary recommendations

Your report is based on the assumption that the site conditions as revealed through selective point sampling are indicative of actual conditions throughout an area. This assumption cannot be substantiated until project implementation has commenced and therefore your report recommendations can only be regarded as preliminary. Only Wagner Soil Testing, who prepared the report, is fully familiar with the background information needed to assess whether or not the report's recommendations are valid and whether or not changes should be considered as the project develops. If another party undertakes the implementation of recommendations of this report, there is a risk that the report will be misinterpreted, and Wagner Soil Testing cannot be held responsible for such misinterpretation.

Your report is prepared for specific purposes and persons

To avoid misuse of the information contained in your report it is recommended that you confer with Wagner Soil Testing before passing your report on to another party who may not be familiar with the background and purpose of the report. Your report should not be applied to any project other than that originally specified at the time the report was issued.

It is a requirement that the client contacts Wagner Soil Testing Pty Ltd when the exact position of the proposed building is confirmed so we can check if our Boreholes fall in the footing area [our borelogs are only presumed indicative of the whole area until this is confirmed]. In the case of a cracked house investigation more testing may be required to conclude all possible causes of settlement and or movement. Initial drilling and lab testing may only identify some of the causes of the problem. Wagner Soil Testing should be contacted when additional testing is required. It is a company policy that Wagner Soil Testing are contacted if the development (including any portion and/or envelope) is sold and/or changes title as the report is only for the use of our direct client. If the development is sold and/or changes title Wagner Soil Testing must be contacted and subsequently will carry out a comprehensive site inspection - evaluation at no cost to ensure the preliminary report is relevant and no changes whatsoever have been made.

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