

# WORKS INSPECTION & TESTING Bulk Earthworks

PROPOSED  
RESIDENTIAL  
DEVELOPMENT

**Woodlinks  
Estate Stage 19**

JOB NO: P2137 comp01



Prepared for Shadforths Civil  
28<sup>th</sup> June 2022

# Document Information

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# Document Control

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## Table of Contents

<b>INTRODUCTION</b>	<b>4</b>
<b>SCOPE OF WORKS</b>	<b>4</b>
Level 1	
<b>SPECIFICATION REQUIREMENTS</b>	<b>4</b>
<b>SITE WORKS - BULK EARTHWORKS</b>	<b>5</b>
General	
Compaction Control Testing	
<b>CONCLUSION</b>	<b>5</b>
<b>SITE PHOTOGRAPHS</b>	

## Appendices

**Appendix A Bulk Earthworks – Compaction**

**Appendix B Lot Certificates**

## INTRODUCTION

Construction Sciences was commissioned by **Shadforths Civil** to carry out the geotechnical inspection and testing required for the proposed development at Collingwood Park, which was carried out between 24<sup>th</sup> January 2022 and 27<sup>th</sup> May 2022.

## SCOPE OF WORKS

The Earthworks on this development was monitored in accordance with the scope of our commission as follows:

**Level 1:** Bulk earthworks stripping and filling was inspected and tested on a Level 1 basis, in accordance with AS 3798-2007.

Scope of Level 1 responsibility: ***“The primary objective of Level 1 Inspection and Testing is for the geotechnical inspection and testing authority (GITA) to be able to express an opinion on the compliance of the work. The GITA is responsible for ensuring that the inspection and testing is sufficient for this purpose.*”**

***The GITA needs to have competent personnel on site at all times while earthwork operations are undertaken. Such operations include the following:***

- (a) Completion of removal of topsoil.***
- (b) Placing of imported or cut material.***
- (c) Compaction and adding/removal of moisture.***
- (d) Trenching and backfilling, where applicable.***
- (e) Test rolling.***
- (f) Testing.***

***The superintendent should agree on a suitable inspection and testing plan prior to the commencement of the works”.***

*reference AS3798 – Section 8.2*

## SPECIFICATION REQUIREMENTS

Earthworks on this development was inspected and tested in accordance with the specification of the design engineer, **Peak Urban** and to the specifications of the local authority, **Ipswich City Council**.

The following table is a summary of the basic compaction and quality requirements for the project.

Testing procedures used to confirm that these requirements were met were all in accordance with Australian Standard test methods

<b>SPECIFICATIONS</b>	
<b><i>Item</i></b>	<b><i>Minimum Compaction Requirement</i></b>
<b><i>Bulk Earthworks Fill</i></b>	<b><i>95% Wet Density Ratio - Standard</i></b>

## SITE WORKS - BULK EARTHWORKS

**General:** Full time site inspection was maintained in accordance with Level 1 requirements whilst earthworks were carried out on this development. Fill areas included residential allotments, roads and embankments.

The areas to be filled were stripped and proof rolled in accordance with the specification requirements. Areas displaying instability were generally excavated until competent conditions were encountered. Benching was provided on slopes where filling was to be placed.

The natural ground in the areas of filling generally comprised gravelly to sandy CLAYS and clayey to gravelly SANDS.

The material used in the bulk earthworks filling was sourced from site cutting to design levels & imported fill.

**Compaction Control Testing:** Compaction control testing via the nuclear densometer method was carried out at regular intervals throughout the placement of fill, in accordance with the minimum test frequency recommendations included in AS3798 "Guidelines on Earthworks for Commercial and Residential Developments".

All test results are included in Appendix A. A summary of the test results is included as Table 1. A total of 65 field density tests were carried out throughout the earthworks. The average wet density ratio was recorded to be 98.7%. The maximum wet density ratio was 103.5% and minimum was 95.5%.

## CONCLUSION

We confirm that:

- (a) Our representative was in full time site attendance whilst bulk earthworks filling was in progress between 24<sup>th</sup> January 2022 and 27<sup>th</sup> May 2022 at Woodlinks Stage 19.
- (b) Pre – fill ground preparation was carried out in accordance with the specifications and site instruction given.
- (c) The structural filling placed to design levels during the term of our engagement on a "Level 1" basis can be termed "controlled filling".
- (d) The results of the compaction control testing indicate that the fill placed during the term of our site attendance, was compacted to at least the minimum specified wet density ratio.
- (e) All test results pertaining to the development are included within appendix A of this report.



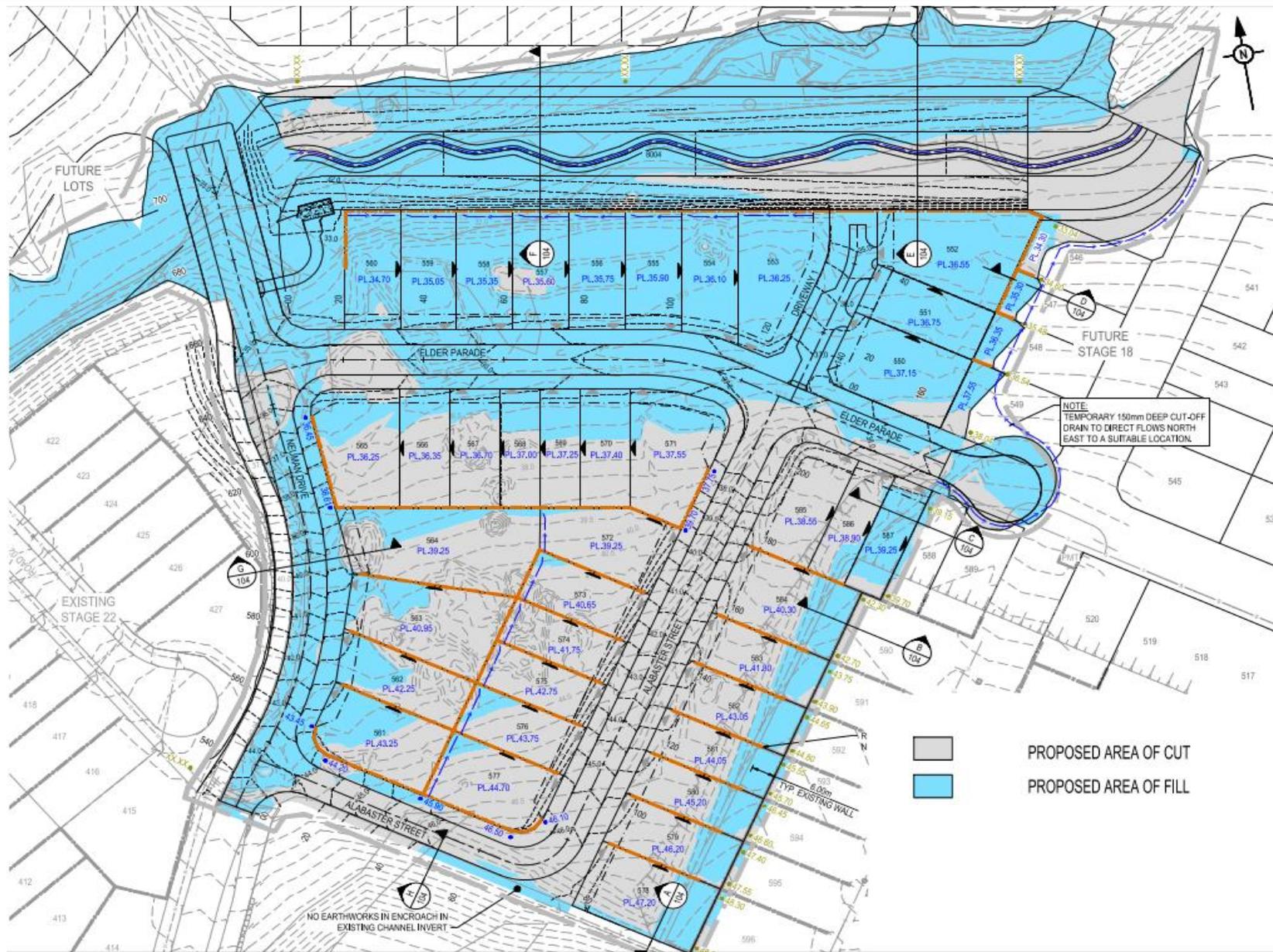
**WAYNE GORMAN**  
**LABORATORY MANAGER**  
**Construction Sciences**

# Bulk Fill

Client: Shadforth Civil Pty Ltd	Project: 1979/P/2137 - Woodlinks Stage 19
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Sample Client Reference	Sample Number	Sample Date	Location 1	Location 2	Location 3	Location 4	Wet Density Ratio	Moisture Ratio
EW-01	1979/S/178277	28/01/2022	6369.48	4328.6	30.98	Stormwater Corridor	99	95.5
EW-02	1979/S/178278	28/01/2022	6408.86	4237.78	31.16	Stormwater Corridor	102.5	97.5
EW-03	1979/S/178279	28/01/2022	6347.97	4243.35	31.16	Stormwater Corridor	103.5	86.5
EW-04	1979/S/178550	1/02/2022	6453.66	4248.58	27.78	Drainage Corridor	102	84.5
EW-05	1979/S/178551	1/02/2022	6433.29	4252.83	27.78	Drainage Corridor	99	87
EW-06	1979/S/178552	1/02/2022	6379.48	4258.99	29.17	Drainage Corridor	96	84
EW-07	1979/S/178553	1/02/2022	6356.04	4258.36	29.82	Drainage Corridor	96	80.5
EW-08	1979/S/178554	1/02/2022	6401.73	4254.34	28.50	Drainage Corridor	97	86.5
EW-09	1979/S/178555	1/02/2022	6345.63	4257.15	30.25	Drainage Corridor	100	88.5
EW-10	1979/S/178903	8/02/2022	6452.38	4246.81	29.03	Stormwater Corridor	98	91
EW-11	1979/S/178904	8/02/2022	6428.76	4252.04	29.11	Stormwater Corridor	95.5	91.5
EW-12	1979/S/178905	8/02/2022	6408.83	4254.94	29.36	Stormwater Corridor	98.5	92.5
EW-13	1979/S/178906	8/02/2022	6379.82	4256.91	30.07	Stormwater Corridor	97	100.5
EW-14	1979/S/179603	17/02/2022	Lot 560	NW Corner	4m S, 4m E	RL: 30.6	98	83
EW-15	1979/S/179604	17/02/2022	Lot 559	NW Corner	6m S, 4m E	RL: 30.84	98.5	86.5
EW-16	1979/S/179605	17/02/2022	Lot 558	NW Corner	5m S, 3m E	RL: 31.64	97	86.5
EW-17	1979/S/179606	17/02/2022	Lot 557	NW Corner	3m S, 4m E	RL: 31.73	95	86.5
EW-18	1979/S/179607	17/02/2022	Lot 556	NW Corner	4m S, 3m E	RL: 32.15	97	82.5
EW-19	1979/S/179845	22/02/2022	6309.66	4236.72	RL: 31.94	Stormwater Corridor	105	85
EW-20	1979/S/179846	22/02/2022	6293.17	4238.13	RL: 31.87	Stormwater Corridor	100.5	87.5
EW-21	1979/S/179847	22/02/2022	6272.03	4240.26	RL: 31.81	Stormwater Corridor	103	79.5
EW-22	1979/S/179848	22/02/2022	6405.40	4232.20	RL: 30.83	Stormwater Corridor	103.5	86
EW-23	1979/S/179849	22/02/2022	6390.62	4239.16	RL: 31.20	Stormwater Corridor	103	84.5
EW-24	1979/S/179850	22/02/2022	6379.25	4233.50	RL: 31.05	Stormwater Corridor	103	85.5
EW-25	1979/S/179851	22/02/2022	Allotment 555	Offset Nth/West Corner	10m Sth, 6m East	RL: 34.08	102.5	86.5
EW-26	1979/S/179852	22/02/2022	Allotment 554	Offset Nth/West Corner	8m Sth, 4m East	RL: 34.22	103.5	85
EW-27	1979/S/179853	22/02/2022	Allotment 553	Offset Nth/West Corner	12m Sth, 3m East	RL: 34.36	103	86
EW-28	1979/S/179854	22/02/2022	Allotment 552	Offset Nth/West Corner	6m Sth, 12m East	RL: 34.62	103	85
EW-29	1979/S/180243	10/03/2022	Lot 554	OS from NW Corner	8m S 5m E	RL 35.90	100	91.5
EW-30	1979/S/180244	10/03/2022	Lot 556	OS from NW Corner	5m S 4m E	RL 33.15	98	99.5
EW-31	1979/S/180245	10/03/2022	Lot 560	OS from NW Corner	9m S 6m E	RL 34.88	96.5	92
EW-32	1979/S/180246	10/03/2022	Lot 557	OS from NW Corner	12m S 4m E	RL 34.48	98	92
EW-33	1979/S/180247	10/03/2022	Neuman St	CH 620	1.5m L of CL	RL 37.39	101.5	90.5
EW-34	1979/S/180248	10/03/2022	Neuman St	CH 580	0.5m R of CL	RL 41.05	98	91.5
EW-35	1979/S/180249	10/03/2022	Elder Pde	CH 90	2m L of CL	RL 36.22	97.5	92.5
EW-36	1979/S/180250	10/03/2022	Elder Pde	CH 50	1.5m R of CL	RL 36.17	97.5	92
EW-37	1979/S/180553	16/03/2022	6242.94	4220.23	33.41	Drainage Corridor	99	87.5
EW-38	1979/S/180554	16/03/2022	6272.46	4229.38	33.35	Drainage Corridor	97.5	88
EW-39	1979/S/180555	16/03/2022	3m South	4m East	O/S NW Corner	Lot 568	96.5	87.5
EW-40	1979/S/180556	16/03/2022	4m South	5m East	O/S NW Corner	Lot 569	97	85.5
EW-41	1979/S/180557	16/03/2022	12m South	3m East	O/S NW Corner	Lot 553	98	83.5
EW-42	1979/S/180558	16/03/2022	5m South	4m East	O/S NW Corner	Lot 554	98.5	91
EW-43	1979/S/180559	16/03/2022	6m South	5m East	O/S NW Corner	Lot 555	99	89
EW-44	1979/S/180582	17/03/2022	Allotment 560	Offset NW Corner	8m Sth, 4m East	RL: 33.85	97.5	86.5
EW-45	1979/S/180583	17/03/2022	Allotment 557	Offset NW Corner	10m Sth, 5m East	RL: 35.13	97	89
EW-46	1979/S/180584	17/03/2022	Allotment 556	Offset NW Corner	6m Sth, 2m East	RL: 35.41	97	92
EW-47	1979/S/180585	17/03/2022	Allotment 554	Offset NW Corner	9m Sth, 3m East	RL: 35.58	97	92
EW-48	1979/S/180935	22/03/2022	Lot 556	O/S from NW Corner	10m S 4m E	36.06	97	89.5

EW-49	1979/S/180936	22/03/2022	Lot 555	O/S from NW Corner	12m S 5m E	35.97	98	86
EW-50	1979/S/180937	22/03/2022	Lot 553	O/S from NW Corner	14m S 5m E	35.65	97	98.5
EW-51	1979/S/180938	22/03/2022	Lot 587	O/S from NE Corner	8m S 3m W	39.20	99.5	89
EW-52	1979/S/180939	22/03/2022	Lot 583	O/S from NE Corner	3m S 3m W	41.66	97	102.5
EW-53	1979/S/180940	22/03/2022	Lot 581	O/S from NE Corner	4m S 2m W	43.92	98	89
EW-54	1979/S/186404	7/06/2022	Lot 578	S/E Corner	6m N, 4m W	F/L	96.5	99.5
EW-55	1979/S/186405	7/06/2022	Lot 579	N/E Corner	3m S, 3m W	F/L	99.5	89
EW-56	1979/S/186406	7/06/2022	Lot 580	S/E Corner	3m N, 4m W	F/L	100.5	89.5
EW-57	1979/S/186407	7/06/2022	Lot 582	S/E Corner	4m N, 5m W	F/L	96	89
EW-58	1979/S/186408	7/06/2022	Lot 584	S/E Corner	9m N, 6m W	F/L	97.5	90
EW-59	1979/S/186409	7/06/2022	Lot 586	S/E Corner	3m N, 3m W	F/L	96	89.5
EW-60	1979/S/186410	7/06/2022	Lot 564	N/W Corner	3m S, 14m E	F/L	98.5	89.5
EW-61	1979/S/186411	7/06/2022	Lot 563	N/W Corner	4m S, 8m E	F/L	96.5	90
EW-62	1979/S/186412	7/06/2022	Lot 562	N/W Corner	7m S, 5m E	F/L	98.5	100.5
EW-63	1979/S/186413	7/06/2022	Lot 561	N/W Corner	8m S, 9m E	F/L	95.5	89
EW-64	1979/S/186414	7/06/2022	Lot 577	N/W Corner	2m S, 3m E	F/L	96	88.5
EW-65	1979/S/186415	7/06/2022	Lot 576	N/W Corner	4m S, 4m E	F/L	97.5	99



APPENDIX

# A

BULK EARTHWORKS



## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Drainage Corridor	<b>Report Number:</b> 1979/R/64368-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/35065 <b>Client Reference/s:</b> WR5515 <b>Report Date / Page:</b> 11/02/2022 <span style="float: right;">Page 1 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/178550	1979/S/178551	1979/S/178552	1979/S/178553
ID / Client ID	-	-	-	-
Lot Number	-	-	-	-
Date / Time Tested	1/02/2022 09:00	1/02/2022 09:05	1/02/2022 09:10	1/02/2022 09:15
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Easting	m 6453.66	m 6433.29	m 6379.48	m 6356.04
Northing	m 4248.58	m 4252.83	m 4258.99	m 4258.36
RL	m 27.78	m 27.78	m 29.17	m 29.82
	Drainage Corridor	Drainage Corridor	Drainage Corridor	Drainage Corridor
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	0	0	0
Compaction Sample Number	1979/S/178550	1979/S/178551	1979/S/178552	1979/S/178553
Sample Description	Sandy/Clay-Brown	Sandy/Clay-Brown	Sandy/Clay-Brown	Sandy/clay-Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	10.4	12.9	11.6	7.0
Adjusted / Moisture Variation (%)	2.0	2.0	2.0	2.0
Optimum Moisture Content (%)	12.5	15.0	14.0	8.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>84.5</b>	<b>87.0</b>	<b>84.0</b>	<b>80.5</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.14	2.05	2.02	2.08
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.10	2.07	2.10	2.16
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>102.0</b>	<b>99.0</b>	<b>96.0</b>	<b>96.0</b>

Remarks
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Accredited for compliance with ISO/IEC 17025 – Testing		
	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Drainage Corridor	<b>Report Number:</b> 1979/R/64368-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/35065 <b>Client Reference/s:</b> WR5515 <b>Report Date / Page:</b> 11/02/2022 <span style="float: right;">Page 2 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/178554	1979/S/178555		
ID / Client ID	-	-		
Lot Number	-	-		
Date / Time Tested	1/02/2022 09:20	1/02/2022 09:25		
Material Source	On-Site	On-Site		
Material Type	Bulk Fill	Bulk Fill		
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b		
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300		
Standard or Modified	Standard	Standard		
Easting	m 6401.73	6345.63		
Northing	m 4254.34	4257.15		
RL	m 28.50	30.25		
	Drainage Corridor	Drainage Corridor		
Test Fraction (mm)	< 19.0 mm	< 19.0 mm		
Sample Oversize (%)	0	0		
Compaction Sample Number	1979/S/178554	1979/S/178555		
Sample Description	Sandy/Clay-Brown	Sandy/Clay-Brown		
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	8.9	10.1		
Adjusted / Moisture Variation (%)	1.5	1.5		
Optimum Moisture Content (%)	10.5	11.5		
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)		
<b>Moisture Ratio (%)</b>	<b>86.5</b>	<b>88.5</b>		
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.03	2.12		
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.10	2.12		
Density Ratio Required (%)	95	95		
<b>Hilf Density Ratio (%)</b>	<b>97.0</b>	<b>100.0</b>		

Remarks
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	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stormwater Corridor	<b>Report Number:</b> 1979/R/64369-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35014 <b>Client Reference/s:</b> WR5510 <b>Report Date / Page:</b> 11/02/2022 <span style="float: right;">Page 1 of 1</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/178277	1979/S/178278	1979/S/178279	
ID / Client ID	-	-	-	
Lot Number	-	-	-	
Date / Time Tested	28/01/2022 08:55	28/01/2022 09:05	28/01/2022 09:15	
Material Source	On-Site	On-Site	On-Site	
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	
Standard or Modified	Standard	Standard	Standard	
Easting m	6369.48	6408.86	6347.97	
Northing m	4328.6	4237.78	4243.35	
RL m	30.98	31.16	31.16	
	Stormwater Corridor	Stormwater Corridor	Stormwater Corridor	
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	
Sample Oversize (%)	0	0	0	
Compaction Sample Number	1979/S/178277	1979/S/178278	1979/S/178279	
Sample Description	clay-Brown	clay brown	clay brown	
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	14.4	11.8	12.4	
Adjusted / Moisture Variation (%)	0.5	0.5	2.0	
Optimum Moisture Content (%)	15.0	12.0	14.5	
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	
<b>Moisture Ratio (%)</b>	<b>95.5</b>	<b>97.5</b>	<b>86.5</b>	
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.11	2.17	2.18	
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.14	2.12	2.10	
Density Ratio Required (%)	95	95	95	
<b>Hilf Density Ratio (%)</b>	<b>99.0</b>	<b>102.5</b>	<b>103.5</b>	

Remarks
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Accredited for compliance with ISO/IEC 17025 – Testing	
	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill Testing <b>Area Description:</b> Stormwater Drainage Corridor	<b>Report Number:</b> 1979/R/64379-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35147 <b>Client Reference/s:</b> WR5529 <b>Report Date / Page:</b> 14/02/2022 <span style="float: right;">Page 1 of 1</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/178903	1979/S/178904	1979/S/178905	1979/S/178906
ID / Client ID	-	-	-	-
Lot Number	-	-	-	-
Date / Time Tested	8/02/2022 09:55	8/02/2022 10:00	8/02/2022 10:05	8/02/2022 10:10
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Easting m	6452.38	6428.76	6408.83	6379.82
Northing m	4246.81	4252.04	4254.94	4256.91
RL m	29.03	29.11	29.36	30.07
	Stormwater Corridor	Stormwater Corridor	Stormwater Corridor	Stormwater Corridor
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	0	0	0
Compaction Sample Number	1979/S/178903	1979/S/178904	1979/S/178905	1979/S/178906
Sample Description	Sandy/Clay- Brown	Sandy/Clay-Brown	Sandy/Clay-Brown	Sandy/Clay-Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	11.9	15.3	13.4	14.7
Adjusted / Moisture Variation (%)	1.0	1.5	1.0	0.0
Optimum Moisture Content (%)	13.0	16.5	14.5	14.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Wetter than OMC)
<b>Moisture Ratio (%)</b>	<b>91.0</b>	<b>91.5</b>	<b>92.5</b>	<b>100.5</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.04	2.01	2.04	2.05
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.08	2.10	2.07	2.11
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>98.0</b>	<b>95.5</b>	<b>98.5</b>	<b>97.0</b>

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill Testing <b>Area Description:</b> -	<b>Report Number:</b> 1979/R/64563-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/35286 <b>Client Reference/s:</b> WR6307 <b>Report Date / Page:</b> 23/02/2022 <span style="float: right;">Page 1 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/179603	1979/S/179604	1979/S/179605	1979/S/179606
ID / Client ID	-	-	-	-
Lot Number	-	-	-	-
Date / Time Tested	17/02/2022	17/02/2022	17/02/2022	17/02/2022
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Location	Lot 560 N/W Corner 4m S, 4m E	Lot 559 N/W Corner 6m S, 4m E	Lot 558 N/W Corner 5m S, 3m E	Lot 557 N/W Corner 3m S, 4m E
Level	RL: 30.6	RL: 30.84	RL: 31.64	RL: 31.73
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	2	3	3	5
Compaction Sample Number	1979/S/179603	1979/S/179604	1979/S/179605	1979/S/179606
Sample Description	Sandy CLAY - Brown			
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	9.7	10.9	10.8	12.3
Adjusted / Moisture Variation (%)	2.0	1.5	1.5	2.0
Optimum Moisture Content (%)	11.5	12.5	12.5	14.0
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>83.0</b>	<b>86.5</b>	<b>86.5</b>	<b>86.5</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.00	2.00	1.99	1.99
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.04	2.03	2.05	2.09
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>98.0</b>	<b>98.5</b>	<b>97.0</b>	<b>95.0</b>

Remarks
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	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill Testing <b>Area Description:</b> -	<b>Report Number:</b> 1979/R/64563-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/35286 <b>Client Reference/s:</b> WR6307 <b>Report Date / Page:</b> 23/02/2022 <span style="float: right;">Page 2 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/179607		
ID / Client ID	-		
Lot Number	-		
Date / Time Tested	17/02/2022		
Material Source	On-Site		
Material Type	Bulk Fill		
Sampling Method	AS1289.1.2.1 Cl 6.4b		
Depths: Test / Nom / Actual (mm)	275 / 300 / 300		
Standard or Modified	Standard		
Location	Lot 556 N/W Corner 4m S, 3m E		
Level	RL: 32.15		
Test Fraction (mm)	< 19.0 mm		
Sample Oversize (%)	4		
Compaction Sample Number	1979/S/179607		
Sample Description	Silty Gravelley Clay		
<b>Moisture Test Results:</b>			
Field Moisture Content (%)	9.4		
Adjusted / Moisture Variation (%)	2.0		
Optimum Moisture Content (%)	11.5		
Moisture Variation from OMC	(Drier than OMC)		
<b>Moisture Ratio (%)</b>	<b>82.5</b>		
<b>Density Test Results:</b>			
Field Wet Density (t/m <sup>3</sup> )	2.00		
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.06		
Density Ratio Required (%)	95		
<b>Hilf Density Ratio (%)</b>	<b>97.0</b>		

Remarks
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	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill <b>Area Description:</b> Fill Area	<b>Report Number:</b> 1979/R/64685-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35331 <b>Client Reference/s:</b> WR6312 <b>Report Date / Page:</b> 7/03/2022 <span style="float: right;">Page 1 of 3</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/179845	1979/S/179846	1979/S/179847	1979/S/179848
ID / Client ID	-	-	-	-
Lot Number	-	-	-	-
Date / Time Tested	22/02/2022 10:15	22/02/2022 10:20	22/02/2022 10:25	22/02/2022 10:55
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Easting m	6309.66	6293.17	6272.03	6405.40
Northing m	4236.72	4238.13	4240.26	4232.20
Level	RL: 31.94	RL: 31.87	RL: 31.81	RL: 30.83
	Stormwater Corridor	Stormwater Corridor	Stormwater Corridor	Stormwater Corridor
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	0	0	0
Compaction Sample Number	1979/S/179845	1979/S/179846	1979/S/179847	1979/S/179848
Sample Description	Sandy CLAY - Dark Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Light Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	11.2	11.9	7.8	12.5
Adjusted / Moisture Variation (%)	2.0	1.5	2.0	2.0
Optimum Moisture Content (%)	13.0	13.5	10.0	14.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>85.0</b>	<b>87.5</b>	<b>79.5</b>	<b>86.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.12	2.07	2.09	2.11
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.01	2.05	2.03	2.04
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>105.0</b>	<b>100.5</b>	<b>103.0</b>	<b>103.5</b>

Remarks
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	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill <b>Area Description:</b> Fill Area	<b>Report Number:</b> 1979/R/64685-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35331 <b>Client Reference/s:</b> WR6312 <b>Report Date / Page:</b> 7/03/2022 <span style="float: right;">Page 2 of 3</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/179849	1979/S/179850	1979/S/179851	1979/S/179852
ID / Client ID	-	-	-	-
Lot Number	-	-	-	-
Date / Time Tested	22/02/2022 11:00	22/02/2022 11:05	22/02/2022 11:10	22/02/2022 11:15
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Easting m	6390.62	6379.25	Allotment 555	Allotment 554
Northing m	4239.16	4233.50	Offset Nth/West Corner	Offset Nth/West Corner
Level	RL: 31.20	RL: 31.05	10m Sth, 6m East	8m Sth, 4m East
	Stormwater Corridor	Stormwater Corridor	RL: 34.08	RL: 34.22
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	0	0	0
Compaction Sample Number	1979/S/179849	1979/S/179850	1979/S/179851	1979/S/179852
Sample Description	Sandy CLAY - Dark Brown	Sandy CLAY - Brown	Sandy CLAY - Dark Brown	Sandy CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	10.9	11.6	12.7	11.5
Adjusted / Moisture Variation (%)	2.0	2.0	2.0	2.0
Optimum Moisture Content (%)	13.0	13.5	14.5	13.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>84.5</b>	<b>85.5</b>	<b>86.5</b>	<b>85.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.12	2.08	2.11	2.12
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.06	2.02	2.05	2.05
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>103.0</b>	<b>103.0</b>	<b>102.5</b>	<b>103.5</b>

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill <b>Area Description:</b> Fill Area	<b>Report Number:</b> 1979/R/64685-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35331 <b>Client Reference/s:</b> WR6312 <b>Report Date / Page:</b> 7/03/2022 <span style="float: right;">Page 3 of 3</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/179853	1979/S/179854		
ID / Client ID	-	-		
Lot Number	-	-		
Date / Time Tested	22/02/2022 11:20	22/02/2022 11:25		
Material Source	On-Site	On-Site		
Material Type	Bulk Fill	Bulk Fill		
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b		
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300		
Standard or Modified	Standard	Standard		
Easting <span style="float: right;">m</span>	Allotment 553	Allotment 552		
Northing <span style="float: right;">m</span>	Offset Nth/West Corner	Offset Nth/West Corner		
Level	12m Sth, 3m East RL: 34.36	6m Sth, 12m East RL: 34.62		
Test Fraction (mm)	< 19.0 mm	< 19.0 mm		
Sample Oversize (%)	0	0		
Compaction Sample Number	1979/S/179853	1979/S/179854		
Sample Description	Sandy CLAY - Light Brown	Sandy CLAY - Dark Brown		
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	12.5	11.4		
Adjusted / Moisture Variation (%)	2.0	2.0		
Optimum Moisture Content (%)	14.5	13.5		
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)		
<b>Moisture Ratio (%)</b>	<b>86.0</b>	<b>85.0</b>		
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.10	2.08		
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.04	2.02		
Density Ratio Required (%)	95	95		
<b>Hilf Density Ratio (%)</b>	<b>103.0</b>	<b>103.0</b>		

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/64790-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35415 <b>Client Reference/s:</b> WR6319 <b>Report Date / Page:</b> 15/03/2022 <span style="float: right;">Page 1 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180243	1979/S/180244	1979/S/180245	1979/S/180246
ID / Client ID		-	-	-
Lot Number	-	-	-	-
Date / Time Tested	10/03/2022 10:25	10/03/2022 10:30	10/03/2022 10:35	10/03/2022 10:40
Material Source	Imported	Imported	Imported	Imported
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Location	Lot 554 OS from NW Corner 8m S 5m E	Lot 556 OS from NW Corner 5m S 4m E	Lot 560 OS from NW Corner 9m S 6m E	Lot 557 OS from NW Corner 12m S 4m E
Level	RL 35.90	RL 33.15	RL 34.88	RL 34.48
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	2	0	0
Compaction Sample Number	1979/S/180243	1979/S/180244	1979/S/180245	1979/S/180246
Sample Description	Sandy CLAY - Brown	Sandy CLAY - Brown	CLAY - Brown	Sandy CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	17.2	18.2	16.9	17.5
Adjusted / Moisture Variation (%)	1.5	0.0	1.5	1.5
Optimum Moisture Content (%)	19.0	18.5	18.5	19.0
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>91.5</b>	<b>99.5</b>	<b>92.0</b>	<b>92.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.14	2.13	2.13	2.14
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.14	2.18	2.22	2.18
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>100.0</b>	<b>98.0</b>	<b>96.5</b>	<b>98.0</b>

Remarks
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Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

Client: Shadforth Civil Pty Ltd	Report Number: 1979/R/64790-1
Client Address: 99 Sandalwood Lane, Forest Glen	Project Number: 1979/P/2137
Project: Woodlinks Stage 19	Lot Number: -
Location: Collingwood Park	Internal Test Request: 1979/T/35415
Component: Bulk Earthworks	Client Reference/s: WR6319
Area Description: Stage 19	Report Date / Page: 15/03/2022 <span style="float: right;">Page 2 of 2</span>

Test Procedures:	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180247	1979/S/180248	1979/S/180249	1979/S/180250
ID / Client ID	-	-	-	-
Lot Number	-	-	-	-
Date / Time Tested	10/03/2022 10:45	10/03/2022 10:50	10/03/2022 10:55	10/03/2022 11:00
Material Source	Imported	Imported	Imported	Imported
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Location	Neuman St CH 620 1.5m L of CL	Neuman St CH 580 0.5m R of CL	Elder Pde CH 90 2m L of CL	Elder Pde CH 50 1.5m R of CL
Level	RL 37.39	RL 41.05	RL 36.22	RL 36.17
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	1	1	0
Compaction Sample Number	1979/S/180247	1979/S/180248	1979/S/180249	1979/S/180250
Sample Description	CLAY - Brown	Sandy CLAY -Light Brown	Sandy CLAY - Brown	Sandy CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	16.2	16.1	16.7	16.4
Adjusted / Moisture Variation (%)	1.5	1.5	1.5	1.5
Optimum Moisture Content (%)	18.0	17.5	18.0	18.0
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>90.5</b>	<b>91.5</b>	<b>92.5</b>	<b>92.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.14	2.13	2.14	2.13
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.11	2.17	2.19	2.18
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>101.5</b>	<b>98.0</b>	<b>97.5</b>	<b>97.5</b>

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Soil Testing <b>Area Description:</b> Woodlinks Stage 19	<b>Report Number:</b> 1979/R/64861-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> - <b>Internal Test Request:</b> 1979/T/35481 <b>Client Reference/s:</b> WR6329 <b>Report Date / Page:</b> 21/03/2022 <span style="float: right;">Page 1 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180553	1979/S/180554	1979/S/180555	1979/S/180556
ID / Client ID	EW-37	EW-38	EW-39	EW-40
Lot Number	-	-	-	-
Date / Time Tested	16/03/2022 10:40	16/03/2022 10:50	16/03/2022 11:00	16/03/2022 11:10
Material Source	Imported Material	Imported Material	Imported Material	Imported Material
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Easting: m	6242.94	6272.46	3m South	4m South
Northing m	4220.23	4229.38	4m East	5m East
RL: m	33.41	33.35	O/S NW Corner	O/S NW Corner
Allotment:	Drainage Corridor	Drainage Corridor	Lot 568	Lot 569
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	4	1	1	0
Compaction Sample Number	1979/S/180553	1979/S/180554	1979/S/180555	1979/S/180556
Sample Description	Silty Gravelley Clay	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	10.7	10.3	10.7	10.5
Adjusted / Moisture Variation (%)	1.5	1.5	1.5	2.0
Optimum Moisture Content (%)	12.0	11.5	12.0	12.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>87.5</b>	<b>88.0</b>	<b>87.5</b>	<b>85.5</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.15	2.12	2.16	2.14
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.17	2.18	2.24	2.21
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>99.0</b>	<b>97.5</b>	<b>96.5</b>	<b>97.0</b>

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

Client: Shadforth Civil Pty Ltd	Report Number: 1979/R/64861-1
Client Address: 99 Sandalwood Lane, Forest Glen	Project Number: 1979/P/2137
Project: Woodlinks Stage 19	Lot Number: -
Location: Collingwood Park	Internal Test Request: 1979/T/35481
Component: Soil Testing	Client Reference/s: WR6329
Area Description: Woodlinks Stage 19	Report Date / Page: 21/03/2022 <span style="float: right;">Page 2 of 2</span>

Test Procedures:	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180557	1979/S/180558	1979/S/180559	
ID / Client ID	EW-41	EW-42	EW-43	
Lot Number	-	-	-	
Date / Time Tested	16/03/2022 11:20	16/03/2022 11:30	16/03/2022 11:40	
Material Source	Imported Material	Imported Material	Imported Material	
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	
Standard or Modified	Standard	Standard	Standard	
Easting: m	12m South	5m South	6m South	
Northing m	3m East	4m East	5m East	
RL: m	O/S NW Corner	O/S NW Corner	O/S NW Corner	
Allotment:	Lot 553	Lot 554	Lot 555	
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	
Sample Oversize (%)	1	1	1	
Compaction Sample Number	1979/S/180557	1979/S/180558	1979/S/180559	
Sample Description	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	10.5	14.3	10.5	
Adjusted / Moisture Variation (%)	2.0	1.5	1.5	
Optimum Moisture Content (%)	12.5	15.5	12.0	
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	
<b>Moisture Ratio (%)</b>	<b>83.5</b>	<b>91.0</b>	<b>89.0</b>	
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.12	2.11	2.10	
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.16	2.14	2.12	
Density Ratio Required (%)	95	95	95	
<b>Hilf Density Ratio (%)</b>	<b>98.0</b>	<b>98.5</b>	<b>99.0</b>	

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Fill <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/64872-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> Various <b>Internal Test Request:</b> 1979/T/35488 <b>Client Reference/s:</b> WR6333 <b>Report Date / Page:</b> 21/03/2022 <span style="float: right;">Page 1 of 1</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180582	1979/S/180583	1979/S/180584	1979/S/180585
ID / Client ID	EW-44	EW-45	EW-46	EW-47
Lot Number	560	557	556	554
Date / Time Tested	17/03/2022 10:15	17/03/2022 10:25	17/03/2022 10:35	17/03/2022 10:45
Material Source	Imported Material	Imported Material	Imported Material	Imported Material
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Location	Allotment 560 Offset N/W Corner 8m Sth, 4m East	Allotment 557 Offset N/W Corner 10m Sth, 5m East	Allotment 556 Offset N/W Corner 6m Sth, 2m East	Allotment 554 Offset N/W Corner 9m Sth, 3m East
Level	RL: 33.85	RL: 35.13	RL: 35.41	RL: 35.58
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	2	0	0	0
Compaction Sample Number	1979/S/180582	1979/S/180583	1979/S/180584	1979/S/180585
Sample Description	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	11.1	12.0	19.3	17.8
Adjusted / Moisture Variation (%)	1.5	1.5	1.5	1.5
Optimum Moisture Content (%)	13.0	13.5	21.0	19.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>86.5</b>	<b>89.0</b>	<b>92.0</b>	<b>92.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.09	2.09	2.06	2.07
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.14	2.15	2.13	2.12
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>97.5</b>	<b>97.0</b>	<b>97.0</b>	<b>97.0</b>

Remarks
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Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/64966-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> Various <b>Internal Test Request:</b> 1979/T/35567 <b>Client Reference/s:</b> WR6342 <b>Report Date / Page:</b> 25/03/2022 <span style="float: right;">Page 1 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180935	1979/S/180936	1979/S/180937	1979/S/180938
ID / Client ID	EW-48	EW-49	EW-50	EW-51
Lot Number	556	555	553	587
Date / Time Tested	22/03/2022 09:10	22/03/2022 09:15	22/03/2022 09:25	22/03/2022 09:35
Material Source	Imported	Imported	Imported	Imported
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300	275 / 300 / 300
Standard or Modified	Standard	Standard	Standard	Standard
Location	Lot 556 O/S from NW Corner 10m S 4m E	Lot 555 O/S from NW Corner 12m S 5m E	Lot 553 O/S from NW Corner 14m S 5m E	Lot 587 O/S from NE Corner 8m S 3m W
Level	36.06	35.97	35.65	39.20
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	4	0	0	0
Compaction Sample Number	1979/S/180935	1979/S/180936	1979/S/180937	1979/S/180938
Sample Description	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	13.9	13.0	13.9	13.1
Adjusted / Moisture Variation (%)	1.5	2.0	0.0	1.5
Optimum Moisture Content (%)	15.5	15.0	14.0	14.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>89.5</b>	<b>86.0</b>	<b>98.5</b>	<b>89.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.10	2.12	2.09	2.10
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.17	2.16	2.16	2.10
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>97.0</b>	<b>98.0</b>	<b>97.0</b>	<b>99.5</b>

Remarks
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Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/64966-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> Various <b>Internal Test Request:</b> 1979/T/35567 <b>Client Reference/s:</b> WR6342 <b>Report Date / Page:</b> 25/03/2022 <span style="float: right;">Page 2 of 2</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/180939	1979/S/180940	
ID / Client ID	EW-52	EW-53	
Lot Number	583	581	
Date / Time Tested	22/03/2022 09:40	22/03/2022 09:50	
Material Source	Imported	Imported	
Material Type	Bulk Fill	Bulk Fill	
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	
Depths: Test / Nom / Actual (mm)	275 / 300 / 300	275 / 300 / 300	
Standard or Modified	Standard	Standard	
Location	Lot 583 O/S from NE Corner 3m S 3m W	Lot 581 O/S from NE Corner 4m S 2m W	
Level	41.66	43.92	
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	
Sample Oversize (%)	0	0	
Compaction Sample Number	1979/S/180939	1979/S/180940	
Sample Description	Sandy CLAY - Brown	Sandy CLAY - Brown	
<b>Moisture Test Results:</b>			
Field Moisture Content (%)	13.3	12.4	
Adjusted / Moisture Variation (%)	-0.5	1.5	
Optimum Moisture Content (%)	13.0	14.0	
Moisture Variation from OMC	(Wetter than OMC)	(Drier than OMC)	
<b>Moisture Ratio (%)</b>	<b>102.5</b>	<b>89.0</b>	
<b>Density Test Results:</b>			
Field Wet Density (t/m <sup>3</sup> )	2.11	2.09	
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.18	2.14	
Density Ratio Required (%)	95	95	
<b>Hilf Density Ratio (%)</b>	<b>97.0</b>	<b>98.0</b>	

Remarks
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	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2
Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/66353-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/36531 <b>Client Reference/s:</b> Bulk Earthworks <b>Report Date / Page:</b> 28/06/2022 <span style="float: right;">Page 1 of 3</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/186404	1979/S/186405	1979/S/186406	1979/S/186407
ID / Client ID	EW-54	EW-55	EW-56	EW-57
Lot Number	-	-	-	-
Date / Time Tested	7/06/2022 08:38	7/06/2022 08:49	7/06/2022 09:02	7/06/2022 09:10
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / 200	175 / 200 / 200	175 / 200 / 200
Standard or Modified	Standard	Standard	Standard	Standard
Location	Lot 578 S/E Corner 6m N, 4m W	Lot 579 N/E Corner 3m S, 3m W	Lot 580 S/E Corner 3m N, 4m W	Lot 582 S/E Corner 4m N, 5m W
Level	F/L	F/L	F/L	F/L
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	0	0	0
Compaction Sample Number	1979/S/186404	1979/S/186405	1979/S/186406	1979/S/186407
Sample Description	CLAY - Brown	CLAY - Brown	CLAY - Brown	CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	15.9	11.1	13.1	12.9
Adjusted / Moisture Variation (%)	0.0	1.5	1.5	1.5
Optimum Moisture Content (%)	16.0	12.5	14.5	14.5
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>99.5</b>	<b>89.0</b>	<b>89.5</b>	<b>89.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.09	2.14	2.18	2.08
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.16	2.15	2.17	2.16
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>96.5</b>	<b>99.5</b>	<b>100.5</b>	<b>96.0</b>

Remarks
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Accreditation Number: 1986 Corporate Site Number: 1979	

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/66353-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/36531 <b>Client Reference/s:</b> Bulk Earthworks <b>Report Date / Page:</b> 28/06/2022 <span style="float: right;">Page 2 of 3</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/186408	1979/S/186409	1979/S/186410	1979/S/186411
ID / Client ID	EW-58	EW-59	EW-60	EW-61
Lot Number	-	-	-	-
Date / Time Tested	7/06/2022 09:18	7/06/2022 09:27	7/06/2022 09:40	7/06/2022 09:48
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / 200	175 / 200 / 200	175 / 200 / 200
Standard or Modified	Standard	Standard	Standard	Standard
Location	Lot 584 S/E Corner 9m N, 6m W	Lot 586 S/E Corner 3m N, 3m W	Lot 564 N/W Corner 3m S, 14m E	Lot 563 N/W Corner 4m S, 8m E
Level	F/L	F/L	F/L	F/L
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	0	0	0
Compaction Sample Number	1979/S/186408	1979/S/186409	1979/S/186410	1979/S/186411
Sample Description	CLAY - Brown	CLAY - Brown	CLAY - Brown	CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	12.0	12.6	12.6	12.7
Adjusted / Moisture Variation (%)	1.5	1.5	1.5	1.5
Optimum Moisture Content (%)	13.5	14.0	14.0	14.0
Moisture Variation from OMC	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>90.0</b>	<b>89.5</b>	<b>89.5</b>	<b>90.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.11	2.06	2.20	2.17
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.16	2.14	2.23	2.24
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>97.5</b>	<b>96.0</b>	<b>98.5</b>	<b>96.5</b>

Remarks
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Accredited for compliance with ISO/IEC 17025 – Testing		
	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

## WET DENSITY RATIO REPORT

<b>Client:</b> Shadforth Civil Pty Ltd <b>Client Address:</b> 99 Sandalwood Lane, Forest Glen <b>Project:</b> Woodlinks Stage 19 <b>Location:</b> Collingwood Park <b>Component:</b> Bulk Earthworks <b>Area Description:</b> Stage 19	<b>Report Number:</b> 1979/R/66353-1 <b>Project Number:</b> 1979/P/2137 <b>Lot Number:</b> <b>Internal Test Request:</b> 1979/T/36531 <b>Client Reference/s:</b> Bulk Earthworks <b>Report Date / Page:</b> 28/06/2022 <span style="float: right;">Page 3 of 3</span>
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<b>Test Procedures:</b>	AS1289.5.7.1, AS1289.5.8.1, AS1289.2.1.1
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Sample Number	1979/S/186412	1979/S/186413	1979/S/186414	1979/S/186415
ID / Client ID	EW-62	EW-63	EW-64	EW-65
Lot Number	-	-	-	-
Date / Time Tested	7/06/2022 09:57	7/06/2022 10:04	7/06/2022 10:12	7/06/2022 10:24
Material Source	On-Site	On-Site	On-Site	On-Site
Material Type	Bulk Fill	Bulk Fill	Bulk Fill	Bulk Fill
Sampling Method	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b	AS1289.1.2.1 Cl 6.4b
Depths: Test / Nom / Actual (mm)	175 / 200 / 200	175 / 200 / 200	175 / 200 / 200	175 / 200 / 200
Standard or Modified	Standard	Standard	Standard	Standard
Location	Lot 562 N/W Corner 7m S, 5m E	Lot 561 N/W Corner 8m S, 9m E	Lot 577 N/W Corner 2m S, 3m E	Lot 576 N/W Corner 4m S, 4m E
Level	F/L	F/L	F/L	F/L
Test Fraction (mm)	< 19.0 mm	< 19.0 mm	< 19.0 mm	< 19.0 mm
Sample Oversize (%)	0	2	0	0
Compaction Sample Number	1979/S/186412	1979/S/186413	1979/S/186414	1979/S/186415
Sample Description	CLAY - Brown	CLAY - Brown	CLAY - Brown	CLAY - Brown
<b>Moisture Test Results:</b>				
Field Moisture Content (%)	13.6	12.9	11.8	13.1
Adjusted / Moisture Variation (%)	0.0	1.5	1.5	0.0
Optimum Moisture Content (%)	13.5	14.5	13.5	13.0
Moisture Variation from OMC	(Wetter than OMC)	(Drier than OMC)	(Drier than OMC)	(Drier than OMC)
<b>Moisture Ratio (%)</b>	<b>100.5</b>	<b>89.0</b>	<b>88.5</b>	<b>99.0</b>
<b>Density Test Results:</b>				
Field Wet Density (t/m <sup>3</sup> )	2.08	2.10	2.13	2.05
Adj/Peak Conv Wet Density (t/m <sup>3</sup> )	2.12	2.19	2.22	2.10
Density Ratio Required (%)	95	95	95	95
<b>Hilf Density Ratio (%)</b>	<b>98.5</b>	<b>95.5</b>	<b>96.0</b>	<b>97.5</b>

Remarks
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	Accreditation Number: 1986 Corporate Site Number: 1979	Approved Signatory: Dean Stimpson Form ID: W5ASRep Rev 2

APPENDIX

# B

LOT CERTIFICATES



Ref: 1979/L/1

Project Ref: 1979/P/2137

28/06/2022

Shadforths Civil  
99 Sandalwood Lane  
Forest Glen Qld 4556

Construction Sciences Pty Ltd  
ABN 74 128 806 735

Brisbane South Laboratory  
(Kingston)  
57-59 Mudgee St, Kingston  
4110 Qld, Australia

PO Box 253  
Acacia Ridge QLD 4110  
Australia

Phone: 61 7 3320 8500  
[www.constructionsciences.net](http://www.constructionsciences.net)

Dear Sir/Madam,

**INSPECTION OF PLACEMENT AND COMPACTION OF ALLOTMENT FILL  
LOT 550, WOODLINKS ESTATE STAGE 19, COLLINGWOOD PARK**

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Yours faithfully



Wayne Gorman  
Lab Manager  
For Brisbane South  
Construction Sciences

Ref: 1979/L/1

Project Ref: 1979/P/2137

28/06/2022

Shadforth's Civil  
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Dear Sir/Madam,

**INSPECTION OF PLACEMENT AND COMPACTION OF ALLOTMENT FILL  
LOT 570, WOODLINKS ESTATE STAGE 19, COLLINGWOOD PARK**

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Dear Sir/Madam,

**INSPECTION OF PLACEMENT AND COMPACTION OF ALLOTMENT FILL  
LOT 571, WOODLINKS ESTATE STAGE 19, COLLINGWOOD PARK**

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LOT 572, WOODLINKS ESTATE STAGE 19, COLLINGWOOD PARK**

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LOT 580, WOODLINKS ESTATE STAGE 19, COLLINGWOOD PARK**

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	CLIENT: <b>Shadforths Civil</b>	JOB No.: <b>P 2137</b>
	PROJECT: <b>Woodlinks Stage 19</b>	SKETCH No.: <b>SK 02</b>
	TEST ITEM: <b>Site Photos</b>	DATE ISSUED: <b>28/06/2022</b>



CLIENT: <b>Shadforths Civil</b>	JOB No.: <b>P 2137</b>
PROJECT: <b>Woodlinks Stage 19</b>	SKETCH No.: <b>SK 03</b>
TEST ITEM: <b>Site Photos</b>	DATE ISSUED: <b>28/06/2022</b>

## Contact

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