

## Level One Report AS3798

**Client:** BL Civil  
**Project:** Montereia Rd Stage 5B,6,7,& 7A  
**Address:** 144 Montereia Rd, Ripley QLD 4306  
**Job No:** J22/03  
**Docket No:** # 46049



Version	Date	Author	Initials	Reviewer	Initials
1	5/6/2023	Tom Sawyer	T.S	Jacob Jones	J.J

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



CONSTRUCTION

MATERIALS

TESTING

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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 Montereia Rd Stages 5B,6,7 & 7A.

Controlled fill (as defined in AS 2870) was placed by BL Civil. 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 144 Montereia Rd Ripley QLD 4306. The general location of the site is shown in the attached site plans (Appendix 1). The site is bound by future residential development.

## 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 Clayey Sand (SC). 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 4961m<sup>3</sup>.

#### 4.1 Areas Filled

The specific fill areas supervised by Wagner Soil Testing can be seen through the following:

- **Stage 5** – Lots 155, 158, 234
- **Stage 6** – Lots 163, 164, 165, 166, 167, 168, 168, 170, 171, 172
- **Stage 7** – Lots 206, 207, 208, 209, 210, 217
- **Stage 7A** - Lots 197, 198, 199, 200, 201, 202, 203, 204, 205

#### 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, sixteen (16) 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”**.

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.

## 9.0 Constraints

This report was produced for the sole use of BL Civil. 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.

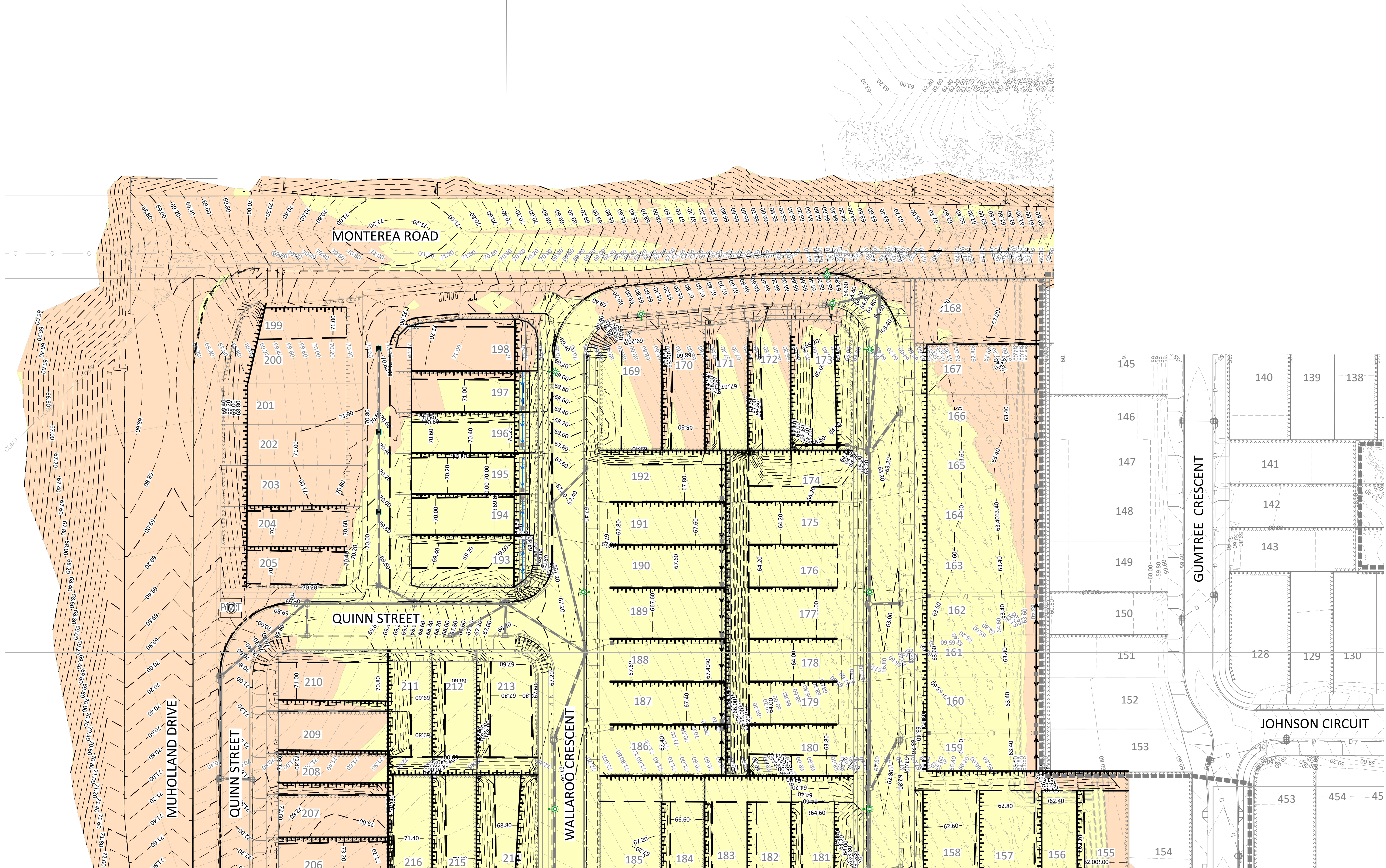
For further technical support regarding this Geotechnical Report please contact Mr. Dean Wagner of Wagner Soil Testing.

Tom Sawyer  
Undergraduate Engineer  
Wagner Soil Testing



## Appendix 1 – General Layout Plan





DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED  
A3 REDUCED

UNREDUCED / REDUCED

0 5 10 15 20 25m

1 : 500 / 1 : 1000

STATUS

# FOR TENDER

SCAN QR CODE TO CONFIRM CURRENT DRAWING REVISION			REV	DATE	DESCRIPTION	DWN	DES	CHK	APP	<div>PROJECT NORTH</div> 	APPROVED	CHECKED	<div>BORNHORST +WARD</div> <div>+61 (7) 3013 4699    <a href="http://www.bornhorstward.com.au">www.bornhorstward.com.au</a></div>	CLIENT	PROJECT	SUBJECT	PROJECT No.				
			B	28.07.22	ISSUED FOR TENDER	ABU	MS	NR	NR							MONTEREA LAND HOLDINGS PTY LTD	MONTEREA BULK EARTHWORKS PRECINCT REMAINING	EARTHWORKS LAYOUT SHEET 3	18331Y		
			A	21.03.22	ISSUE FOR TENDER	LCF	MS	NR	NR											DRAWING No.	REVISION
<a href="http://docs.bornhorstward.com.au/revision/">http://docs.bornhorstward.com.au/revision/</a>																				C0113	B





DIMENSIONS IN METRES EXCEPT WHERE SHOWN OTHERWISE. CULVERT AND PIPE SIZES IN MILLIMETRES

A1 UNREDUCED  
A3 REDUCED  
UNREDUCED / REDUCED

0 5 10 15 20 25m 1:500 / 1:1000

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			B	28.07.22	ISSUED FOR TENDER	ABU	MS	NR	NR						18331Y		
			A	21.03.22	ISSUE FOR TENDER	LCF	MS	NR								DRAWING No.	REVISION
																C0112	B
http://docs.bornhorstward.com.au/revision/											DATE	DATE					





## Appendix 2 – Field Density Reports




## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	15-Dec-22
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	SF
Location:	Ripley, Qld	Checked:	JJ
Report Number:	13A	Page	1 of 1
		Order No:	Fabio

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	W22/19196	W22/19197	W22/19198
Test Location	E:477629	E:477605	E:477935
	N:6940110	N:6940113	N:6940007
	2.6m Below FL	2.2m Below FL	1.9m Below FL
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	15-Dec-22	15-Dec-22	15-Dec-22
Material Sampled	After Compaction	After Compaction	After Compaction
<b>Test Results</b>			
Insitu Wet Density (t/m <sup>3</sup> )	2.01	1.99	2.00
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.03	2.02	2.05
Peak Added Moisture (%)	+0.3	+2.0	+0.4
Moisture Correction (%)	+0.3	+2.3	+0.5
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
HILF DENSITY RATIO (%)	99.0	99.0	98.0
MOISTURE VARIATION (%)			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Stage 5-7		
	Docket #45399		
	This Report Replaces Report 13 - Location		



  
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Accreditation No: 15070  
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Date 24/05/2023

## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	25-Jan-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	AL
Location:	Ripley, Qld	Checked:	JL
Report Number:	39A	Page	1 of 1
		Order No:	Steve

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	W23/600	W23/601	W23/602
Test Location	E:477912	E:477930	E:477626
	N:6939482	N:6939954	N:6940065
	Final Level	Final Level	Final Level
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	25-Jan-23	25-Jan-23	25-Jan-23
Material Sampled	After Compaction	After Compaction	After Compaction
Test Results			
Insitu Wet Density (t/m <sup>3</sup> )	2.06	1.98	2.02
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.08	2.04	2.01
Peak Added Moisture (%)	+0.9	+2.6	+1.9
Moisture Correction (%)	+1.0	+2.9	+2.2
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
HILF DENSITY RATIO (%)	99.0	97.5	100.0
MOISTURE VARIATION (%)			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Stage - 5-7		
	Docket #45940		
	This Report Replaces Report 39 - Location		



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Date 24/05/2023

## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	21-Feb-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	AL
Location:	Ripley, Qld	Checked:	JL
Report Number:	71A	Page	1 of 1
		Order No:	Steve

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	W23/2272	W23/2273	W23/2274
Test Location	E:477863	E:477976	E:477973
	N:6940148	N:6939371	N:6939348
	2.4m Below FL	2.4m Below FL	2.5m Below FL
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	21-Feb-23	21-Feb-23	21-Feb-23
Material Sampled	After Compaction	After Compaction	After Compaction
<b>Test Results</b>			
Insitu Wet Density (t/m <sup>3</sup> )	2.11	2.12	2.12
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.16	2.13	2.19
Peak Added Moisture (%)	+1.1	+2.5	+0.0
Moisture Correction (%)	+1.2	+2.7	+0.0
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
<b>HILF DENSITY RATIO (%)</b>	<b>97.5</b>	<b>99.5</b>	<b>97.0</b>
<b>MOISTURE VARIATION (%)</b>			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Stage 5-7		
	Docket #46055		
	This Report Replaces Report 71 - Location		



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Date 24/05/2023



## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	17-Feb-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	JJ
Location:	Ripley, Qld	Checked:	JL
Report Number:	185A	Page	1 of 1
		Order No:	Fabio

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	W23/4055	W23/4056	W23/4057
Test Location	N:6939649	N:6940136	N:6939650
	E:477768	E:477838	E:477794
	EL 66.8	EL: 68.9	EL: 66.0
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	17-Feb-23	17-Feb-23	17-Feb-23
Material Sampled	After Compaction	After Compaction	After Compaction
Test Results			
Insitu Wet Density (t/m <sup>3</sup> )	1.94	1.95	1.91
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	1.98	2.02	1.98
Peak Added Moisture (%)	+1.8	+1.3	+2.6
Moisture Correction (%)	+2.1	+1.5	+3.0
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
HILF DENSITY RATIO (%)	98.0	96.5	96.5
MOISTURE VARIATION (%)			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Stage 5-7		
	Docket #45987		
	This Report Replaces Report 185 - Location		



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Date 24/05/2023

## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	1-Mar-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	AL / CB
Location:	Ripley, Qld	Checked:	JJ
Report Number:	291	Page	1 of 1
		Order No:	Fabio

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	W23/7248	W23/7249	W23/7250
Test Location	E: 477712	E: 477874	E: 477851
	N: 6939989	N: 6940136	N: 6940147
	Final Level	Final Level	Final Level
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	1-Mar-23	1-Mar-23	1-Mar-23
Material Sampled	After Compaction	After Compaction	After Compaction
<b>Test Results</b>			
Insitu Wet Density (t/m <sup>3</sup> )	2.05	2.12	2.09
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.08	2.15	2.12
Peak Added Moisture (%)	+1.7	+0.4	+2.0
Moisture Correction (%)	+1.9	+0.4	+2.2
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
<b>HILF DENSITY RATIO (%)</b>	<b>98.5</b>	<b>98.5</b>	<b>98.5</b>
<b>MOISTURE VARIATION (%)</b>			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	<b>Docket # 47203</b>		



  
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Date 22/05/2023

## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	1-Mar-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	AL / CB
Location:	Ripley, Qld	Checked:	JJ
Report Number:	292	Page	1 of 1
		Order No:	Fabio

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	W23/7251	W23/7252	W23/7253
Test Location	E: 477727	E: 477741	E: 477723
	N: 6940053	N: 6940029	N: 6940022
	Final Level	Final Level	Final Level
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	1-Mar-23	1-Mar-23	1-Mar-23
Material Sampled	After Compaction	After Compaction	After Compaction
<b>Test Results</b>			
Insitu Wet Density (t/m <sup>3</sup> )	2.11	2.13	2.01
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.16	2.15	2.09
Peak Added Moisture (%)	+1.0	+0.4	+1.7
Moisture Correction (%)	+1.1	+0.4	+1.9
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
HILF DENSITY RATIO (%)	98.0	99.0	96.0
MOISTURE VARIATION (%)			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Docket # 47203		



  
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Date 22/05/2023

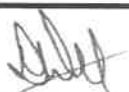


## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	1-Mar-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	AL / CB
Location:	Ripley, Qld	Checked:	JJ
Report Number:	293	Page	1 of 1
		Order No:	Fabio

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	W23/7254	W23/7255	W23/7256
Test Location	E: 477740	E: 477727	E: 477733
	N: 6940106	N: 6940097	N: 6940066
	Final Level	Final Level	Final Level
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	1-Mar-23	1-Mar-23	1-Mar-23
Material Sampled	After Compaction	After Compaction	After Compaction
<b>Test Results</b>			
Insitu Wet Density (t/m <sup>3</sup> )	2.05	2.06	2.14
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.08	2.12	2.13
Peak Added Moisture (%)	+1.1	+2.5	+0.2
Moisture Correction (%)	+1.2	+2.7	+0.2
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
<b>HILF DENSITY RATIO (%)</b>	<b>98.5</b>	<b>97.5</b>	<b>100.0</b>
<b>MOISTURE VARIATION (%)</b>			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Docket # 47203		



  
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Date 22/05/2023

## REPORT ON FIELD HILF DENSITY - NUCLEAR METER

Client:	BL Civil	Job No:	J22/03
Client Address:	P O Box 5501, Brendale Qld 4500	Date:	1-Mar-23
Project:	Monterea Road - Stages 5B, 6, 7, 7A & External	Tested by:	AL / CB
Location:	Ripley, Qld	Checked:	JJ
Report Number:	294	Page	1 of 1
		Order No:	Fabio

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	W23/7257	W23/7258	W23/7259
Test Location	E: 477739	E: 477748	E: 477735
	N: 6940162	N: 6940140	N: 6940118
	Final Level	Final Level	Final Level
Layer / Elevation	Allotment Fill	Allotment Fill	Allotment Fill
Material Source	Onsite	Onsite	Onsite
Depth Tested	200	200	200
Layer Thickness	200	200	200
Date Tested	1-Mar-23	1-Mar-23	1-Mar-23
Material Sampled	After Compaction	After Compaction	After Compaction
<b>Test Results</b>			
Insitu Wet Density (t/m <sup>3</sup> )	2.14	2.11	2.07
Insitu Moisture Content (%)	N/A	N/A	N/A
PCWD (t/m <sup>3</sup> )	2.16	2.14	2.14
Peak Added Moisture (%)	+1.1	-0.4	+1.3
Moisture Correction (%)	+1.2	-0.5	+1.4
Retaining Sieve (mm)	19.0	19.0	19.0
Percentage Oversize (wet)	0.0	0.0	0.0
<b>HILF DENSITY RATIO (%)</b>	<b>99.0</b>	<b>98.5</b>	<b>96.5</b>
<b>MOISTURE VARIATION (%)</b>			
Compaction Type	Standard	Standard	Standard
Degree of Compaction	95%	95%	95%
Remarks	Docket # 47203		



  
Authorised Signatory  
Accreditation No: 15070  
Accredited for compliance ISO/IEC 17025 - Testing

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## Appendix 3 – Typical Site Conditions





## Appendix 4 – Site Information



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# Information

## 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 site 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.