

Shadforth Pty Ltd
99 Sandalwood Lane
Forest Glen QLD, 4556

Project Number: PTP/06302
Letter Number: PTP/06302 – 0006 – Rev1
Project Name: Maison Stage 1, Rochedale

Attention: Vyt Milvydas
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Report on Level 1 Earthworks
Maison Stage 1,
309 Priestdale Road,
Rochedale, QLD, 4123

1. INTRODUCTION

1.1. General

This report presents the results of the Level 1 Earthworks Inspections and compliance testing carried out on the bulk earthworks completed at 309 Priestdale Road, Rochedale for the Maison Stage 1 residential development undertaken between 6 February 2021 to 25 May 2021.



Picture 1: Aerial View of the site (Image Source: Google Earth, 27 October 2017)

The work was commissioned by, and earthworks operations constructed by Shadforth Pty Ltd. At the request of Shadforth, Protest have been engaged to conduct Level 1 Supervision in general accordance with the design and specifications set out within general notes (*Drawing No. 790468-001-CI-1100 – Rev A – Overall Lot Layout and General Notes*) and “AS 3798 – 2007: Guidelines on Earthworks for Commercial and Residential Developments.

1.2. Previous Earthworks

As far as could be assessed, no previous earthworks had been carried out at the site.

1.3. The Project

The purpose for filling at the site was to construct a residential development which includes new pavements, residential building platforms and associated underground services. Civil Drawing set provided by Cardno (Qld) Pty Ltd detail the Stage 1 Civil works to be constructed at the above-mentioned site.

2. THE BRIEF

The Brief from the client was limited to:

- Level 1 Inspection and Testing of the placement and compaction of fill materials in accordance with AS3798-2007 *Guidelines on Earthworks for Commercial and Residential Developments*;
- Relative Density Control Testing in accordance with AS1289 *Testing of Soils for Engineering Purposes* and at frequencies required in AS3798 Table 8.1;
- Brisbane City Council Specifications; and
- Bulk Earthworks Notes in *Drawing No. 790468-001-CI-1100 – Rev A – Overall Lot Layout and General Notes*.

The minimum relative compaction requirements were specified within the Bulk Earthworks Notes and (Drawing No. 790468-001-CI-1100 – Rev A – Overall Lot Layout and General Notes) the minimum relative compaction requirements are summarised in Table 1.

Table 1. Test Request Compaction and Moisture Content Specification

Fill Types	Maximum Dry Density Ratio (%)	Optimum Moisture Content Variation (%)
All earthworks (unless directed otherwise by the superintendent)	>95%	-

(Notes: ⁽¹⁾ Optimum Moisture Content)

3. METHODOLOGY

Earthworks Inspection and testing was carried out on the stripped and exposed ground surfaces and during the placement and compaction of fill materials. Field and laboratory testing included a walk over assessment of the existing ground conditions, observation of fill and compaction activities and field density testing using a nuclear densometer. Samples of the fill materials were collected and tested at the Protest laboratory (Ormeau) for compliance.

3.1. Stripped Surface Assessment

The fill areas were observed to be stripped and cleared of visible organic matter, loose and deleterious materials to depths exposing a suitable foundation. Following the assessment of the exposed fill areas, the natural foundation was approved for filling using the following process:

- Walk over assessments confirming that the competent ground was exposed.
- Proof roll testing using large sized truck carrying out multiple passes confirming no movement of the foundation.

3.2. Filling Operations

Following successful proof rolling, filling operations comprised the placement and compaction of material obtained from onsite cuts which were typically Silty Sandy Clays. Filling materials were placed onsite in uniform layers not exceeding 150mm thick compacted layers with the plant detailed below.

The material used as fill was moisture conditioned at the fill source and during placement and blended to achieve suitable moisture content for compaction. The following heavy plant were used throughout the bulk earthworks component:

- Padfoot Roller
- Grader
- Water Truck
- Dump Truck
- Dozer
- Excavator
- Moxy
- Compactor

Approximately 25,911m³ of fill was placed at the site with a maximum depth of approximately 2.5m. Drawing No. 790468-001-CI-1101, Revision A – *Earthworks and Lot Benching Plan* attached is the bulk earthworks cut to fill plan. The frequency of field density testing adopted for this project was based on AS3798-2007, Table 8.1 with a minimum of one test per 500m³ placed for a *Type 1 – Large Scale Operation*.

A total of sixty-five (65) field density ratio tests were undertaken at select locations during the filling operations. Field density testing was carried out using a nuclear gauge and in accordance with the test method outlined in AS1289.5.8.1.

The relative compaction was then determined by comparing the recorded field density with the laboratory maximum dry density (standard compaction) outlined in test method AS1289.5.1.1. A summary of the test results is presented in Table 2 with the individual reports attached.

Table 2. Summary of Density Testing

Item	Compaction	Moisture Variation
No. of Tests	65	65
Specification	>95%	-
Range	98.0% to 106.0%	3.0% (Dry) to 2% (Wet of OMC)
No. of Tests Outside Specification	0	0
Mean	100.5%	1.0% (Dry of OMC ⁽¹⁾)

(Notes: ⁽¹⁾ Optimum Moisture Content)

4. COMPLIANCE

Based on the level 1 supervision and test results undertaken, it is our opinion that the bulk earthworks placed and compacted at Maison Stage 1, Rochedale between 6 February 2021 to 25 May 2021 by Shadforth Pty Ltd are within accordance with “AS3798-2007 *Guidelines on Earthworks for Commercial and Residential Developments*”.

5. COMMENTS

Based on the results of the inspections and field density testing whilst Protest were on-site, it is considered that the bulk earthworks at Maison Stage 1 between 6 February 2021 to 25 May 2021 have been undertaken in general accordance with AS3798-2007 *Guidelines on Earthworks for Commercial and Residential Developments*. Protest believes consideration should be given to the following:

- This report only certifies the bulk earthworks activities supervised by Protest between 6 February 2021 to 25 May 2021. Protest does not take responsibility for any other bulk earthworks activities that have occurred before or after these dates;
- The installation of services or any activities that may cause disruption of the compacted filling;
- The suitability of the filled land to support the proposed structures; and
- Any variation in filling depth of extent of areas that is not noted within this report or on the individual test report sheets.

6. COMMENTS

- I. This report was produced for the sole use of Shadforth Pty Ltd. It should not be used by or depended upon for other projects or purposes on the same or other site or by a third party. In the preparation of this report Protest has relied upon information provided by the client and/or their agents.
- II. 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 Protest field testing has been completed.
- III. 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 Protest and, if required, amendments made.
- IV. Protest 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.

We trust that the above information is suitable for your present requirements. Should you have any queries, please do not hesitate to contact the undersigned.

Written By:



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Reviewed By:



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Branch Manager

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- Attachments:
1. Site Images;
 2. Test Location Plan;
 3. Density Reports;
 4. Reference Drawings.

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Attachment 1

Site Images



Figure 1. Post-strip inspection (Taken 28/01/2021)



Figure 2. Post-strip inspection (Taken 28/01/2021)



Figure 3. Post-strip inspection (Taken 28/01/2021)



Figure 4. Post-strip inspection (Taken 01/02/2021)



Figure 5. Compactor used throughout bulk earthwork activities to spread and compact material. (Taken 04/02/2021)



Figure 6 – Compactor and scraper working in conjunction to spread and compact material. (Taken 10/02/2021)



Figure 7 – Water cart applying moisture during placement of material. (Taken 15/02/2021)



Figure 8 – Test pad cut for field density testing. (Taken 20/02/2021)



Figure 9. Overview of earthworks pad. (Taken 23/02/2021)



Figure 10 – Dump trucks carting fill material. (Taken 26/02/2021)



Figure 11. Compactor used throughout bulk earthworks operations. (Taken 02/03/2021)



Figure 12. Scraper used throughout bulk earthworks operations. (Taken 02/03/2021)



Figure 13. Grader used to trim pads throughout earthworks operations. (Taken 08/03/2021)



Figure 14. Padfoot roller used throughout earthwork operations to compact material. (Taken 08/03/2021)



Figure 15. Dump truck transferring fill material. (Taken 29/03/2021)



Figure 16. Excavator used throughout earthwork operations to cut and transfer material. (Taken 30/03/2021)



Figure 17. Dozer used throughout bulk earthwork operations to cut and spread material. (Taken 20/04/2021)



Figure 18. Dozer cutting embankment. (Taken 21/04/2021)

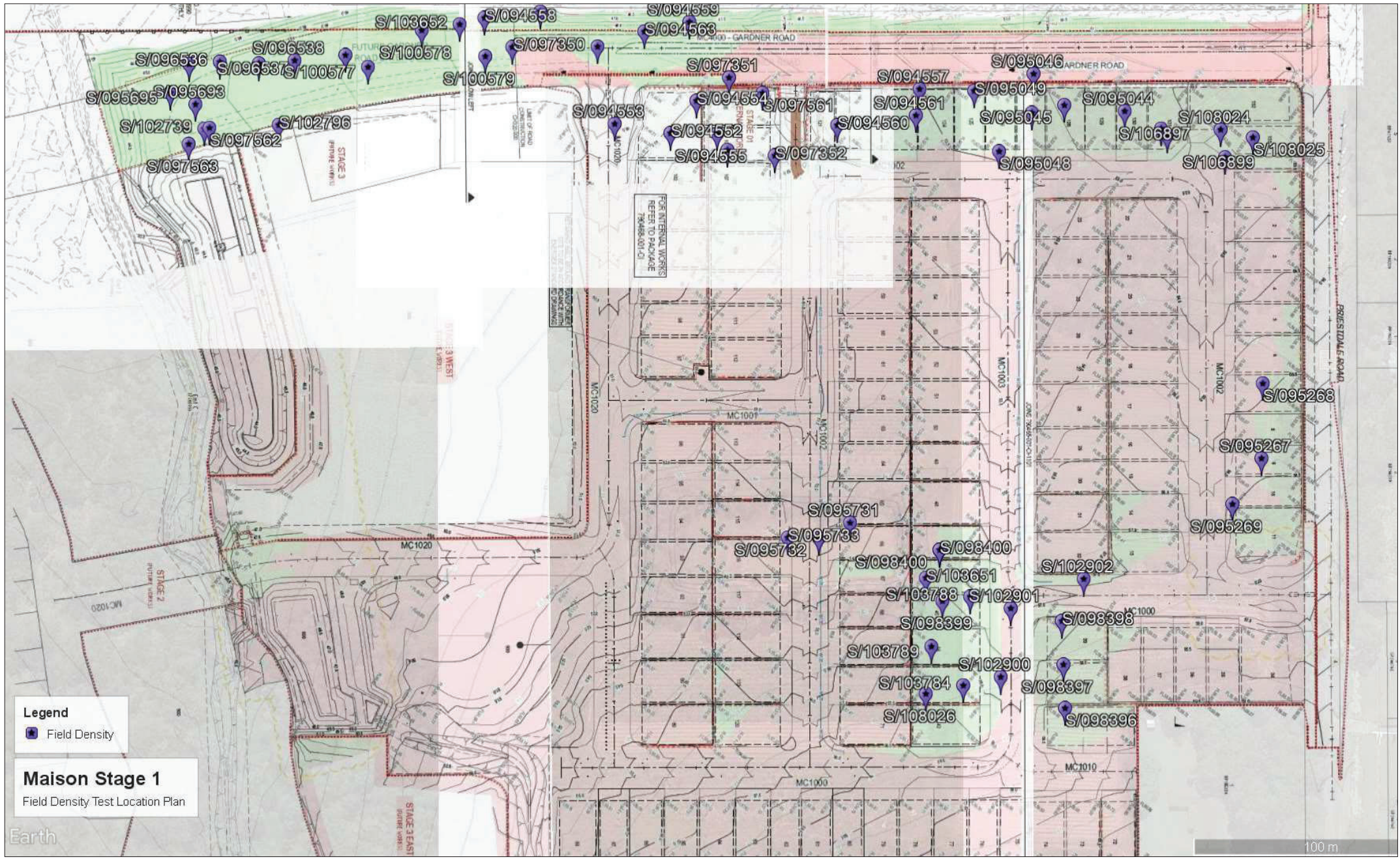


Figure 19. Overview of site. (Taken 21/04/2021)

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Attachment 2
Testing Location Plan



Legend
 Field Density

Maison Stage 1
 Field Density Test Location Plan

Earth

01	Field Density Location Plan	14/07/21	KP	KP	KP
Issue	Description	Date	DRN	CHK	APP



CLIENT
 Shadforth

TITLE
 Maison Stage 1, Rochedale

Job No.
 PTP/06302
 Drawing No.
 1

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Attachment 3
Density Reports

Compaction and Moisture Control Test Summary



Client :	Shadforth				
Project Name :	Maison Stage 1				
Project Number :	PTP/06302				
Location :	Rochedale				
Sample No.	Easting:	Northing:	Moisture Variation (Dry/Wet of OMC %)	Dry Density Ratio (DDR %)	Report Number
S/095267	2m North, 2m East	From S/W CNR	-1.5	102.5	SR_PTP_06302 - 3_1
S/095268	5m North, 3m East	From S/W CNR	-2	102.5	SR_PTP_06302 - 3_1
S/095269	8m North, 2m East	From S/W CNR	-1.5	101.5	SR_PTP_06302 - 3_1
S/094552	E: 511220	N: 6948411	-0.5	99	SR_PTP_06302 - 4_1
S/094553	E: 511197	N: 6968411	-0.5	99.5	SR_PTP_06302 - 4_1
S/094554	E: 511209	N: 6948423	-1.5	100.5	SR_PTP_06302 - 4_1
S/094555	E: 511223	N: 6948429	-1	101	SR_PTP_06302 - 4_1
S/094556	E: 511230	N: 6948432	-1.5	102.5	SR_PTP_06302 - 4_1
S/094557	E: 511218	N: 6948510	-3	103	SR_PTP_06302 - 4_1
S/094558	E: 511131	N: 6948351	0	101	SR_PTP_06302 - 6_1
S/094559	E: 511129	N: 6948391	1.5	100	SR_PTP_06302 - 6_1
S/094560	E: 511227	N: 6948476	-2	98	SR_PTP_06302 - 6_1
S/094561	E: 511228	N: 6948507	-1	102	SR_PTP_06302 - 6_1
S/094562	E: 511117	N: 6948352	-2	98	SR_PTP_06302 - 6_1
S/094563	E: 511137	N: 6948383	-2	100.5	SR_PTP_06302 - 6_1
S/095731	E: 511382	N: 6948457	-1.5	98.5	SR_PTP_06302 - 7_1
S/095732	E: 511386	N: 6948444	-2	100.5	SR_PTP_06302 - 7_1
S/095733	E: 511384	N: 6948432	-1.5	99.5	SR_PTP_06302 - 7_1
S/095693	E: 511180	N: 6948229	-0.5	98	SR_PTP_06302 - 8_1
S/095695	E: 511174	N: 6948220	-1.5	100	SR_PTP_06302 - 8_1
S/095696	E: 511164	N: 6948229	0	101	SR_PTP_06302 - 8_1
S/096536	E: 511165	N: 6948241	-2	98	SR_PTP_06302 - 9_1
S/096537	E: 511168	N: 6948256	-1.5	98.5	SR_PTP_06302 - 9_1
S/096538	E: 511169	N: 6948270	-1	98	SR_PTP_06302 - 9_1
S/097350	E: 511780	N: 6948389	-2	101.5	SR_PTP_06302 - 16_1
S/097351	E: 511181	N: 6948416	-2	102	SR_PTP_06302 - 16_1
S/097352	E: 511185	N: 6948443	-2	100.5	SR_PTP_06302 - 16_1
S/097561	E: 511191	N: 6948425	-1	100.5	SR_PTP_06302 - 16_1
S/097562	E: 511190	N: 6948233	-1.5	98.5	SR_PTP_06302 - 16_1
S/097563	E: 511195	N: 6948224	-0.5	99.5	SR_PTP_06302 - 16_1
S/098396	E: 511467	N: 6948529	-1.5	103	SR_PTP_06302 - 20_1
S/098397	E: 511450	N: 6948531	-2	101	SR_PTP_06302 - 20_1
S/098398	E: 511433	N: 6948533	-1.5	101	SR_PTP_06302 - 20_1
S/098399	E: 511418	N: 6948488	-0.5	98	SR_PTP_06302 - 20_1
S/098400	E: 511398	N: 6948490	0	100.5	SR_PTP_06302 - 20_1
S/095044	6m North, 5m East	From S/W CNR	-1	99.5	SR_PTP_06302 - 21_1
S/095045	4m North, 8m East	From S/W CNR	-0.5	103	SR_PTP_06302 - 21_1
S/095046	1m North, 7m East	From S/W CNR	0	104.5	SR_PTP_06302 - 21_1
S/095047	6m North, 1m East	From S/W CNR	-2	106	SR_PTP_06302 - 21_1

S/095048	12m North, 13m East	From S/W CNR	1	101	SR_PTP_06302 - 21_1
S/095049	1m North, 5m East	From S/W CNR	2	102	SR_PTP_06302 - 21_1
S/095082	3m East, 6m North	From S/W CNR	0.5	98.5	SR_PTP_06302 - 2_1
S/095083	2m East, 4m North	From S/W CNR	-1.5	98.5	SR_PTP_06302 - 2_1
S/095084	4m East, 6m North	From S/W CNR	-2	98	SR_PTP_06302 - 2_1
S/100577	E: 511174	N: 6948371	0	100	SR_PTP_06302 - 23_1
S/100578	E: 511173	N: 6948371	1	99.5	SR_PTP_06302 - 23_1
S/100579	E: 511179	N: 6948344	-2	102.5	SR_PTP_06302 - 23_1
S/102739	E: 511190	N: 6948231	-0.5	98.5	SR_PTP_06302 - 24_1
S/102796	E: 511178	N: 6948280	-1.5	100.5	SR_PTP_06302 - 24_1
S/102797	E: 511177	N: 6948355	0	99.5	SR_PTP_06302 - 24_1
S/102900	E: 511451	N: 6948506	-1.5	98.5	SR_PTP_06302 - 25_1
S/102901	E: 511425	N: 6948514	-1.5	98	SR_PTP_06302 - 25_1
S/102902	E: 511418	N: 6948544	-2	102	SR_PTP_06302 - 25_1
S/103651	E: 511408	N: 6948483	-2	102.5	SR_PTP_06302 - 26_1
S/103652	E: 511165	N: 6948336	-2	100.5	SR_PTP_06302 - 26_1
S/103653	E: 511170	N: 6948290	-1.5	98.5	SR_PTP_06302 - 26_1
S/103784	E: 511393	N: 6948470	-1.5	101.5	SR_PTP_06302 - 27_1
S/103788	E: 511383	N: 6948464	0	99	SR_PTP_06302 - 27_1
S/103789	E: 511372	N: 6948465	-1.5	100	SR_PTP_06302 - 27_1
S/106897	E: 511248	N: 6948601	-1	99.5	SR_PTP_06302 - 66_1
S/106898	E: 511251	N: 6948603	-1.5	101	SR_PTP_06302 - 66_1
S/106899	E: 511263	N: 6948624	-1	99	SR_PTP_06302 - 66_1
S/108024	E: 511252	N: 6948624	-1	99.5	SR_PTP_06302 - 67_1
S/108025	E: 511257	N: 6948636	-1.5	101	SR_PTP_06302 - 67_1
S/108026	E: 511453	N: 6948476	-1	99	SR_PTP_06302 - 67_1



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 2/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	..	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/095082	S/095083	S/095084			
Date Tested :	11/02/2021	11/02/2021	11/02/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	150 / 200	150 / 200	150 / 200			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	00:00	08:39	00:00			
Lot Number :			
Location 1 :	Lot 125	Lot 128	Lot 105			
Location 2 :	3.0 metres East , 6 metres North	2.0 metres East , 4 metres North	4.0 metres East , 6 metres North			
Location 3 :	From South West	From South West	From South West			
Location 4 :	CNR	CNR	CNR			
Location 4 :	R.L 52.5	R.L 52.8	R.L 51.75			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	-	-	-			
Oversize Dry :	-	-	-			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/095082	S/095083	S/095084			
MDR Test Date :	16/02/2021	16/02/2021	16/02/2021			
Soil Description :	Gravelly, Sandy Clay	Gravelly, Sandy Clay	Gravelly, Sandy Clay			
MDR Test Results						
MDD (t/m ³) :	1.79	1.80	1.81			
OMC :	14.0%	14.5%	14.0%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
Moisture Test Results						
Field Moisture Content :	14.5%	13.0%	12.5%			
Moisture Specification :	-	-	-			
Variation from OMC :	0.5% Wet of OMC	1.5% Dry of OMC	2.0% Dry of OMC			
Moisture Ratio :	104.5%	90.0%	87.5%			
Density Test Results						
Field Dry Density (t/m ³) :	1.76	1.77	1.78			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	98.5%	98.5%	98.0%			
Degree of Saturation / Required :	-	-	-			
Remarks :	-					
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				APPROVED SIGNATORY  Kenney Pham - Signatory		



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 3/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Rochedale			Test Request :		
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/095267	S/095268	S/095269			
Date Tested :	12/02/2021	12/02/2021	12/02/2021			
Material Source :	On Site	On Site	On Site			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	150 / 200	150 / 200	150 / 200			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	00:00	00:00	00:00			
Lot Number :	-	-	-			
Location 1 :	Lot 132	Lot 131	Lot 122			
Location 2 :	2 metres North , 2 metres East	5 metres North , 3 metres East	8 metres North , 2 metres East			
Location 3 :	From S/W CNR	From S/W CNR	From S/W CNR			
Location 4 :	R.L 53.5	R.L 53.4	R.L 52.14			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	-	-	-			
Oversize Dry :	-	-	-			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/095267	S/095268	S/095269			
MDR Test Date :	18/02/2021	18/02/2021	18/02/2021			
Soil Description :	Sandy Clay	Sandy Clay	Sandy Clay			
<i>MDR Test Results</i>						
MDD (t/m ³) :	1.57	1.63	1.67			
OMC :	26.0%	24.0%	18.5%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
<i>Moisture Test Results :</i>						
Field Moisture Content :	24.5%	22.0%	16.5%			
Moisture Specification :	-	-	-			
Variation from OMC :	1.5% Dry of OMC	2.0% Dry of OMC	1.5% Dry of OMC			
Moisture Ratio :	94.0%	91.5%	91.0%			
<i>Density Test Results</i>						
Field Dry Density (t/m ³) :	1.60	1.67	1.70			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	102.5%	102.5%	101.5%			
Degree of Saturation / Required :	-	-	-			
Remarks :	-					
	Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208			APPROVED SIGNATORY  Kenney Pham - Signatory		



Dry Density / Moisture Ratio Report

Client :	Shadforth						Report Number :	SR/PTP/06302 - 4/2
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD						Report Date :	7/10/2021
Project Name :	Maison Rochedale						Test Request :	-
Project Number :	PTP/06302						Page 1 of 1	
Location :	Rochedale							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1							
Sample Number :	S/094552	S/094553	S/094554	S/094555	S/094556	S/094557		
Date Tested :	6/02/2021	6/02/2021	6/02/2021	6/02/2021	6/02/2021	6/02/2021		
Material Source :	Onsite	Onsite	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	150 / 150	150 / 150	150 / 150	150 / 150	150 / 150	150 / 150		
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	10:58	11:01	11:03	11:04	11:04	11:04		
Lot Number :	-	-	-	-	-	-		
Location 1 :	Western School Border	Western School Border	Western School Border	Western School Border	Western School Border	Western School Border		
Location 2 :	E : 511220	E : 511197	E : 511209	E : 511223	E : 511230	E : 511218		
Location 3 :	N : 6948411	N : 6968411	N : 6948423	N : 6948429	N : 6948432	N : 6948510		
Location 4 :	R.L.50.73	R.L. 51.6	R.L.52.05	R.L.52.53	R.L52.75	R.L.51.67		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	-	-	-	-	-	-		
Oversize Dry :	-	-	-	-	-	-		
Oversize Density - Dry (t/m ³) :	-	-	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/094552	S/094553	S/094554	S/094555	S/094556	S/094557		
MDR Test Date :	11/02/2021	11/02/2021	11/02/2021	11/02/2021	11/02/2021	11/02/2021		
Soil Description :	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay		
MDR Test Results								
MDD (t/m ³) :	1.83	1.60	1.87	1.92	1.50	1.51		
OMC :	11.0%	26.5%	15.0%	11.0%	31.0%	30.0%		
ADJ MDD (t/m ³) :	-	-	-	-	-	-		
ADJ OMC :	-	-	-	-	-	-		
Moisture Test Results :								
Field Moisture Content :	10.5%	26.0%	13.0%	10.0%	29.0%	27.0%		
Moisture Specification :	-	-	-	-	-	-		
Variation from OMC :	0.5% Dry of OMC	0.5% Dry of OMC	1.5% Dry of OMC	1.0% Dry of OMC	1.5% Dry of OMC	3.0% Dry of OMC		
Moisture Ratio :	95.0%	98.5%	89.0%	90.5%	94.5%	90.5%		
Density Test Results								
Field Dry Density (t/m ³) :	1.81	1.59	1.87	1.93	1.54	1.55		
Density Specification :	95%	95%	95%	95%	95%	95%		
Dry Density Ratio :	99.0%	99.5%	100.5%	101.0%	102.5%	103.0%		
Characteristic Value (Q020) :	CV(min) = 99.6%	CV(max) = 102.2%	Mean = 100.9%	Std. Dev. = 1.6%	n = 6	k = 0.828		
Degree of Saturation / Required :	-	-	-	-	-	-		
Remarks :	-							
	Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208						APPROVED SIGNATORY  Kenney Pham - Signatory	



Dry Density / Moisture Ratio Report

Client :	Shadforth					Report Number :	SR/PTP/06302 - 6/2
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD					Report Date :	7/10/2021
Project Name :	Maison Rochedale					Test Request :	-
Project Number :	PTP/06302					Page 1 of 1	
Location :	Rochedale						
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1						
Sample Number :	S/094558	S/094559	S/094560	S/094561	S/094562	S/094563	
Date Tested :	6/02/2021	6/02/2021	6/02/2021	6/02/2021	6/02/2021	6/02/2021	
Material Source :	Onsite	Onsite	Onsite	Onsite	Onsite	Onsite	
For use as :	General Fill	General Fill	General Fill	General Fill	General Fill	General Fill	
Test / Layer Depths :	150 / 150	150 / 150	150 / 150	150 / 150	150 / 150	150 / 150	
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	
Time :	11:04	11:05	11:05	11:06	11:06	11:06	
Lot Number :	-	-	-	-	-	-	
Location 1 :	Western School Border	Western School Border	Western School Border	Western School Border	Western School Border	Western School Border	
Location 2 :	E : 511131	E : 511129	E : 511227	E : 511228	E : 511117	E : 511137	
Location 3 :	N : 6948351	N : 6948391	N : 6948476	N : 6948507	N : 6948352	N : 6948383	
Location 4 :	R.L.52.2	R.L.52.6	R.L.52.4	R.L.52.5	R.L.52.1	R.L.52.3	
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	
Oversize Wet :	-	-	-	-	-	-	
Oversize Dry :	-	-	-	-	-	-	
Oversize Density - Dry (t/m ³) :	-	-	-	-	-	-	
Assigned MDR (Yes/No) :	No	No	No	No	No	No	
MDR Sample Number :	S/094558	S/094559	S/094560	S/094561	S/094562	S/094563	
MDR Test Date :	11/02/2021	11/02/2021	11/02/2021	11/02/2021	11/02/2021	11/02/2021	
Soil Description :	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	Sandy Clay	
MDR Test Results							
MDD (t/m ³) :	1.49	1.58	1.59	1.57	1.62	1.57	
OMC :	31.0%	30.0%	30.5%	31.0%	29.5%	30.5%	
ADJ MDD (t/m ³) :	-	-	-	-	-	-	
ADJ OMC :	-	-	-	-	-	-	
Moisture Test Results :							
Field Moisture Content :	31.0%	28.5%	28.5%	29.5%	27.5%	28.5%	
Moisture Specification :	-	-	-	-	-	-	
Variation from OMC :	0.0% Dry of OMC	1.5% Dry of OMC	2.0% Dry of OMC	1.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	
Moisture Ratio :	100.0%	95.0%	94.0%	96.5%	94.0%	93.5%	
Density Test Results							
Field Dry Density (t/m ³) :	1.51	1.57	1.56	1.60	1.59	1.57	
Density Specification :	95%	95%	95%	95%	95%	95%	
Dry Density Ratio :	101.0%	100.0%	98.0%	102.0%	98.0%	100.5%	
Characteristic Value (Q020) :	CV(min) = 98.6%		CV(max) = 101.3%	Mean = 99.9%	Std. Dev. = 1.6%	n = 6	k = 0.828
Degree of Saturation / Required :	-	-	-	-	-	-	
Remarks :	-						
	Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208					APPROVED SIGNATORY  Kenney Pham - Signatory	



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 7/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/095731	S/095732	S/095733			
Date Tested :	16/02/2021	16/02/2021	16/02/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	125 / 150	125 / 150	125 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	13:30	13:35	13:35			
Lot Number :	Basin	Basin	Basin			
Location 1 :	E: 511382	E: 511386	E: 511384			
Location 2 :	N: 6948457	N: 6948444	N: 6948432			
Location 3 :	RL: 52.92	RL: 52.91	RL: 52.99			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	-	-	-			
Oversize Dry :	-	-	-			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/095731	S/095732	S/095733			
MDR Test Date :	23/02/2021	23/02/2021	23/02/2021			
Soil Description :	SILTY SANY CLAY	SILTY SANY CLAY	SILTY SANDY CLAY			
<i>MDR Test Results</i>						
MDD (t/m ³) :	1.73	1.70	1.71			
OMC :	14.5%	19.5%	19.0%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
<i>Moisture Test Results</i>						
Field Moisture Content :	13.0%	17.0%	18.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	1.5% Dry of OMC	2.0% Dry of OMC	1.5% Dry of OMC			
Moisture Ratio :	89.0%	89.0%	93.0%			
<i>Density Test Results</i>						
Field Dry Density (t/m ³) :	1.70	1.71	1.70			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	98.5%	100.5%	99.5%			
Degree of Saturation / Required :						
	-	-	-			
Remarks :	-					
	Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast			APPROVED SIGNATORY  Kenney Pham - Signatory		
	Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208					



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 8/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/095693	S/095695	S/095696			
Date Tested :	16/02/2021	16/02/2021	16/02/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General fill	General fill	General fill			
Test / Layer Depths :	125 / 150	125 / 150	125 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	06:10	06:13	06:14			
Lot Number :	-	-	-			
Location 1 :	E: 511180	E: 511174	E: 511164			
Location 2 :	N: 6948229	N: 6948220	N: 6948229			
Location 3 :	RL: 44	RL: 43.9	RL: 43.75			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	-	-	-			
Oversize Dry :	-	-	-			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/095693	S/095695	S/095696			
MDR Test Date :	24/02/2021	24/02/2021	24/02/2021			
Soil Description :	Silty, Sandy Clay	Silty, Sandy Clay	Silty, Sandy Clay			
<i>MDR Test Results</i>						
MDD (t/m ³) :	1.88	1.84	1.91			
OMC :	15.0%	15.5%	12.0%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
<i>Moisture Test Results</i>						
Field Moisture Content :	14.0%	14.0%	12.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	0.5% Dry of OMC	1.5% Dry of OMC	0.0% Dry of OMC			
Moisture Ratio :	95.5%	90.5%	99.0%			
<i>Density Test Results</i>						
Field Dry Density (t/m ³) :	1.85	1.84	1.92			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	98.0%	100.0%	101.0%			
Degree of Saturation / Required :						
	-	-	-			
Remarks :	-					
	Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast			APPROVED SIGNATORY  Kenney Pham - Signatory		
	Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208					



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 9/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/096536	S/096537	S/096538			
Date Tested :	23/02/2021	23/02/2021	23/02/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	125 / 150	125 / 150	125 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	08:20	08:22	08:22			
Lot Number :	-	-	-			
Location 1 :	E: 511165	E: 511168	E: 511169			
Location 2 :	N: 6948241	N: 6948256	N: 6948270			
Location 3 :	RL: 46.35	RL: 44.27	RL: 44.48			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	-	-	-			
Oversize Dry :	-	-	-			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/096536	S/096537	S/096538			
MDR Test Date :	24/02/2021	24/02/2021	24/02/2021			
Soil Description :	Gravelly Sandy Clay	Gravelly Sandy Clay	Gravelly Sandy Clay			
<i>MDR Test Results</i>						
MDD (t/m ³) :	1.39	1.43	1.45			
OMC :	26.0%	24.5%	23.5%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
<i>Moisture Test Results</i>						
Field Moisture Content :	24.0%	23.0%	22.5%			
Moisture Specification :	-	-	-			
Variation from OMC :	2.0% Dry of OMC	1.5% Dry of OMC	1.0% Dry of OMC			
Moisture Ratio :	91.5%	94.0%	94.5%			
<i>Density Test Results</i>						
Field Dry Density (t/m ³) :	1.37	1.41	1.42			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	98.0%	98.5%	98.0%			
Degree of Saturation / Required :	-	-	-			
Remarks :	-					
	Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast			APPROVED SIGNATORY  Kenney Pham - Signatory		
	Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208					



Dry Density / Moisture Ratio Report

Client :	Shadforth						Report Number :	SR/PTP/06302 - 16/2
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD						Report Date :	7/10/2021
Project Name :	Maison Stage 1, Rochedale						Test Request :	-
Project Number :	PTP/06302						Page 1 of 1	
Location :	Rochedale							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1							
Sample Number :	S/097350	S/097351	S/097352	S/097561	S/097562	S/097563		
Date Tested :	1/03/2021	1/03/2021	1/03/2021	1/03/2021	1/03/2021	1/03/2021		
Material Source :	Onsite	Onsite	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	125 / 150	125 / 150	125 / 150	125 / 150	125 / 150	125 / 150		
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	09:30	09:31	09:31	08:12	08:13	08:13		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E: 511178	E: 511181	E: 511185	E: 511191	E: 511190	E: 511195		
Location 2 :	N: 6948389	N: 6948416	N: 6948443	N: 6948425	N: 6948233	N: 6948224		
Location 3 :	RL: 47.85	RL: 47.5	RL: 47.35	RL: 47.65	RL: 45.85	RL: 45.85		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	-	-	2%	3%	-	-		
Oversize Dry :	-	-	2%	3%	-	-		
Oversize Density - Dry (t/m ³) :	-	-	2.50	2.50	-	-		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/097350	S/097351	S/097352	S/097561	S/097562	S/097563		
MDR Test Date :	10/03/2021	10/03/2021	10/03/2021	10/03/2021	10/03/2021	10/03/2021		
Soil Description :	Silty Sandy Clay - Red	Silty Sandy Clay - Red	Silty Sandy Clay - Red	Silty Sandy Clay - Red	Silty Sandy Clay - Red	Silty Sandy Clay - Red		
MDR Test Results								
MDD (t/m ³) :	1.44	1.44	1.43	1.55	1.54	1.58		
OMC :	24.0%	29.0%	26.5%	25.5%	25.0%	24.5%		
ADJ MDD (t/m ³) :	-	-	1.45	1.57	-	-		
ADJ OMC :	-	-	26.0%	25.0%	-	-		
Moisture Test Results :								
Field Moisture Content :	22.0%	27.0%	24.5%	24.0%	23.5%	24.5%		
Moisture Specification :	-	-	-	-	-	-		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	1.0% Dry of OMC	1.5% Dry of OMC	0.5% Dry of OMC		
Moisture Ratio :	92.5%	93.0%	93.0%	96.0%	93.5%	99.0%		
Density Test Results								
Field Dry Density (t/m ³) :	1.45	1.47	1.45	1.58	1.52	1.57		
Density Specification :	95%	95%	95%	95%	95%	95%		
Dry Density Ratio :	101.5%	102.0%	100.5%	100.5%	98.5%	99.5%		
Degree of Saturation / Required :	-	-	-	-	-	-		
Remarks :	-							
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled</p> <p>Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast</p> <p>Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>	APPROVED SIGNATORY  Kenney Pham - Signatory							

Dry Density / Moisture Ratio Report

Client :	Shadforth				Report Number :	SR/PTP/06302 - 20/2
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	7/10/2021
Project Name :	Maison Stage 1, Rochedale				Test Request :	-
Project Number :	PTP/06302				Page 1 of 1	
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/098396	S/098397	S/098398	S/098399	S/098400	
Date Tested :	8/03/2021	8/03/2021	8/03/2021	8/03/2021	8/03/2021	
Material Source :	Onsite	Onsite	Onsite	Onsite	Onsite	
For use as :	General Fill	General Fill	General Fill	General Fill	General Fill	
Test / Layer Depths :	125 / 150	125 / 150	125 / 150	125 / 150	125 / 150	
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	
Time :	09:02	09:03	09:03	09:03	09:04	
Lot Number :	-	-	-	-	-	
Location 1 :	E: 511467	E: 511450	E: 511433	E: 511418	E: 511398	
Location 2 :	N: 6948529	N: 6948531	N: 6948533	N: 6948488	N: 6948490	
Location 3 :	RL: 59.12	RL: 58.64	RL: 58.0	RL: 57.11	RL: 56.85	
Location 4 :	-	-	-	-	-	
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	
Oversize Wet :	-	-	-	-	-	
Oversize Dry :	-	-	-	-	-	
Oversize Density - Dry (t/m ³) :	-	-	-	-	-	
Assigned MDR (Yes/No) :	No	No	No	No	No	
MDR Sample Number :	S/098396	S/098397	S/098398	S/098399	S/098400	
MDR Test Date :	12/03/2021	12/03/2021	12/03/2021	12/03/2021	12/03/2021	
Soil Description :	Silty, Sandy Clay	Silty, Sandy Clay	Silty, Sandy Clay	Silty, Sandy Clay	Silty, Sandy Clay	
MDR Test Results						
MDD (t/m ³) :	1.51	1.54	1.47	1.47	1.47	
OMC :	28.0%	27.0%	30.0%	29.5%	28.0%	
ADJ MDD (t/m ³) :	-	-	-	-	-	
ADJ OMC :	-	-	-	-	-	
Moisture Test Results :						
Field Moisture Content :	26.5%	25.0%	28.5%	29.0%	28.0%	
Moisture Specification :	-	-	-	-	-	
Variation from OMC :	1.5% Dry of OMC	2.0% Dry of OMC	1.5% Dry of OMC	0.5% Dry of OMC	0.0% Dry of OMC	
Moisture Ratio :	95.0%	92.5%	94.5%	97.5%	100.0%	
Density Test Results						
Field Dry Density (t/m ³) :	1.56	1.55	1.49	1.44	1.48	
Density Specification :	95%	95%	95%	95%	95%	
Dry Density Ratio :	103.0%	101.0%	101.0%	98.0%	100.5%	
Degree of Saturation / Required :	-	-	-	-	-	
Remarks :	-					
 <p style="font-size: small;">Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>	APPROVED SIGNATORY  Kenney Pham - Signatory					



Dry Density / Moisture Ratio Report

Client :	Shadforth						Report Number :	SR/PTP/06302 - 21/2
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD						Report Date :	7/10/2021
Project Name :	Maison Stage 1, Rochedale						Test Request :	
Project Number :	PTP/06302						Page 1 of 1	
Location :	Rochedale							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1							
Sample Number :	S/095044	S/095045	S/095046	S/095047	S/095048	S/095049		
Date Tested :	10/02/2021	10/02/2021	10/02/2021	10/02/2021	10/02/2021	10/02/2021		
Material Source :	On Site	On Site	On Site	On Site	On Site	On Site		
For use as :	Allotment Fill	Allotment Fill	Allotment Fill	Allotment Fill	Allotment Fill	Allotment Fill		
Test / Layer Depths :	150 / 200	150 / 200	150 / 200	150 / 200	150 / 200	150 / 200		
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	14:20	00:00	12:00	12:00	12:00	12:00		
Lot Number :	-	-	-	-	-	-		
Location 1 :	Lot 103	Lot 105	Lot 106	Lot 102	Lot 103	Lot 107		
Location 2 :	6 metres North , 5 metres East	4 metres North , 8 metres East	1 metres North , 7 metres East 6 metres North , 5 metres East	6 metres North , 1 metres East	12 metres North , 13 metres East	1 metres North , 5 metres East		
Location 3 :	From S/W CNR	From S/W CNR	From S/W CNR	From S/W CNR	From S/W CNR	From S/W CNR		
Location 4 :	R.L 50.90	R.L 51.2	R.L 51.0	R.L 50.83	R.L 50.95	R.L 51.6		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	-	-	-	-	-	-		
Oversize Dry :	-	-	-	-	-	-		
Oversize Density - Dry (t/m ³) :	-	-	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/095044	S/095045	S/095046	S/095047	S/095048	S/095049		
MDR Test Date :	23/02/2021	23/02/2021	23/02/2021	23/02/2021	23/02/2021	23/02/2021		
Soil Description :	Clay - Brown	Clay - Brown	Clay - Brown	Clay - Brown	Clay - Brown	Clay - Brown		
MDR Test Results								
MDD (t/m ³) :	1.57	1.57	1.55	1.53	1.67	1.67		
OMC :	29.5%	26.5%	26.0%	25.5%	19.5%	14.5%		
ADJ MDD (t/m ³) :	-	-	-	-	-	-		
ADJ OMC :	-	-	-	-	-	-		
Moisture Test Results								
Field Moisture Content :	28.0%	26.0%	25.5%	23.5%	20.5%	16.5%		
Moisture Specification :	-	-	-	-	-	-		
Variation from OMC :	1.0% Dry of OMC	0.5% Dry of OMC	0.0% Dry of OMC	2.0% Dry of OMC	1.0% Wet of OMC	2.0% Wet of OMC		
Moisture Ratio :	96.0%	98.0%	99.0%	92.0%	105.0%	113.0%		
Density Test Results								
Field Dry Density (t/m ³) :	1.56	1.62	1.62	1.61	1.69	1.70		
Density Specification :	95%	95%	95%	95%	95%	95%		
Dry Density Ratio :	99.5%	103.0%	104.5%	106.0%	101.0%	102.0%		
Characteristic Value (Q020) :	CV(min) = 100.7% CV(max) = 104.6% Mean = 102.7% Std. Dev. = 2.4% n = 6 k = 0.828							
Degree of Saturation / Required :	-	-	-	-	-	-		
Remarks :	-							
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				<p>APPROVED SIGNATORY</p>  Kenney Pham - Signatory				



Dry Density / Moisture Ratio Report

Client :	Shadforth	Report Number :	SR/PTP/06302 - 22/2
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD	Report Date :	7/10/2021
Project Name :	Maison Rochedale	Test Request :	-
Project Number :	PTP/06302	Page 1 of 1	
Location :	Rochedale		
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1		
Sample Number :	S/093630		
Date Tested :	29/01/2021		
Material Source :	Onsite		
For use as :	General Fill		
Test / Layer Depths :	150 / 150		
Sampling Method :	AS1289.1.2.1 - cl6.4b		
Time :	09:14		
Lot Number :	'		
Location 1 :	Car park and Office		
Location 2 :	E : 511392		
Location 3 :	N : 6948575		
Location 4 :	Subgrade Level		
Test Fraction (mm) :	< 19mm		
Oversize Wet :	-		
Oversize Dry :	-		
Oversize Density - Dry (t/m ³) :	-		
Assigned MDR (Yes/No) :	No		
MDR Sample Number :	S/093630		
MDR Test Date :	11/02/2021		
Soil Description :	Sandy Clay		
MDR Test Results			
MDD (t/m ³) :	1.99		
OMC :	11.0%		
ADJ MDD (t/m ³) :	-		
ADJ OMC :	-		
Moisture Test Results			
Field Moisture Content :	8.5%		
Moisture Specification :	-		
Variation from OMC :	2.0% Dry of OMC		
Moisture Ratio :	80.0%		
Density Test Results			
Field Dry Density (t/m ³) :	1.95		
Density Specification :	95%		
Dry Density Ratio :	98.5%		
Characteristic Value (Q020) :		Mean = 98.5%	n = 1 k = 0.828
Degree of Saturation / Required :	-		
Remarks :	-		
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>		<p>APPROVED SIGNATORY</p>  Kenney Pham - Signatory	



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 23/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/100577	S/100578	S/100579			
Date Tested :	29/03/2021	29/03/2021	29/03/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General fill	General fill	General fill			
Test / Layer Depths :	150 / 150	150 / 150	150 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	10:41	10:42	10:43			
Lot Number :	-	-	-			
Location 1 :	E - 511174	E - 511173	E - 511179			
Location 2 :	N - 6948371	N - 6948371	N - 6948344			
Location 3 :	RL - 48.31	RL - 48.39	RL - 48.63			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	-	-	-			
Oversize Dry :	-	-	-			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/100577	S/100578	S/100579			
MDR Test Date :	31/03/2021	31/03/2021	31/03/2021			
Soil Description :	Silty Clay	Silty Clay	Silty Clay			
<i>MDR Test Results</i>						
MDD (t/m ³) :	1.57	1.57	1.57			
OMC :	18.0%	17.5%	20.0%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
<i>Moisture Test Results :</i>						
Field Moisture Content :	18.5%	18.5%	18.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	0.0% Wet of OMC	1.0% Wet of OMC	2.0% Dry of OMC			
Moisture Ratio :	101.0%	105.5%	90.0%			
<i>Density Test Results</i>						
Field Dry Density (t/m ³) :	1.57	1.57	1.61			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	100.0%	99.5%	102.5%			
Degree of Saturation / Required :	-	-	-			
Remarks :	-					
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>	APPROVED SIGNATORY  Kenney Pham - Signatory					



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 24/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	LISV	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/102739	S/102796	S/102797			
Date Tested :	14/04/2021	14/04/2021	14/04/2021			
Material Source :	On Site	On Site	On Site			
For use as :	Embankment Fill	Embankment Fill	Embankment Fill			
Test / Layer Depths :	150 / 200	150 / 200	150 / 200			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	11:16	11:20	11:36			
Lot Number :	South West STG 3	South West STG 3	South West STG 3			
Location 1 :	E:511190	E:511178	E:511177			
Location 2 :	N:6948231	N:6948280	N:6948355			
Location 3 :	R.L 46.2	R.L 46.6	R.L 46.0			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	0%	0%	0%			
Oversize Dry :	0%	0%	0%			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/102739	S/102796	S/102797			
MDR Test Date :	20/04/2021	20/04/2021	20/04/2021			
Soil Description :	Sandy Clay	Sandy Clay	Sandy Clay			
MDR Test Results						
MDD (t/m ³) :	1.75	1.74	1.76			
OMC :	17.0%	18.0%	16.5%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
Moisture Test Results						
Field Moisture Content :	16.5%	16.5%	17.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	0.5% Dry of OMC	1.5% Dry of OMC	0.0% Wet of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	96.5%	93.0%	100.5%			
Density Test Results						
Field Dry Density (t/m ³) :	1.73	1.76	1.75			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	98.5%	100.5%	99.5%			
Degree of Saturation / Required :						
	-	-	-			
Remarks :						
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				<p>APPROVED SIGNATORY</p>  Kenney Pham - Signatory		



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 25/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/102900	S/102901	S/102902			
Date Tested :	15/04/2021	15/04/2021	15/04/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	125 / 150	125 / 150	125 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	09:54	10:02	10:11			
Lot Number :	MC1000	MC1000	MC1000			
Location 1 :	E - 511451	E - 511425	E - 511418			
Location 2 :	N - 6948506	N - 6948514	N - 6948544			
Location 3 :	RL - 58.17	RL - 57.59	RL - 57.22			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	0%	0%	0%			
Oversize Dry :	0%	0%	0%			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/102900	S/102901	S/102902			
MDR Test Date :	19/04/2021	19/04/2021	19/04/2021			
Soil Description :	Silty Sandy Clay	Silty Sandy Clay	Silty Sandy Clay			
MDR Test Results						
MDD (t/m ³) :	1.71	1.69	1.71			
OMC :	16.5%	20.5%	19.5%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
Moisture Test Results						
Field Moisture Content :	15.0%	19.0%	17.5%			
Moisture Specification :	-	-	-			
Variation from OMC :	1.5% Dry of OMC	1.5% Dry of OMC	2.0% Dry of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	91.0%	92.0%	89.0%			
Density Test Results						
Field Dry Density (t/m ³) :	1.68	1.66	1.74			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	98.5%	98.0%	102.0%			
Degree of Saturation / Required :	-	-	-			
Remarks :						
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				APPROVED SIGNATORY  Kenney Pham - Signatory		



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 26/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/103651	S/103652	S/103653			
Date Tested :	20/04/2021	20/04/2021	20/04/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	125 / 150	125 / 150	125 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	10:35	11:10	10:40			
Lot Number :	-	-	-			
Location 1 :	E - 511408	E - 511165	E - 511170			
Location 2 :	N - 6948483	N - 6948336	N - 6948290			
Location 3 :	RL - 57.99	RL - 47.06	RL - 46.63			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	0%	0%	6%			
Oversize Dry :	0%	0%	7%			
Oversize Density - Dry (t/m ³) :	-	-	2.07			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/103651	S/103652	S/103653			
MDR Test Date :	28/04/2021	28/04/2021	28/04/2021			
Soil Description :	Silty Sandy Clay	Silty Sandy Clay	Silty Sandy Clay			
MDR Test Results						
MDD (t/m ³) :	1.87	1.68	1.58			
OMC :	13.0%	20.0%	20.0%			
ADJ MDD (t/m ³) :	-	-	1.61			
ADJ OMC :	-	-	18.5%			
Moisture Test Results						
Field Moisture Content :	11.0%	18.0%	17.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	1.5% Dry of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	84.5%	90.0%	91.0%			
Density Test Results						
Field Dry Density (t/m ³) :	1.92	1.68	1.59			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	102.5%	100.5%	98.5%			
Degree of Saturation / Required :	-	-	-			
Remarks :						
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				APPROVED SIGNATORY  Kenney Pham - Signatory		



Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 27/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/103784	S/103788	S/103789			
Date Tested :	21/04/2021	21/04/2021	21/04/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General fill	General fill	General fill			
Test / Layer Depths :	125 / 150	125 / 150	125 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	09:22	09:29	09:37			
Lot Number :	-	-	-			
Location 1 :	E - 511393	E - 511383	E - 511372			
Location 2 :	N - 6948470	N - 6948464	N - 6948465			
Location 3 :	RL - 53.93	RL - 53.46	RL - 52.93			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	0%	0%	0%			
Oversize Dry :	0%	0%	0%			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/103784	S/103788	S/103789			
MDR Test Date :	27/04/2021	27/04/2021	27/04/2021			
Soil Description :	Silty Sandy Clay	Silty Sandy Clay	Silty Sandy Clay			
MDR Test Results						
MDD (t/m ³) :	1.48	1.48	1.48			
OMC :	29.5%	29.0%	28.5%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
Moisture Test Results						
Field Moisture Content :	28.0%	29.0%	27.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	1.5% Dry of OMC	0.0% Wet of OMC	1.5% Dry of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	94.5%	100.5%	94.5%			
Density Test Results						
Field Dry Density (t/m ³) :	1.51	1.47	1.48			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	101.5%	99.0%	100.0%			
Degree of Saturation / Required :	-	-	-			
Remarks :						
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				APPROVED SIGNATORY  Kenney Pham - Signatory		

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforth			Report Number :	SR/PTP/06302 - 66/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1					
Sample Number :	S/108024	S/108025	S/108026			
Date Tested :	25/05/2021	25/05/2021	25/05/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	Allotment Fill	Allotment Fill	Allotment Fill			
Test / Layer Depths :	275 / 300	275 / 300	275 / 300			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	13:13	13:13	13:14			
Lot Number :	Lot 1	Lot 1	Lot 13/32			
Location 1 :	E - 511252	E - 511257	E - 511453			
Location 2 :	N - 6948624	N - 6948636	N - 6948476			
Location 3 :	Finish Level	Finish Level	Finish Level			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	0%	0%	0%			
Oversize Dry :	0%	0%	0%			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/108024	S/108025	S/108026			
MDR Test Date :	26/05/2021	26/05/2021	26/05/2021			
Soil Description :	Silty Sandy Clay	Silty Sandy Clay	Silty Sandy Clay			
MDR Test Results						
PCWD (t/m ³) :	2.05	2.00	1.97			
Moisture Variation :	1.0%	1.5%	1.0%			
ADJ PCWD (t/m ³) :	-	-	-			
ADJ Moisture Variation :	-	-	-			
Moisture Test Results						
Field Moisture Content :	12.0%	13.0%	9.5%			
Moisture Specification :	-	-	-			
Variation from OMC :	1.0% Dry of OMC	1.5% Dry of OMC	1.0% Dry of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	N/A	N/A	N/A			
Density Test Results						
Field Wet Density (t/m ³) :	2.04	2.02	1.94			
Density Specification :	95%	95%	95%			
Wet Density Ratio :	99.5%	101.0%	99.0%			
Degree of Saturation / Required :	-	-	-			
Remarks :						
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				APPROVED SIGNATORY  Kenney Pham - Signatory		

Dry Density / Moisture Ratio Report

Client :	Shadforth			Report Number :	SR/PTP/06302 - 67/2	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	7/10/2021	
Project Name :	Maison Stage 1, Rochedale			Test Request :	-	
Project Number :	PTP/06302			Page 1 of 1		
Location :	Rochedale					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.1.1					
Sample Number :	S/106897	S/106898	S/106899			
Date Tested :	17/05/2021	17/05/2021	17/05/2021			
Material Source :	Onsite	Onsite	Onsite			
For use as :	Allotment fill	Allotment fill	Allotment fill			
Test / Layer Depths :	150 / 175	150 / 175	150 / 175			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	13:46	13:47	13:47			
Lot Number :	1	2	3			
Location 1 :	E - 511248	E - 511251	E - 511263			
Location 2 :	N - 6948601	N - 6948603	N - 6948624			
Location 3 :	RL - 53.48	RL - 53.42	RL - 53.50			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm			
Oversize Wet :	0%	0%	0%			
Oversize Dry :	0%	0%	0%			
Oversize Density - Dry (t/m ³) :	-	-	-			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/106897	S/106898	S/106899			
MDR Test Date :	24/05/2021	24/05/2021	24/05/2021			
Soil Description :	Silty Sandy Clay	Silty Sandy Clay	Silty Sandy Clay			
MDR Test Results						
MDD (t/m ³) :	1.53	1.64	1.56			
OMC :	25.5%	22.5%	24.5%			
ADJ MDD (t/m ³) :	-	-	-			
ADJ OMC :	-	-	-			
Moisture Test Results						
Field Moisture Content :	24.0%	22.5%	24.0%			
Moisture Specification :	-	-	-			
Variation from OMC :	1.5% Dry of OMC	0.5% Wet of OMC	0.5% Dry of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	93.0%	101.5%	97.0%			
Density Test Results						
Field Dry Density (t/m ³) :	1.57	1.61	1.56			
Density Specification :	95%	95%	95%			
Dry Density Ratio :	102.5%	98.0%	99.5%			
Degree of Saturation / Required :	-	-	-			
Remarks :						
 <p>Note: The results contained in this report relate only to the item/s that were tested/sampled Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast Base Laboratory Address - 8/36 Blanck Street, ORMEAU, QLD 4208</p>				APPROVED SIGNATORY  Kenney Pham - Signatory		

PROTEST
ENGINEERING

GEOTECHNICAL // TESTING SERVICES // STRUCTURAL

Attachment 4

Referenced Drawings

DATE PLOTTED: 4 December 2020 12:01 PM BY: BEN FALKENHAGEN

EARTHWORKS

- EXISTING SURFACE HEIGHTS ARE INTERPOLATED FROM A TRIANGULATED DIGITAL TERRAIN MODEL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE EXISTING SURFACE LEVELS AND CORRESPONDING CUT / FILL HEIGHTS TO ACHIEVE THE DESIGN SURFACE LEVEL ON SITE;
- THE CONTRACTOR SHALL INFORM BRISBANE CITY COUNCIL (B.C.C.), ALL RELEVANT SERVICE PROVIDERS AND THE SUPERINTENDENT OF THE START DATE PRIOR TO COMMENCEMENT OF WORKS;
- NOT WITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION. SIMILARLY, FINISHED SURFACE LEVELS FOR ALLOTMENTS MAY BE ADJUSTED BY A WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION WITH PRIOR APPROVAL FROM BRISBANE CITY COUNCIL (B.C.C.);
- STRIP ALL TOPSOIL TO EXTENT OF EARTHWORKS TO ENSURE COMPLETE REMOVAL OF ORGANIC MATTER PRIOR TO EARTHWORKS COMMENCING. MATERIAL TO BE STOCKPILED FOR REUSE AS DIRECTED BY THE SUPERINTENDENT. ALL EXCESS TOPSOIL TO BE REMOVED FROM SITE ON COMPLETION OF THE WORKS;
- EARTHWORKS SPOIL IS TO BE STOCKPILED AS DIRECTED BY THE SUPERINTENDENT. TOPSOIL IS TO BE RE-SPREAD FROM STOCKPILE AT MIN. 150mm IN ACCORDANCE WITH AS3798;
- SILT FENCING IS TO BE PLACED ON THE DOWNSTREAM SIDE OF ALL STOCKPILE SITES AND AN ADEQUATE CUTOFF DRAINS ARE TO BE PLACED ON THE UPSTREAM SIDE OF ALL STOCKPILE SITES;
- BATTER SLOPES TO BE 1 IN 4 MAX UNLESS SPECIFIED OTHERWISE;
- SETOUT OF EARTHWORKS IS IN ACCORDANCE WITH WITH TYPICAL PAD SETOUT DETAIL;
- ALL EARTHWORKS TESTING TO BE SUPERVISED TO LEVEL 1. FREQUENCY OF FIELD DENSITY TESTING TO BE TYPE 1 IN ACCORDANCE WITH TABLE 8.1 OF AS 3798;
- ALL FILL AREAS SHALL BE COMPACTED TO MIN 95% STD U.N.O.;
- ALL FILL UNDER ROADS SHALL BE COMPACTED TO 100% STANDARD COMPACTION;
- VOLUMES SHOWN ARE SOLID FIGURES ONLY, NO ALLOWANCES HAVE BEEN MADE FOR COMPACTION, BULKING, UNSUITABLE MATERIAL, TRENCH SPOIL OR ROAD PAVEMENT DEPTHS.

RETAINING WALLS

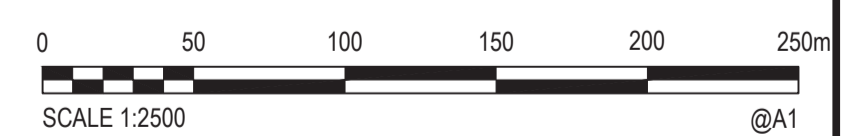
- ALL WALLS TO HAVE SUITABLE DRAINAGE DESIGN (IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS) INCLUDED WITH SLOTTED PIPE CONNECTIONS TO THE STORMWATER SYSTEM. IF NO STORMWATER PIT IS ADJACENT TO THE OUTLET, CONNECT TO KERB ADAPTER;
- END OF WALL LOCATIONS HAVE BEEN SHOWN DIAGRAMMATICALLY, HOWEVER FINAL LENGTH TO BE DETERMINED BY THE SUPERINTENDENT WHERE THE HEIGHT DIFFERENCE FROM TOP & BOTTOM OF BATTER EXCEEDS 400mm;
- CONTRACTOR TO ENSURE ALL BATTERS ARE TO BE 1:2 MAX SLOPE (1:1 ACCEPTABLE FOR WITHIN ROCK);
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION CERTIFICATION OF RETAINING WALLS BY AN APPROPRIATELY QUALIFIED & REGISTERED PROFESSIONAL ENGINEER OF QUEENSLAND (RPEQ), INCLUDING PROVISION OF CERTIFIED FORMS 15 & 16. DESIGN CERTIFICATION TO BE PROVIDED TO THE SUPERINTENDENT A MINIMUM OF TWO WEEKS PRIOR TO COMMENCEMENT OF CONSTRUCTION. WALL CONSTRUCTION SHALL NOT COMMENCE UNTIL INSTRUCTIONS TO PROCEED ARE RECEIVED FROM THE SUPERINTENDENT;
- ALL RETAINING WALLS TO BE DESIGNED AND CONSTRUCTED AS 'VERTICAL' WALLS (BY 'ADBRI MASONRY' MANUFACTURERS) OR EQUIVALENT WHERE ALTERNATIVE PRODUCTS ARE PROPOSED, DETAILS ARE TO BE SUBMITTED TO SUPERINTENDENT PRIOR TO ORDERING;
- FINAL WALL OFFSET TO SUIT WALL HEIGHT AND DEPTH OF NO FINES INFILL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND TO BE CONFIRMED BY SUPERINTENDENT PRIOR TO CONSTRUCTION;
- WHERE SERVICES CROSS UNDER WALLS WITH STRIP FOOTING, PROVIDE L11TM400 TRENCH MESH, CENTRAL IN 600Wx150D FOOTING. EXTEND FOOTING TRENCH MESH MIN 600mm EACH SIDE OF SERVICE CROSSING TRENCH. WHEN SERVICES CROSS UNDER SLEEPER TYPE WALLS WITH BORED PIERS THE CONTRACTOR IS TO ENSURE NO HORIZONTAL CLASH WITH THE SERVICE TRENCH AND THE PIER FOOTING;
- CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF SAFETY FENCING COMPLIANT WITH CURRENT SPECIFICATION AT THE TOP OF ALL BATTERS AND WALLS AND TO REMAIN IN PLACE AFTER CONSTRUCTION UNTIL A PERMANENT FENCE IS CONSTRUCTED BY THE LOT OWNER.



UNDERWOOD ROAD
PLAN
SCALE 1:2500

HOLD POINT:
FORM 15 AND CONTRACTORS RPEQ. SIGNED
RETAINING WALL DESIGNS TO BE PROVIDED TO
SUPERINTENDENT BEFORE CONSTRUCTION

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Rev.	Date	Description	Des.	Verif.	Appd.
A	4/12/2020	ISSUED FOR CONSTRUCTION	CK	JO'S	JO'S
4	20.07.2020	STAGE 3 EXTENTS REMOVED	BH	JO'S	JO'S
3	13.05.2020	OPERATIONAL WORKS APPROVAL ISSUE	CK	BW	JO
2	17.04.2020	UPDATED LAYOUT FOR APPROVAL	CK	BW	JO
1	18.12.2018	ISSUE FOR APPROVAL	DPM	LG	RB



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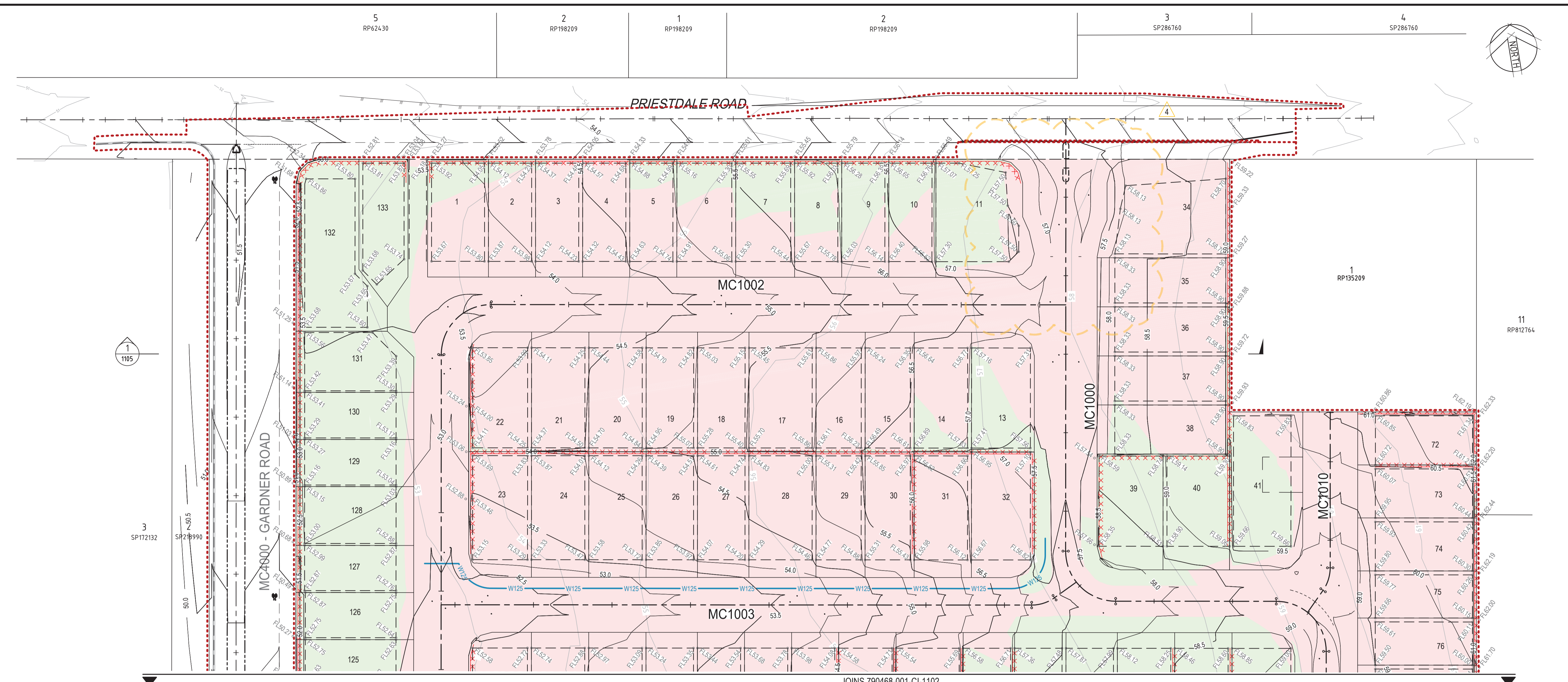


Drawn	D.MCKENZIE	Date	18.12.2018
Checked	C.KEMPE	Date	27.03.2020
Designed	L.KUSTERS	Date	18.12.2018
Verified	L.GARSDIE	Date	18.12.2018
Approved	J.O'SULLIVAN	Date	4/12/2020

Client	R&F GOLDEN PROPERTY PTY LTD
Project	309 PRIESTDALE ROAD, ROCHEDALE
Title	PRIESTDALE ROAD STAGE 1 CIVIL WORKS
Title	EARTHWORKS
OVERALL LOT LAYOUT AND GENERAL NOTES	

Status	FOR CONSTRUCTION			
Datum	AHD	GRID	Scale	Size
			1:2500	A1
Drawing Number	790468-001-CI-1100			Revision
				A

DATE PLOTTED: 4 December 2020 12:01 PM BY: BEN FALKENHAGEN
 XREFS: X:790468-001-LOT BODYS; X:790468-001-CONTS DESIGN; X:790468-001-SURVEY; X:790468-001-EWKS; X:790468-001-EWKS-CUT; X:790468-001-EWKS-FILL
 CAD File: L:\510-63-2020-1-STAGE 1-APPEAL RESPONSE\Drawings\790468-001-CI-1101-1103.dwg



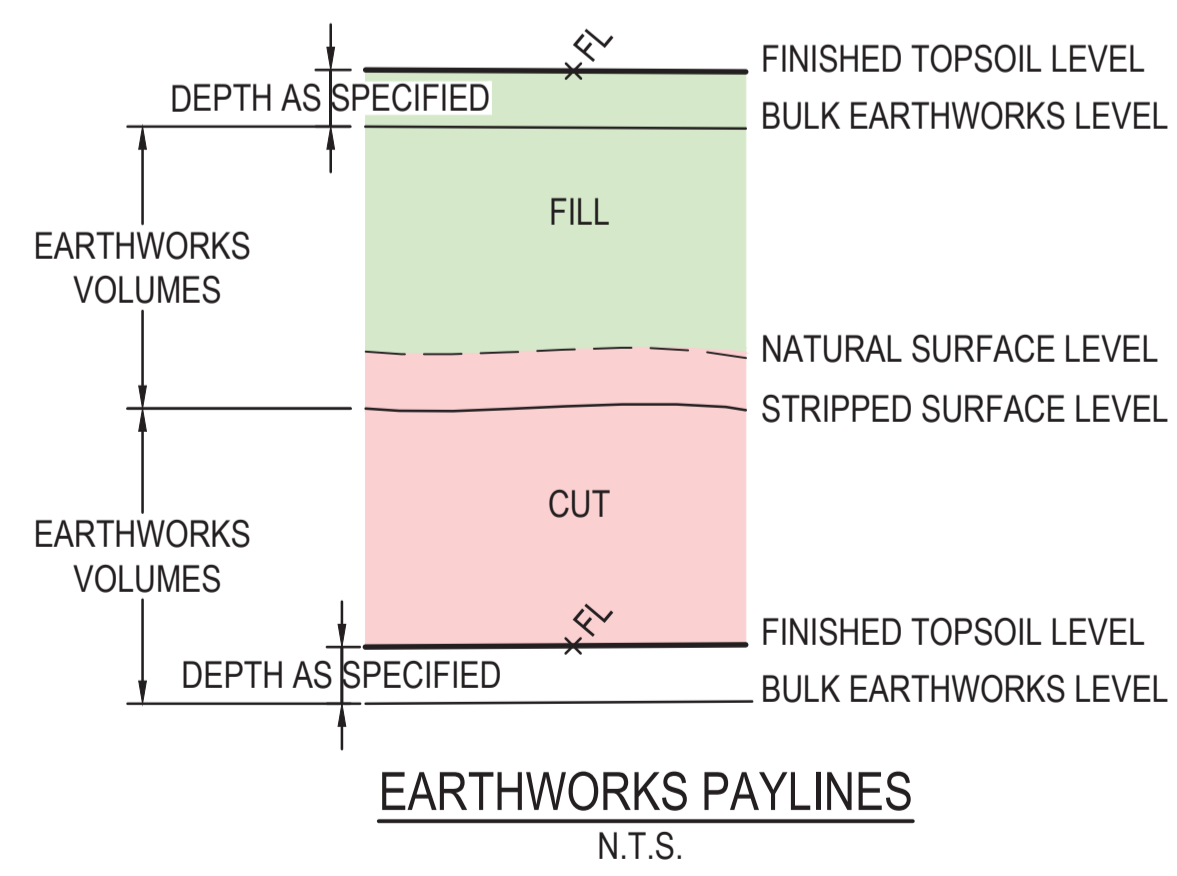
EARTHWORKS DESIGN VOLUMES	
STAGE 1 INTERNAL	
STRIP AREA: (Ha)	9.483ha
STRIP DEPTH: (mm)	200
STRIP VOLUME: (m ³)	18,966
RESPREAD DEPTH: (mm)	150 VERGES & UP TO 300 FOR LOTS
TOTAL CUT (m ³) STRIP TO BOX	85,628
TOTAL FILL: (m ³)	16,387
EXCESS MATERIAL (m ³)	69,241

- NOTES:**
1. NO COMPACTION (BULKING FACTOR) ON FILL
 2. EXCLUDES ALL TRENCH EXCAVATION
 3. EXCLUDES ALL SOFT SPOT/BAD GROUND REMOVAL
 4. EXCLUDES ALL TEMPORARY AND ADDITIONAL EROSION AND SEDIMENT CONTROL BUNDS, SWALES & BASINS
 5. EXCLUDES BIO FILTER MEDIA & ROCK ALLOWANCES
 6. EXCLUDES RETAINING WALL AND BACKFILL MEDIA ALLOWANCES
 7. CONTRACTOR TO IMPORT CLEAN TOPSOIL FOR VERGES, PARKS AND TREE PITS
 8. THE STRIP DEPTH IS A NOMINAL AMOUNT ONLY AND IS TO BE CONFIRMED ON-SITE
 9. STOCKPILE AND EXPORT LOCATIONS AS DIRECTED

PLAN
SCALE 1:500

LEGEND	
	STAGE BOUNDARY
	EARTHWORKS - CUT
	EARTHWORKS - FILL
	PROPOSED RETAINING WALL (REFER TO 790468-001-ST-1700-1701 FOR WALL TYPE)
	EARTHWORKS - TOP AND BOTTOM OF BATTER
	SPOT LEVEL
	BUILDING PAD - PROPOSED
	CONTOUR - PROPOSED (MAJOR 0.5m)
	CONTOUR - PROPOSED (MINOR 0.25m)
	CONTOUR - EXISTING (0.25m)

- NOTES:**
1. REFER DWG 790468-001-CI-1100 FOR EARTHWORKS AND LOT BENCHING NOTES.
 2. REFER DWG 790468-001-CI-1101 FOR EARTHWORKS AND LOT BENCHING LEGEND.



Rev.	Date	Description	Des.	Verif.	Appd.
1	18.12.2018	ISSUE FOR APPROVAL	DPM	LG	RB
2	17.04.2020	UPDATED LAYOUT FOR APPROVAL	CK	BW	JO
3	13.05.2020	OPERATIONAL WORKS APPROVAL ISSUE	CK	BW	JO
4	20.07.2020	INTERSECTION, LANE LEVELS, SECTIONS ADDED	BH	JO'S	JO'S
5	4/08/2020	BULK EARTHWORKS VOLUMES AMENDED	BJF	JO'S	JO'S
A	4/12/2020	ISSUED FOR CONSTRUCTION	CK	JO'S	JO'S

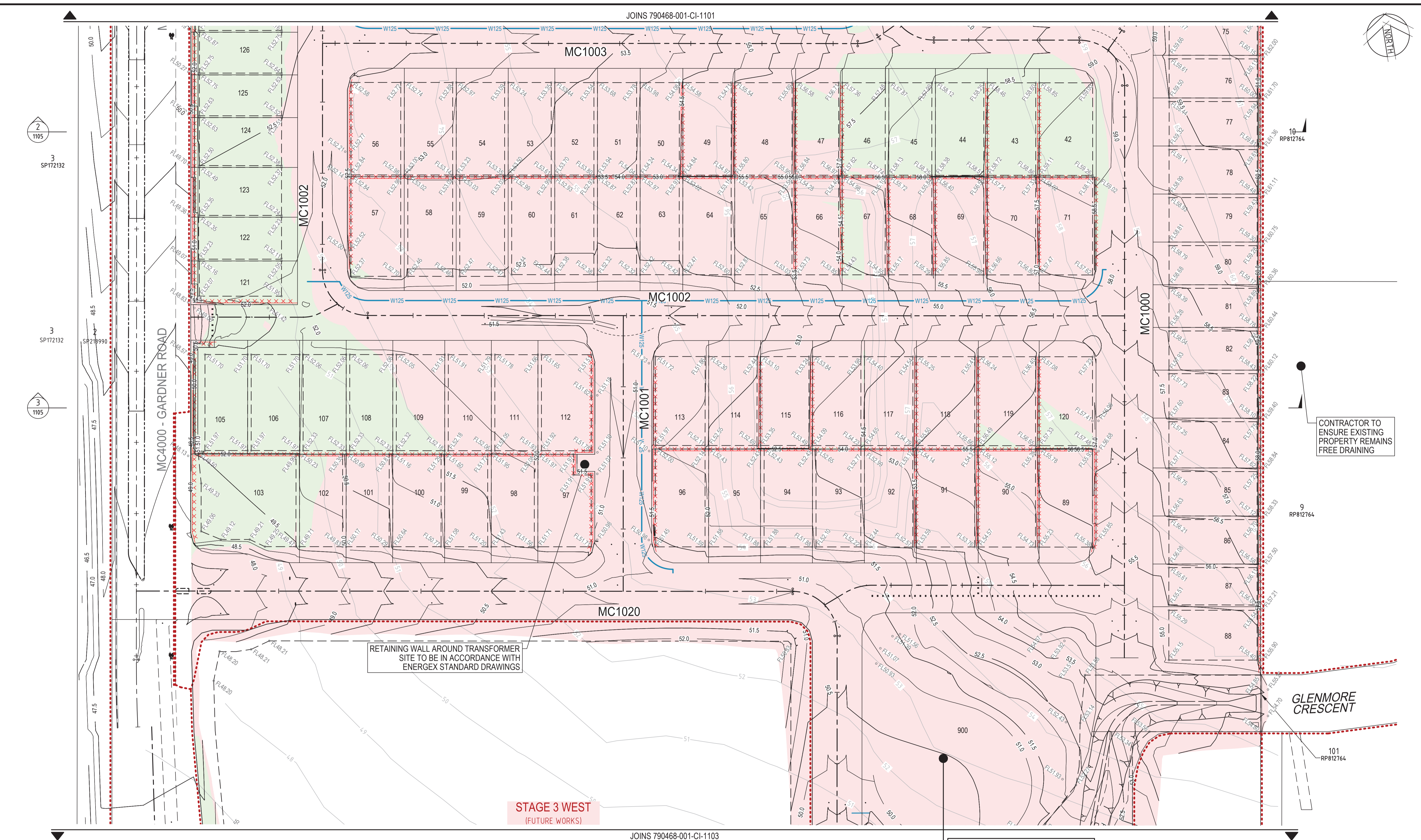


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 Springfield Central QLD 4300
 Tel: 07 3381 0111 Fax: 07 3470 1241
 Web: www.cardno.com.au

Drawn D.MCKENZIE	Date 18.12.2018	Client R&F GOLDEN PROPERTY PTY LTD
Checked C.KEMPE	Date 27.03.2020	Project 309 PRIESTDALE ROAD, ROCHEDALE
Designed L.KUSTERS	Date 18.12.2018	PRIESTDALE ROAD STAGE 1
Verified L.GARSDIE	Date 18.12.2018	CIVIL WORKS
Approved J.O'SULLIVAN	Date 4/12/2020	EARTHWORKS
Title EARTHWORKS AND LOT BENCHING PLAN - SHEET 1		Status FOR CONSTRUCTION
Drawing Number 790468-001-CI-1101		Revision A

XREFS: X:790468-001-LOT BODYS; X:790468-001-CONTS DESIGN; X:790468-001-SURVEY; X:790468-001-DESIGN; X:790468-001-EWKS; X:790468-001-EWKS-CUT-FILL
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 DATE PLOTTED: 4 December 2020 12:02 PM BY: BEN FALKENHAGEN



NOTES:

- REFER DWG 790468-001-CI-1100 FOR EARTHWORKS AND LOT BENCHING NOTES;
- REFER DWG 790468-001-CI-1101 FOR EARTHWORKS AND LOT BENCHING LEGEND.

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PLAN
SCALE 1:500

NOTE:
GRADING AND DESIGNS THROUGH THE PARK ARE SUBJECT TO A SEPARATE LANDSCAPING APPROVAL BY OTHERS.



Rev.	Date	Description	Des.	Verif.	Appd.
1	18.12.2018	ISSUE FOR APPROVAL	DPM	LG	RB
2	17.04.2020	UPDATED LAYOUT FOR APPROVAL	CK	BW	JO
3	13.05.2020	OPERATIONAL WORKS APPROVAL ISSUE	CK	BW	JO
4	20.07.2020	STAGE 3 EXTENTS REMOVED, SECTIONS ADDED	BH	JO'S	JO'S
5	4/08/2020	BULK EARTHWORKS VOLUMES AMENDED	BIF	JO'S	JO'S
A	4/12/2020	ISSUED FOR CONSTRUCTION	CK	JO'S	JO'S



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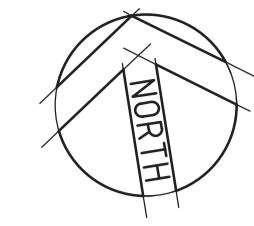
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Checked	C.KEMPE	Date	27.03.2020
Designed	L.KUSTERS	Date	18.12.2018
Verified	L.GARSDIE	Date	18.12.2018
Approved	J.O'SULLIVAN	Date	4/12/2020

Client **R&F GOLDEN PROPERTY PTY LTD**
Project **309 PRIESTDALE ROAD, ROCHEDALE**
PRIESTDALE ROAD STAGE 1
CIVIL WORKS
Title **EARTHWORKS**
RPEQ: 19706

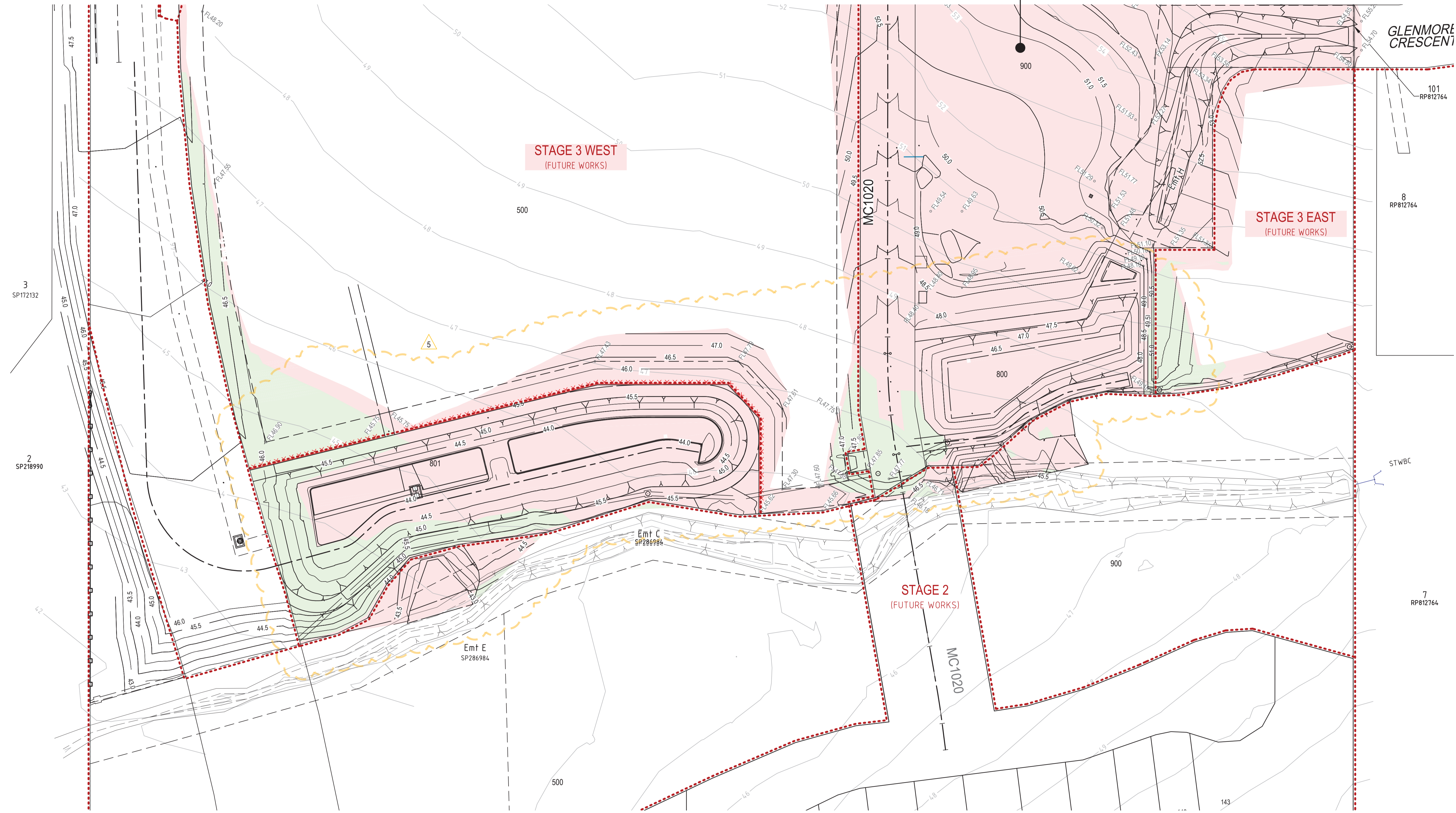
FOR CONSTRUCTION			
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Grid		Size	A1
Drawing Number	790468-001-CI-1102		Revision
			A

DATE PLOTTED: 4 December 2020 12:02 PM BY: BEN FALKENHAGEN
 XREFS: X:790468-001-LOT BENCHING; X:790468-001-CONTS DESIGN; X:790468-001-CONTS SURV; X:790468-001-EWKS-CUT-FILL
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JOINS 790468-001-CI-1101

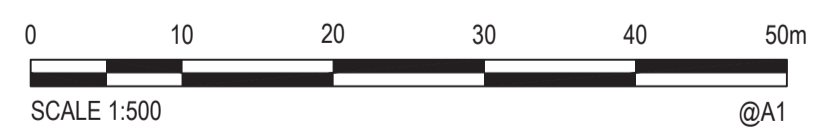
NOTE:
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NOTES:
 1. REFER DWG 790468-001-CI-1100 FOR EARTHWORKS AND LOT BENCHING NOTES.
 2. REFER DWG 790468-001-CI-1101 FOR EARTHWORKS AND LOT BENCHING LEGEND.

PLAN
 SCALE 1:500

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Rev.	Date	Description	Des.	Verif.	Appd.
A	4/12/2020	ISSUED FOR CONSTRUCTION	CK	JO'S	JO'S
5	4/08/2020	BULK EARTHWORKS VOLUMES AMENDED	BJF	JO'S	JO'S
4	20.07.2020	STAGE 3 EXTENTS REMOVED	BH	JO'S	JO'S
3	13.05.2020	OPERATIONAL WORKS APPROVAL ISSUE	CK	BW	JO
2	17.04.2020	UPDATED LAYOUT FOR APPROVAL	CK	BW	JO
1	18.12.2018	ISSUE FOR APPROVAL	DPM	LG	RB



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Checked	C.KEMPE	Date	27.03.2020
Designed	L.KUSTERS	Date	18.12.2018
Verified	L.GARSDIE	Date	18.12.2018
Approved	J.O'SULLIVAN	Date	4/12/2020

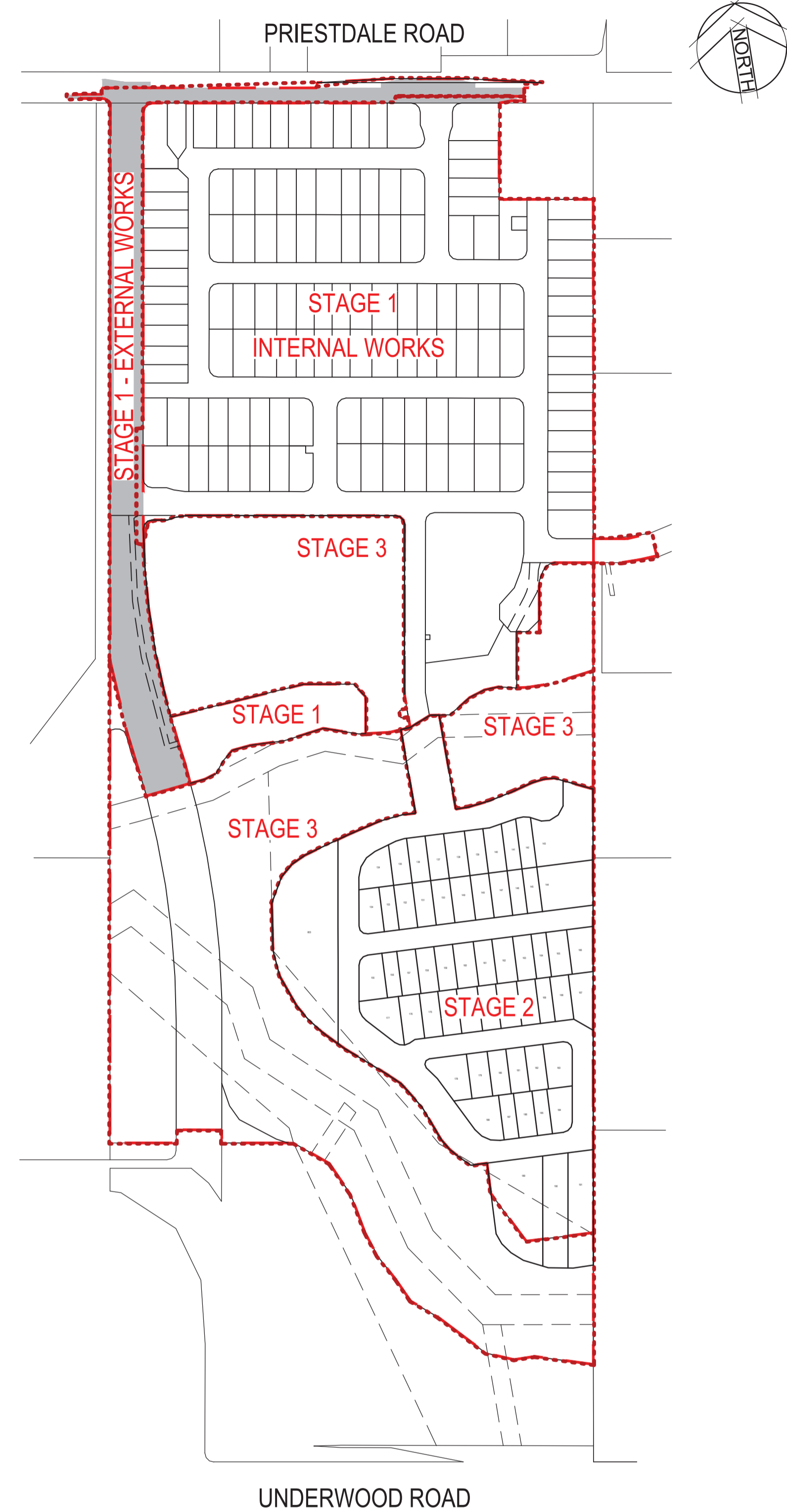
Client	R&F GOLDEN PROPERTY PTY LTD
Project	309 PRIESTDALE ROAD, ROCHEDALE
	PRIESTDALE ROAD STAGE 1
	CIVIL WORKS
Title	EARTHWORKS
	RPEQ. 19706
	EARTHWORKS AND LOT BENCHING PLAN - SHEET 3

Status				FOR CONSTRUCTION	
Datum	AHD	Scale	1:500	Size	A1
Drawing Number	790468-001-CI-1103			Revision	A

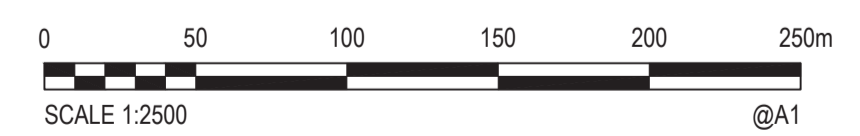
DATE PLOTTED: 26 February 2021 11:58 AM BY: CLINTON VENABLES
 XREFS: X:790468-001 LOT BDCS: GRP-A1-HL
 CAD File: L:\5103-62001 - STAGE 1 APPEAL RESPONSE\Drawings\790468-100-CI-1100.dwg

EARTHWORKS

1. EXISTING SURFACE HEIGHTS ARE INTERPOLATED FROM A TRIANGULATED DIGITAL TERRAIN MODEL. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM THE EXISTING SURFACE LEVELS AND CORRESPONDING CUT / FILL HEIGHTS TO ACHIEVE THE DESIGN SURFACE LEVEL ON SITE;
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3. NOT WITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION. SIMILARLY, FINISHED SURFACE LEVELS FOR ALLOTMENTS MAY BE ADJUSTED BY A WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION WITH PRIOR APPROVAL FROM BRISBANE CITY COUNCIL (B.C.C.);
4. STRIP ALL TOPSOIL TO EXTENT OF EARTHWORKS TO ENSURE COMPLETE REMOVAL OF ORGANIC MATTER PRIOR TO EARTHWORKS COMMENCING. MATERIAL TO BE STOCKPILED FOR REUSE AS DIRECTED BY THE SUPERINTENDENT. ALL EXCESS TOPSOIL TO BE REMOVED FROM SITE ON COMPLETION OF THE WORKS;
5. EARTHWORKS SPOIL IS TO BE STOCKPILED AS DIRECTED BY THE SUPERINTENDENT. TOPSOIL IS TO BE RE-SPREAD FROM STOCKPILE AT MIN. 150mm IN ACCORDANCE WITH AS3798;
6. SILT FENCING IS TO BE PLACED ON THE DOWNSTREAM SIDE OF ALL STOCKPILE SITES AND AN ADEQUATE CUTOFF DRAINS ARE TO BE PLACED ON THE UPSTREAM SIDE OF ALL STOCKPILE SITES;
7. BATTER SLOPES TO BE 1 IN 4 MAX UNLESS SPECIFIED OTHERWISE;
8. SETOUT OF EARTHWORKS IS IN ACCORDANCE WITH WITH TYPICAL PAD SETOUT DETAIL;
9. ALL EARTHWORKS TESTING TO BE SUPERVISED TO LEVEL 1. FREQUENCY OF FIELD DENSITY TESTING TO BE TYPE 1 IN ACCORDANCE WITH TABLE 8.1 OF AS 3798;
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PLAN
SCALE 1:2500



RECEIVED
By Document Control at 10:02 am, Mar 05, 2021

Rev.	Date	Description	Des.	Verif.	Appd.
A	25.02.2021	ISSUED FOR CONSTRUCTION	BJF	JO'S	JO'S
3	13.05.2020	OPERATIONAL WORKS APPROVAL ISSUE	CK	BW	JO
2	17.04.2020	UPDATED LAYOUT FOR APPROVAL	CK	BW	JO
1	18.12.2018	ISSUE FOR APPROVAL	DPM	LG	RB

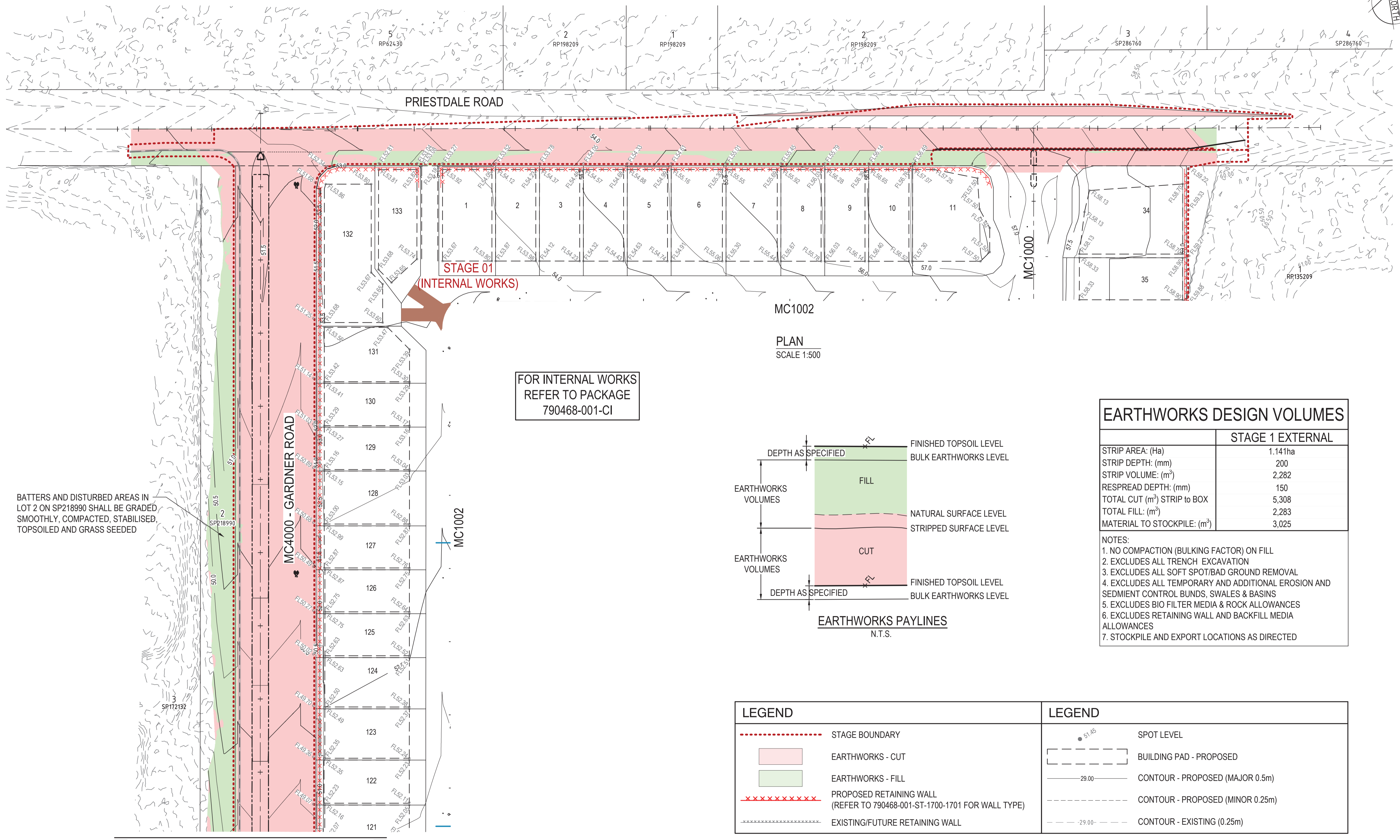
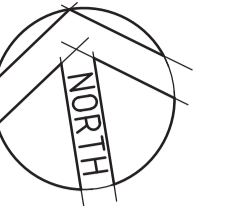


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Drawn D.MCKENZIE	Date 18.12.2018	Client R&F GOLDEN PROPERTY PTY LTD
Checked C.KEMPE	Date 27.03.2020	Project 309 PRIESTDALE ROAD, ROCHEDALE
Designed L.KUSTERS	Date 18.12.2018	Title PRIESTDALE ROAD STAGE 1 - EXTERNAL WORKS CIVIL WORKS
Verified L.GARSDIE	Date 18.12.2018	Title EARTHWORKS
Approved J.O'SULLIVAN	Date 13.05.2020	Overall Lot Layout and General Notes

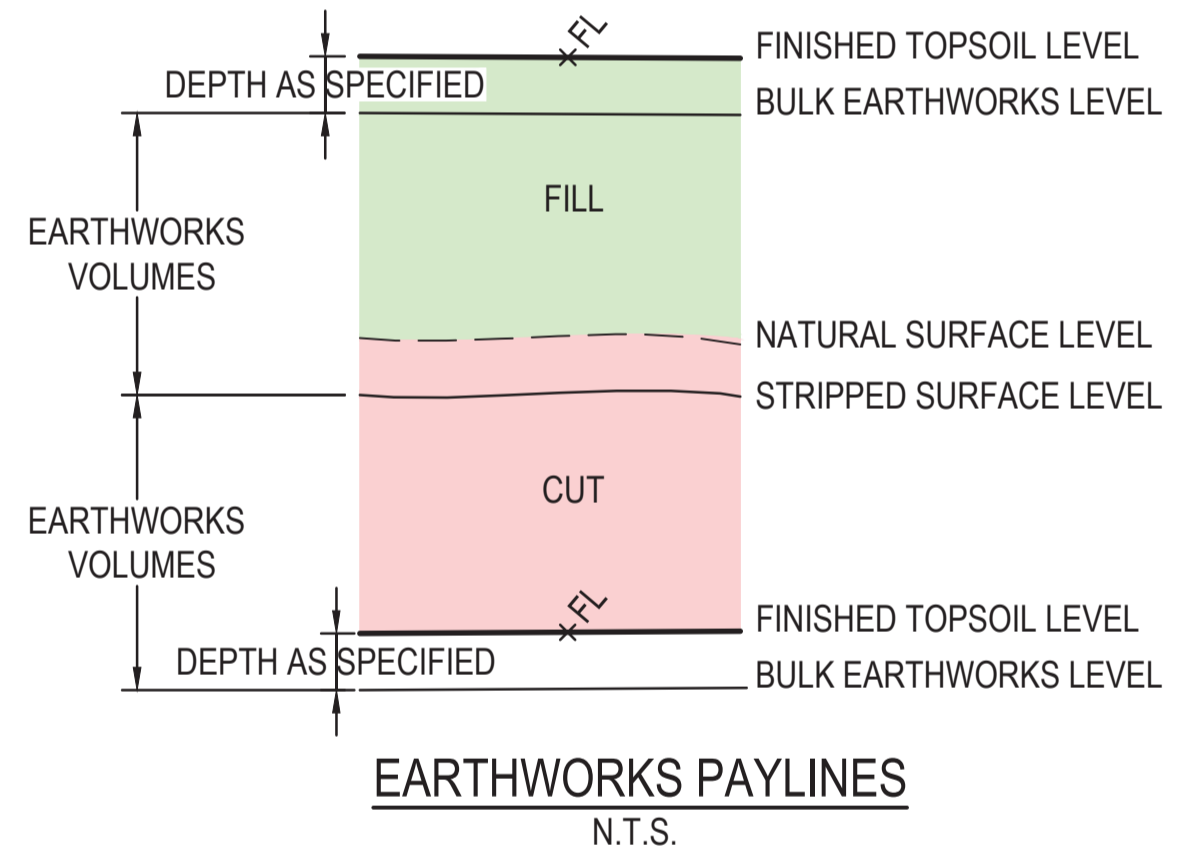
Status FOR CONSTRUCTION			
Datum AHD	GRID	Scale 1:2500	Size A1
Drawing Number 790468-100-CI-1100			Revision A



BATTERS AND DISTURBED AREAS IN LOT 2 ON SP218990 SHALL BE GRADED SMOOTHLY, COMPACTED, STABILISED, TOPSOILED AND GRASS SEED

FOR INTERNAL WORKS REFER TO PACKAGE 790468-001-CI

PLAN SCALE 1:500



EARTHWORKS DESIGN VOLUMES

	STAGE 1 EXTERNAL
STRIP AREA: (Ha)	1.141ha
STRIP DEPTH: (mm)	200
STRIP VOLUME: (m ³)	2,282
RESPREAD DEPTH: (mm)	150
TOTAL CUT (m ³) STRIP TO BOX	5,308
TOTAL FILL: (m ³)	2,283
MATERIAL TO STOCKPILE: (m ³)	3,025

- NOTES:
- NO COMPACTION (BULKING FACTOR) ON FILL
 - EXCLUDES ALL TRENCH EXCAVATION
 - EXCLUDES ALL SOFT SPOT/BAD GROUND REMOVAL
 - EXCLUDES ALL TEMPORARY AND ADDITIONAL EROSION AND SEDIMENT CONTROL BUNDS, SWALES & BASINS
 - EXCLUDES BIO FILTER MEDIA & ROCK ALLOWANCES
 - EXCLUDES RETAINING WALL AND BACKFILL MEDIA ALLOWANCES
 - STOCKPILE AND EXPORT LOCATIONS AS DIRECTED

LEGEND	
	STAGE BOUNDARY
	EARTHWORKS - CUT
	EARTHWORKS - FILL
	PROPOSED RETAINING WALL (REFER TO 790468-001-ST-1700-1701 FOR WALL TYPE)
	EXISTING/FUTURE RETAINING WALL

LEGEND	
	SPOT LEVEL
	BUILDING PAD - PROPOSED
	CONTOUR - PROPOSED (MAJOR 0.5m)
	CONTOUR - PROPOSED (MINOR 0.25m)
	CONTOUR - EXISTING (0.25m)

NOTE:
1. REFER DWG 790468-100-CI-1100 FOR EARTHWORKS AND LOT BENCHING NOTES.



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1	18.12.2018	ISSUE FOR APPROVAL	DPM	LG	RB

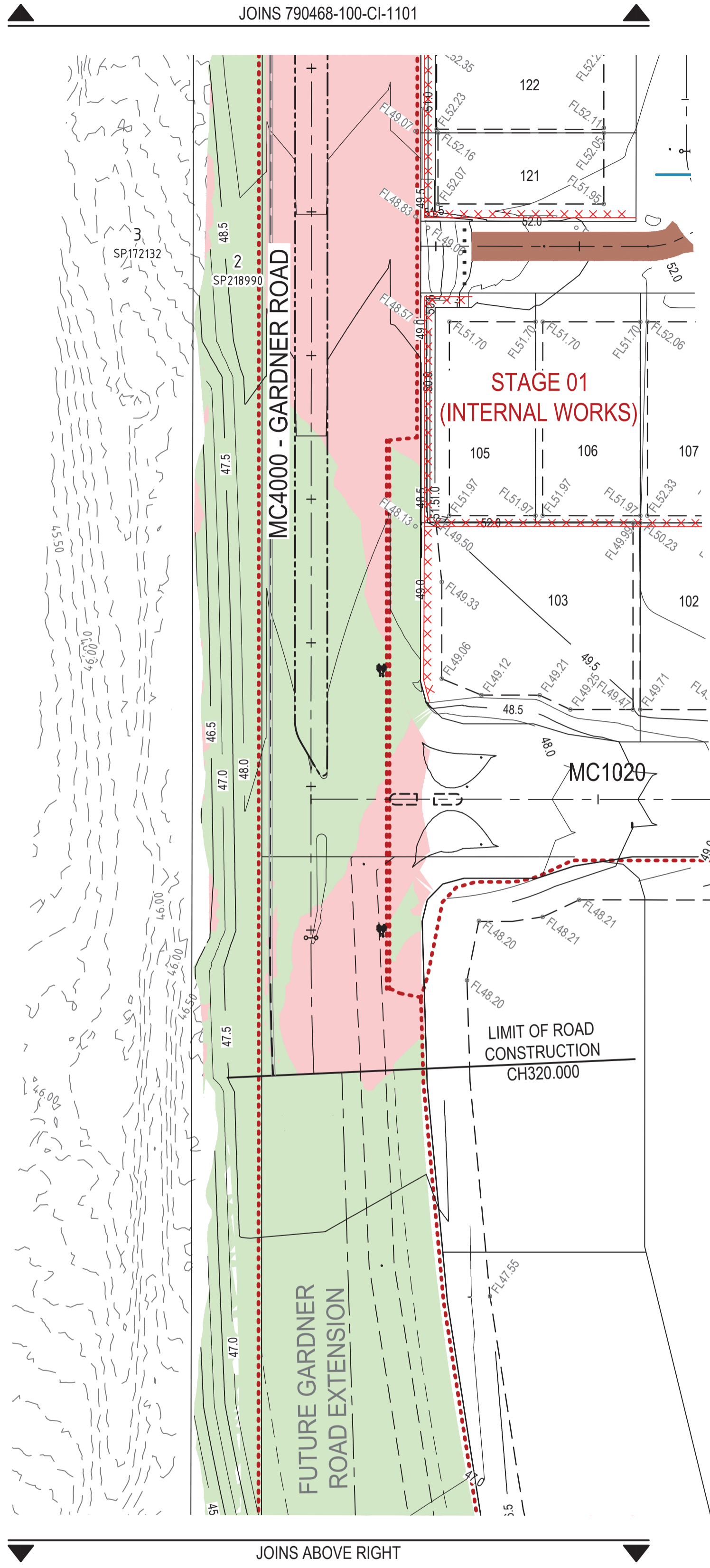
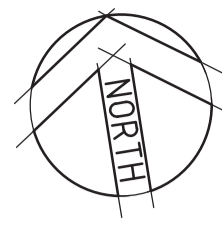


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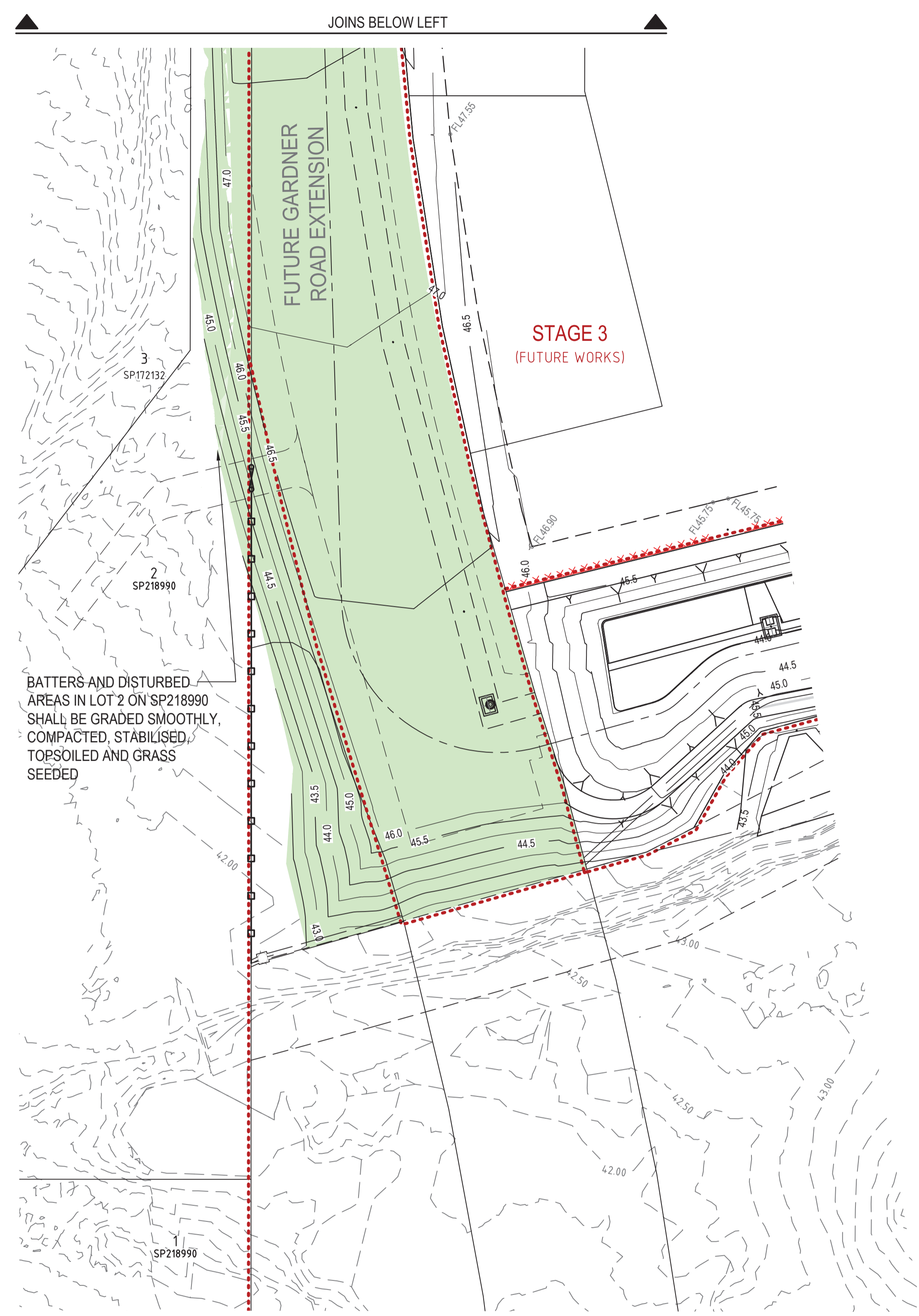


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Verified L.GARSIDE	Date 18.12.2018	CIVIL WORKS
Approved J.O'SULLIVAN	Date 13.05.2020	EARTHWORKS
		EARTHWORKS AND LOT BENCHING PLAN - SHEET 1

FOR CONSTRUCTION			
Datum	GRID	Scale	Size
AHD		1:500	A1
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790468-100-CI-1101		A	



FOR INTERNAL WORKS
REFER TO PACKAGE
790468-001-CI



BATTERS AND DISTURBED
AREAS IN LOT 2 ON SP218990
SHALL BE GRADED SMOOTHLY,
COMPACTED, STABILISED,
TOPSOILED AND GRASS
SEEDED

PLAN
SCALE 1:500



NOTES:
1. REFER DWG 790468-100-CI-1100 FOR EARTHWORKS AND LOT BENCHING NOTES;
2. REFER DWG 790468-100-CI-1101 FOR EARTHWORKS AND LOT BENCHING LEGEND.

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		Title EARTHWORKS AND LOT BENCHING PLAN - SHEET 2

Status FOR CONSTRUCTION			
Datum AHD	GRID	Scale 1:500	Size A1
Drawing Number 790468-100-CI-1102		Revision A	