

Level One Compliance Report

BULK EARTHWORKS FILLING OPERATIONS Everleigh Estate Precinct 10.4

9 August 2024

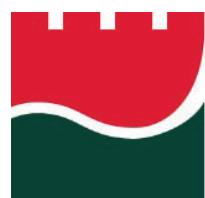
Prepared By

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Prepared for:

SHADFORTH CIVIL

Document Reference: PTP/11755 - 10.4



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Job No: PTP/11755
Ref No: P10.4
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9 August 2024

Shadforth Civil
99 Sandalwood Lane
Forest Glen Qld 4556

ATTENTION: CALLUM WATTS
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**RE: LEVEL ONE COMPLIANCE REPORT FOR BULK EARTHWORKS FILLING OPERATIONS,
EVERLEIGH ESTATE – PRECINCT 10.4, TEVIOT ROAD, GREENBANK**

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1.0 INTRODUCTION

1.1 General

This report presents results of Level One Earthworks Inspections and associated compaction compliance testing carried out on earthworks fill constructed at Everleigh Estate – Precinct 10.4, Teviot Road, Greenbank (the site).

Earthworks operations were carried out by Shadforth Civil.

Earthworks filling operations for Precinct 10.4 allotments and roads were carried out between April and August 2023.

The areas of fill covered by this report are presented as Figures 1, 2 and 3 below.

Figure 1 presents the extent of earthworks as shown on the Premise Earthworks Drawings MIR-1010-C203-A, C205-A and C206-A.

Figures 2 and 3 show the actual fill areas and conformance with the 600mm and 100mm below finished surface level as shown on the Shadforth Civil Survey Plans.

Figure 1: Extent of Fill - Premise Earthworks Drawings MIR-1010-C203-A, C205-A and C206-A

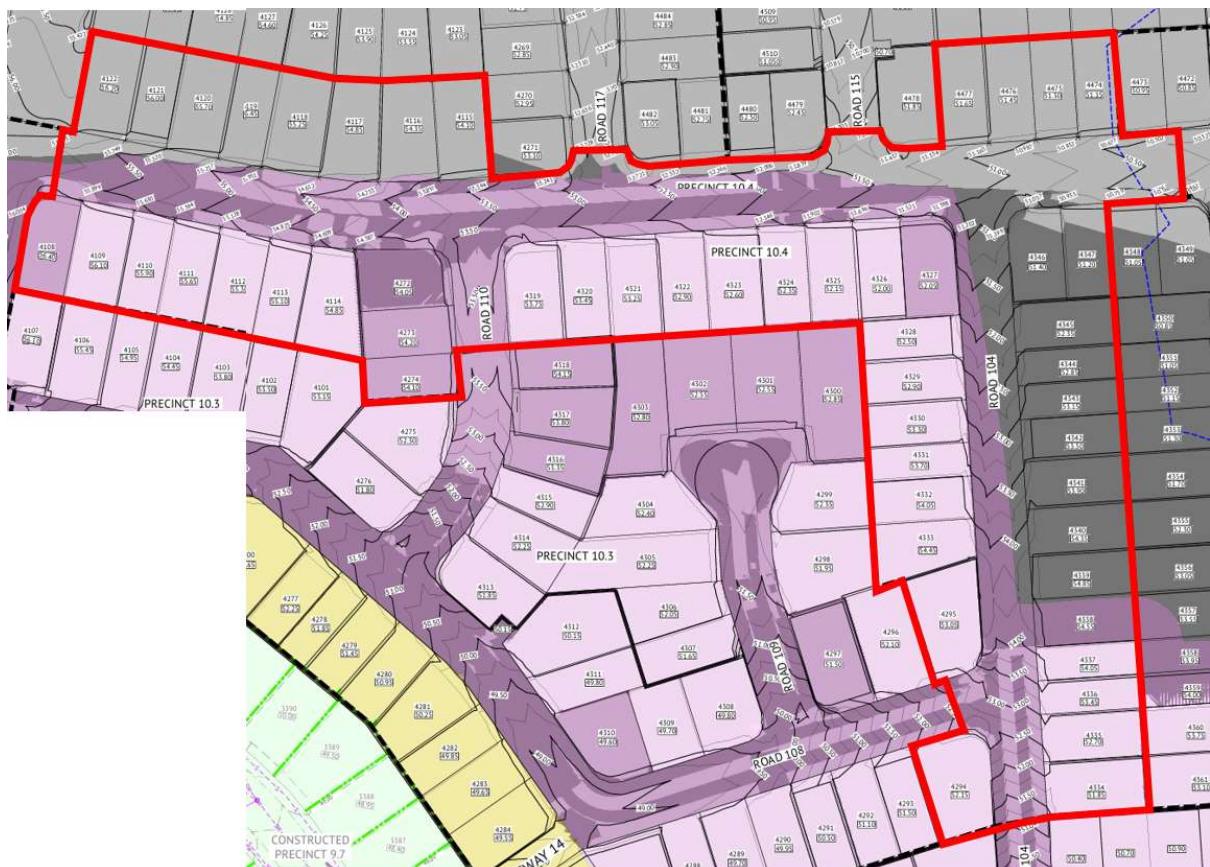


Figure 2: Actual Constructed Area of Fill (600mm BFSL) – Shadforth Survey Plans

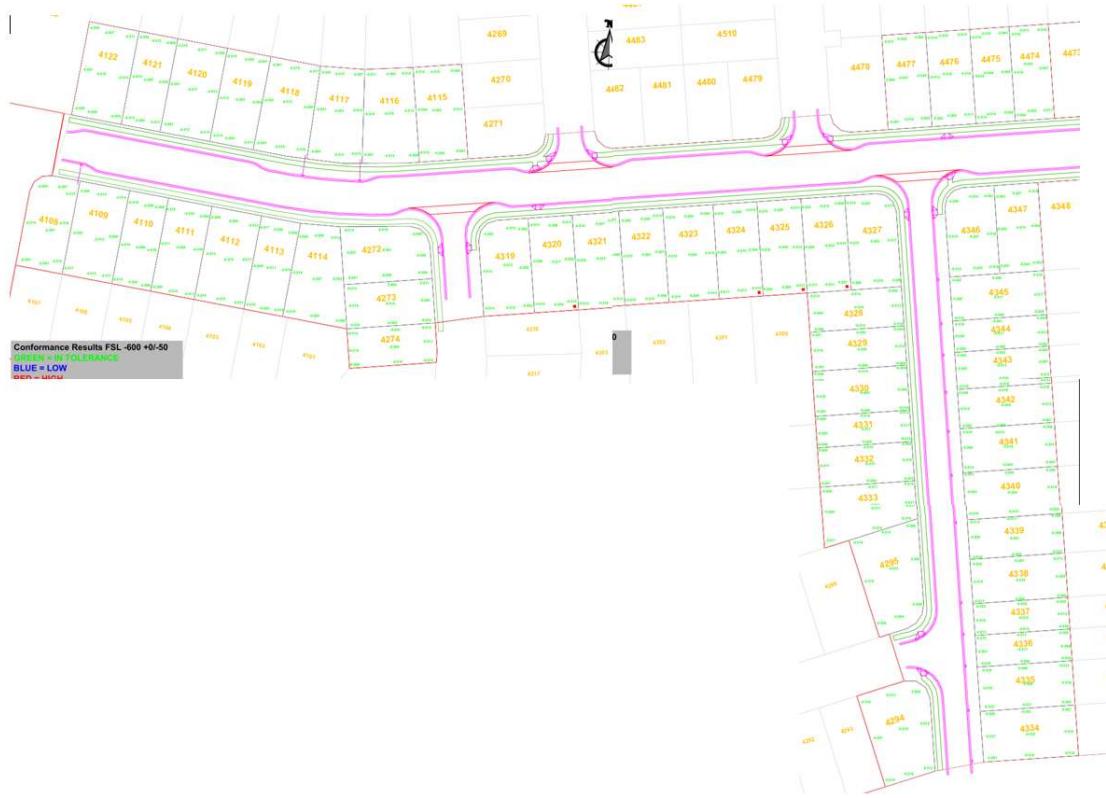
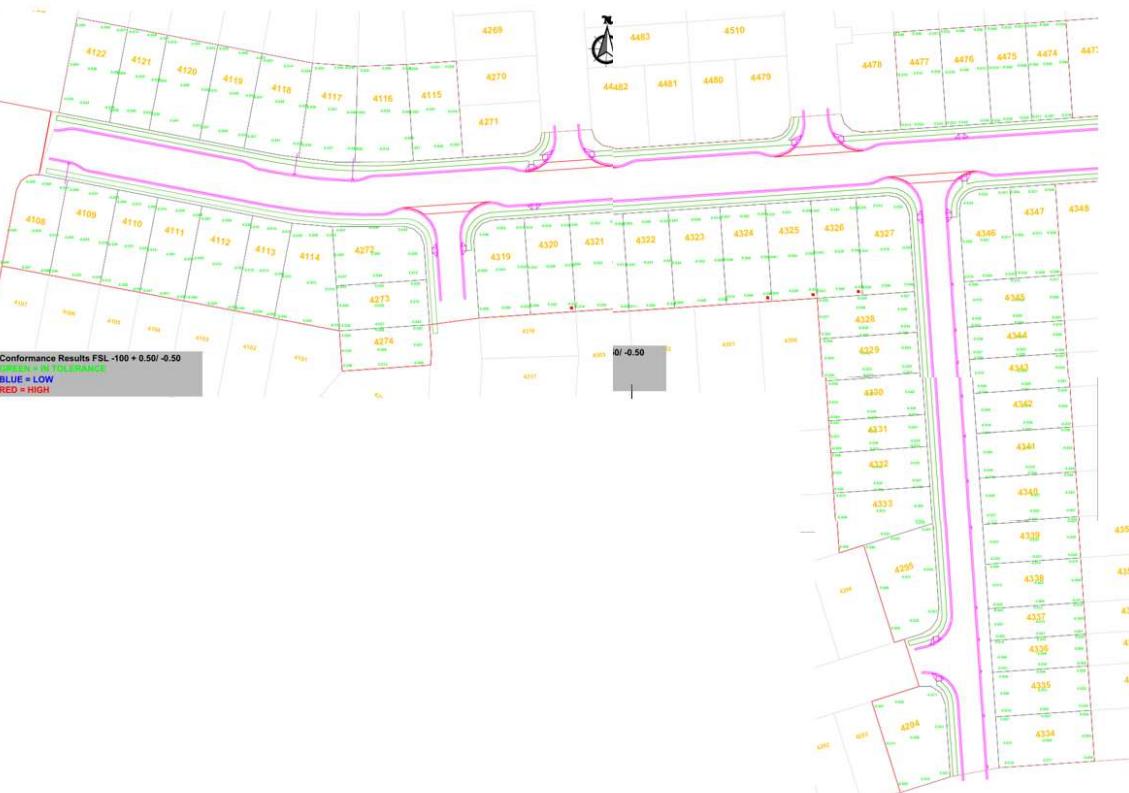


Figure 3: Actual Constructed Area of Fill (100mm BFSL) – Shadforth Survey Plans



1.2 Previous Earthworks

Minor filling was carried out on the site as part of the earthworks for a previous Precinct.

1.3 The Project

The project includes filling operations to construct building platforms to support proposed residences, new pavements, and underground services. The Site is bounded by future precincts to the north, west, east and south.

2.0 THE BRIEF

The Brief from the Client and relevant documents were limited to:

- Level One Inspection and Testing of the placement and compaction of fill materials in general 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.
- Earthworks Notes on drawing MIR-1010-C210-A.
- Recommendations in Morrison Geotechnic Pty Ltd report “Recommended Filling Earthworks Specification” report 16520B, dated 25th June 2020.

All other design requirements such as CBR and Quality of Materials, site classification, material assessments, foundation assessments and slope / global stability appraisals were not included in the Brief and are therefore excluded from this Report.

For the actual constructed fill thickness and extremities on fill placed, a disclosure plan should be requested from the developer.

2.1 Additional Requirements

All fill at the Site was to be constructed in accordance with the Earthworks Specification as shown on Premise Drawing – MIR-1010-C210-A. The earthworks specification is presented as Figure 4 below.

Figure 4 Earthworks Specification

EARTHWORKS SPECIFICATION

SPECIFICATION	DEPTH RANGE (m)				PAVEMENT SUBGRADE	TRENCH BACKFILL
	0.0 - 0.6	0.6 - 3.00	3.00 - 5.00	> 5.00		
CBR %	-	-	-	-	10	15
LAYER THICKNESS (mm)	300	300	300	300	BETWEEN SUBGRADE AND 0.3m BELOW	300
MAXIMUM PARTICLE SIZE (mm)	200	500	500	500	200	200
% PASSING 37.5mm	80% MIN	REFER NOTES AND KEY OUTCOMES	REFER NOTES AND KEY OUTCOMES			
% PASSING 0.075mm	30% MIN	REFER NOTES	REFER NOTES	REFER NOTES	REFER NOTES	REFER NOTES AND AS3798
COMPACTION	95% STD	95% STD	95% STD	95% STD	100% STD	95% MOD IN ROADS AND 95% STD OUTSIDE ROADS
MOISTURE	+/- 2% OMC	+/- 2% OMC	+/- 2% OMC	+/- 2% OMC	60% - 90% OF OMC	+/- 2% OMC

NOTES:

1. OMC - OPTIMUM MOISTURE CONTENT
2. LAYER OF THICKNESS IS LIMITED TO 300mm TO ALLOW IDENTIFICATION OF LARGER PARTICLES AND ALLOW EVERY CHANCE OF BREAK DOWN IN FILLING OR REMOVAL.
3. TREATMENT OF ROCK TO SIZES ABOVE SHOULD BE CARRIED OUT IN CUT PRIOR TO LOADING TO FILL AREAS. TREATED ROCK TO BE APPROVED BY GITA PRIOR TO TRANSPORTING.
4. UPPER 0.6m, (PARTICULARLY IN AREAS OF DEEP FILL), OF THE FILL PROFILE TO BE RELATIVELY IMPERMEABLE HENCE INCREASE IN FINES COMPONENT.
5. PROOF ROLL TESTING ON EACH COMPACTED LAYER USING RUBBER WHEELED PLANT SUCH AS LOADED ADT'S OR LOADED SCRAPERS. UNFAVOURABLE DEFORMATION OF THE COMPACTED SURFACE UNDER LOAD OF ADT'S OR SCRAPERS WILL REQUIRE REPAIR PRIOR TO ADDITIONAL PLACEMENT.
6. MECHANICAL INTERLOCK METHODOLOGY IS NOT APPROPRIATE DUE TO POOR DURABILITY OF SITE WON SANDSTONE. FILL COMPOSITION IS REQUIRED TO INCLUDE AN APPROPRIATE SAND GRAVEL AND FINES COMPONENT CONFORMING TO THE REQUIREMENTS OF AS3798.

KEY OUTCOMES FOR EARTHWORKS OPERATIONS

1. DELIVER RESIDENTIAL LOTS WITH FAVOURABLE LOT CLASSIFICATIONS - I.E - NO P CLASSIFICATIONS
2. FILL THICKNESS DOES NOT VARY MORE THAN 2m OVER A DISTANCE OF 10m
3. CONSTRUCT FILL AND LIMIT LONG TERM CREEP SETTLEMENTS TO WITHIN 0.5% TO 1.0% OF THE FILL THICKNESS
4. BUILDING PLATFORM THAT ALLOWS BUILDERS TO CONSTRUCT SLAB ON GROUND RAFTS USING LIGHT EARTHMOVING EQUIPMENT
5. MATERIAL WON FROM CUTS AND USED IN FILL WITH REQUIRE:
 - CUTS IN ROCK AS WELL AS BLENDED WITH
 - CUTS IN FINER MATERIALS SUCH AS SANDS AND CLAYS
6. CREATING A FILL PLATFORM THAT IS ABLE TO BE TESTED IN ACCORDANCE WITH AS3798 AND AS1289

Lots and pavements where rock of medium strength or stronger was exposed at the final cut earthworks levels, were cut to a depth of approximately 0.6m below the final earthworks levels. The excavated rock was then replaced with fill materials compliant with the specification requirements for materials within the 0.0m to 0.6m depth range as described in Figure 4 and compacted accordingly.

3.0 METHODOLOGY

Earthworks Inspections and Testing was carried out on the stripped and exposed ground surfaces and during the placement and compaction of fill materials forming residential allotments and road subgrades.

Field and laboratory testing included walk over assessments of the existing ground conditions, proof roll testing of the stripped surface including the natural surface, observations of filling and compaction activities, field density testing using a soil moisture density gauge and Hilt Density compactions.

3.1 Stripped Surface Assessment

The fill areas covered by this report were stripped and cleared of visible loose materials, vegetation, and topsoil.

Materials exposed after stripping and that formed the fill foundation can be broadly summarised as:

- Natural - Silty Sand (SM) – at least dense, fine to medium grained sands, traces of low plasticity fines, grey – brown and moist.
- Natural – Sandy Clay (CI) – at least very stiff, medium plasticity, fine to medium grained sand, pale brown mottled orange and moist.
- Bedrock – Sandstone (XW-HW) – Extremely to Highly weathered, very low to low strength, orange – yellow brown

Following the stripped surface assessment of the fill areas, the foundation was approved for filling using the following process:

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

A photo showing the showing a typical stripped surface is given in Picture 1.

Picture 1: View of The Site During Stripping Operations



3.2 Filling Operations

Fill materials were sourced onsite and can be broadly summarised as:

- Onsite Gravelly Sandy Clay (CI), medium plasticity fines, fine to coarse sand, fine to coarse gravel, yellow - brown and moist.
- Ripped Sandstone with engineering properties of Clayey Sandy Gravel (GC), fine to coarse sand, fine to coarse gravel, low to medium plasticity fines with cobbles up to 200mm max.
- Blasted Sandstone with engineering properties of Clayey Sandy Gravel (GC), fine to coarse sand, fine to coarse gravel, low to medium plasticity fines with cobbles up to 200mm max.

Ripping operations were required to loosen high and very high strength sandstone. Ripped rock was then processed using mechanical crushing plant.

The methodology for the rock crushing operations can be broadly summarised as: -

- Large rock fragments were broken down by an excavator with a hammer attachment to sizes acceptable for the mechanical crushing plant.
- Mechanical crushing to reduce rock fragments to 200mm size or less.
- Mixing crushed product with onsite materials using a front-end loader and placed into stockpiles assessed to be suitable for filling and earthworks operations.

Placement and compaction of the fill materials was carried out using the following plant:

- | | | |
|-------------------|--------------------|-----------------------------|
| • Water Carts | • Excavators | • Cat 825 Compactor |
| • Pad Foot Roller | • Grader | • Articulated Dump Truck's |
| • Dozers | • Front End Loader | • Mechanical Rock Crusher's |

The fill materials were moisture conditioned at the fill source and during placement to moisture contents suitable for compaction. Deleterious materials such as organics, sticks, roots and over size particles were sorted and removed during placement or were rejected for use. Occasional oversize particles including cobbles may be present in the deeper fill profile, however, these are not considered to affect the fill as a mass.

Placement of the fill materials was carried out in layers appropriate for the above plant and compacted using the above plant carrying out multiple passes.

Our representative observed the filling process as described above which was assessed to be consistent for the entire thickness of fill.

Field density tests and laboratory compactions were carried out on the fill materials in accordance with Table 5.1 and 8.1 of AS3798 2007 (Guidelines on Earthworks for Commercial and Residential Developments) and tested to AS1289 test methods (Testing of Soils for Engineering Purposes).

Testing achieved the required specification of 95% of the maximum Hilt Density at the test locations.

Fill placed and compacted at measured density ratios less than 95% was tyed, moisture conditioned and re-compacted until the required specification was achieved. Retesting was carried out using the Random Stratified Location method.

The Location of the field density tests are shown on the Site Plan contained in Appendix A. These test locations and levels were not obtained by survey and therefore should only be considered as approximate.

Photos showing the typical fill construction activities are given in Pictures 2 to 4.

Picture 2: View of the Crushing Operation and Produced Product



Picture 3: View of the Site During Construction



Picture 4: View of the Site During Construction



4.0 STATEMENT OF COMPLIANCE

Our representatives observed the relevant earthworks operations including the stripped surface, fill placement and compaction operations and carried out field density tests and laboratory compaction tests in accordance with the required standards (AS3798, AS1289). Testing achieved the required specification of 95% Standard Maximum Dry Density (SMDD) at the test locations.

Level One Inspection and Testing has been carried out on the filling operation at the Site (limited to the extent shown in Figure 1). Based on the observations made by our Geo-technicians and the results of the field and laboratory tests, the placed and compacted fill at the above project has, as far as we have been able to assess, been constructed in general accordance with the intent of AS3798.

The fill can be deemed to be 'controlled' in accordance with AS2870-2011 Residential Slabs and Footings.

5.0 EXCLUSIONS

This statement does not include any topsoil, which may be placed for use as dressing, trench backfill, areas outside the locations shown in Figure 1 or any other subsequent earthworks after 27 July 2023.

Assessments of material quality such as soaked CBR and site classifications are excluded from this commission.

Our on-site attendance specifically excludes assessments of fill material quality and engineering properties that are outside the requirements of AS3798 – 2007.

Footings and ground slabs for any structures constructed over natural soils or controlled fill should be designed to accommodate the characteristic ground surface movements and settlement potential. Assessments of these design parameters are beyond the scope of this Report.

6.0 LIMITATIONS

This Report has been prepared by Morrison Geotechnic (**Morrison Geotechnic**) and may include contributions from Morrison Geotechnic's officers and employees, sub-contractors, sub-consultants or agents (**Contributors**).

This Report is for the sole benefit and use of Shadforth Civil Pty Ltd (**Client**), its designers, clients, and relevant statutory authorities for the sole purpose of providing geotechnical advice and recommendations in respect of the Bulk Earthworks Filling Operations at Precinct 10.4, Everleigh Estate (**Project**). The Report is only intended to address those issues expressly described in the Brief/ Work Instructions in this Report.

This Report should not be used or relied upon for any other purpose without Morrison Geotechnic's prior written consent. Morrison Geotechnic and the Contributors do not accept any responsibility or liability in any way whatsoever for the use or reliance of this Report by anyone other than Golding Urban Pty Ltd (**Client**), its designers, its clients and relevant statutory authorities or by anyone else for any purpose other than that for which it has been prepared.

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- (a) have relied upon and presumed the accuracy of this information.
- (b) have not verified the accuracy or reliability of this information (other than as expressly stated in this Report).
- (c) have not made any independent investigations or enquiries in respect of those matters of which it has no actual knowledge at the time of giving this Report to the Client; and
- (d) make no warranty or guarantee, expressed or implied, as to the accuracy or reliability of this information.

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- (b) is limited to observations of those parts of the site described in Section 1.0.

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If further information becomes available, or additional assumptions need to be made, Morrison Geotechnic reserves its right to amend this Report.

If you have any queries regarding the above, please contact our office.

Yours faithfully



GARY TAYLOR
For and on behalf of
MORRISON GEOTECHNIC



SIMON WYNNE (RPEQ 17390)
For and on behalf of
MORRISON GEOTECHNIC

ATTACHMENTS:

Appendix A – Site Plans Showing Test Locations
Appendix B – Laboratory Test Results Reports

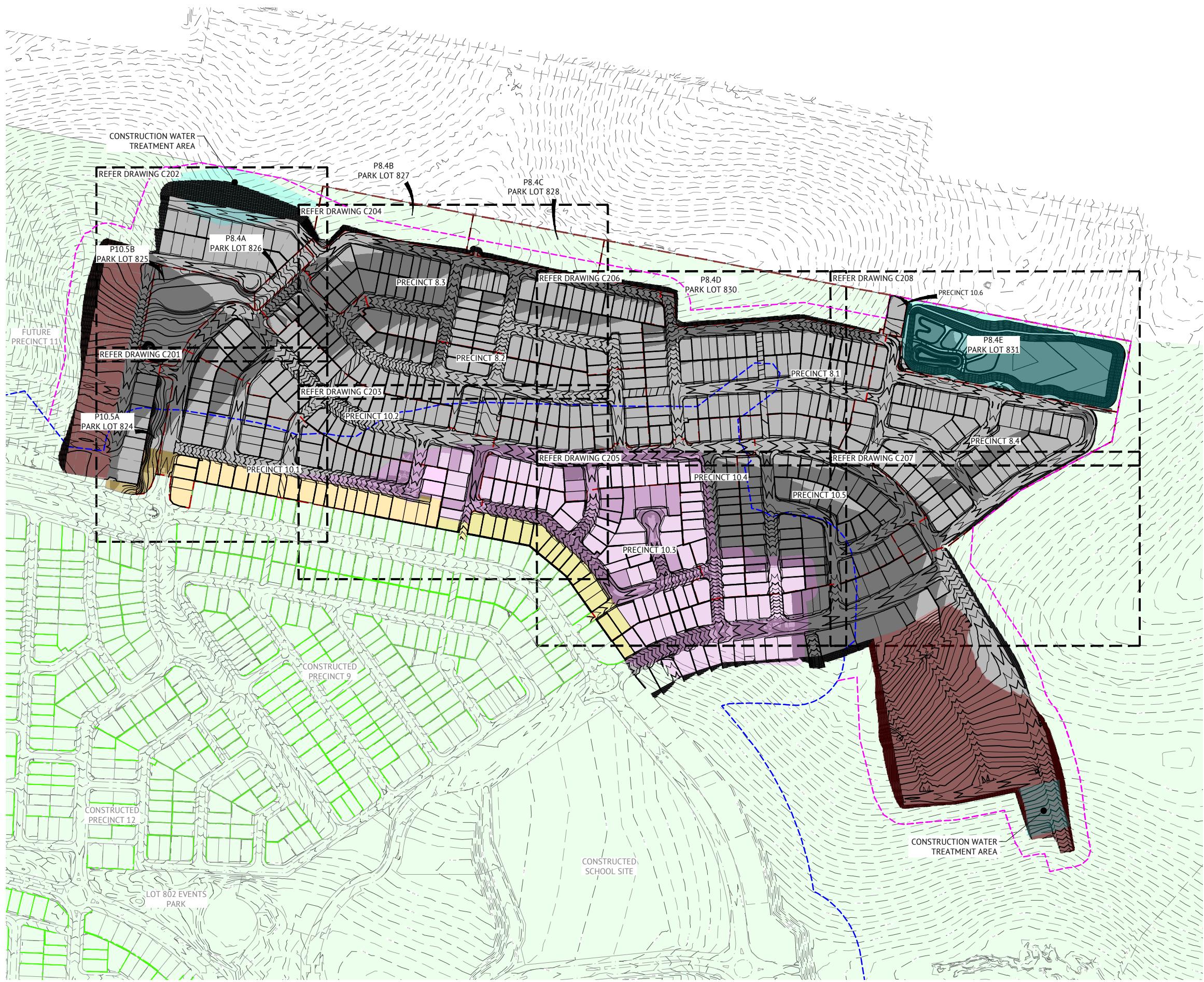


Appendix A

Site Plan & Test Locations

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APPROVAL ISSUE – NOT FOR CONSTRUCTION

05/12/2022	A	ORIGINAL ISSUE	KK	PB
DATE	REV	DESCRIPTION	REC	APP
		REVISIONS		



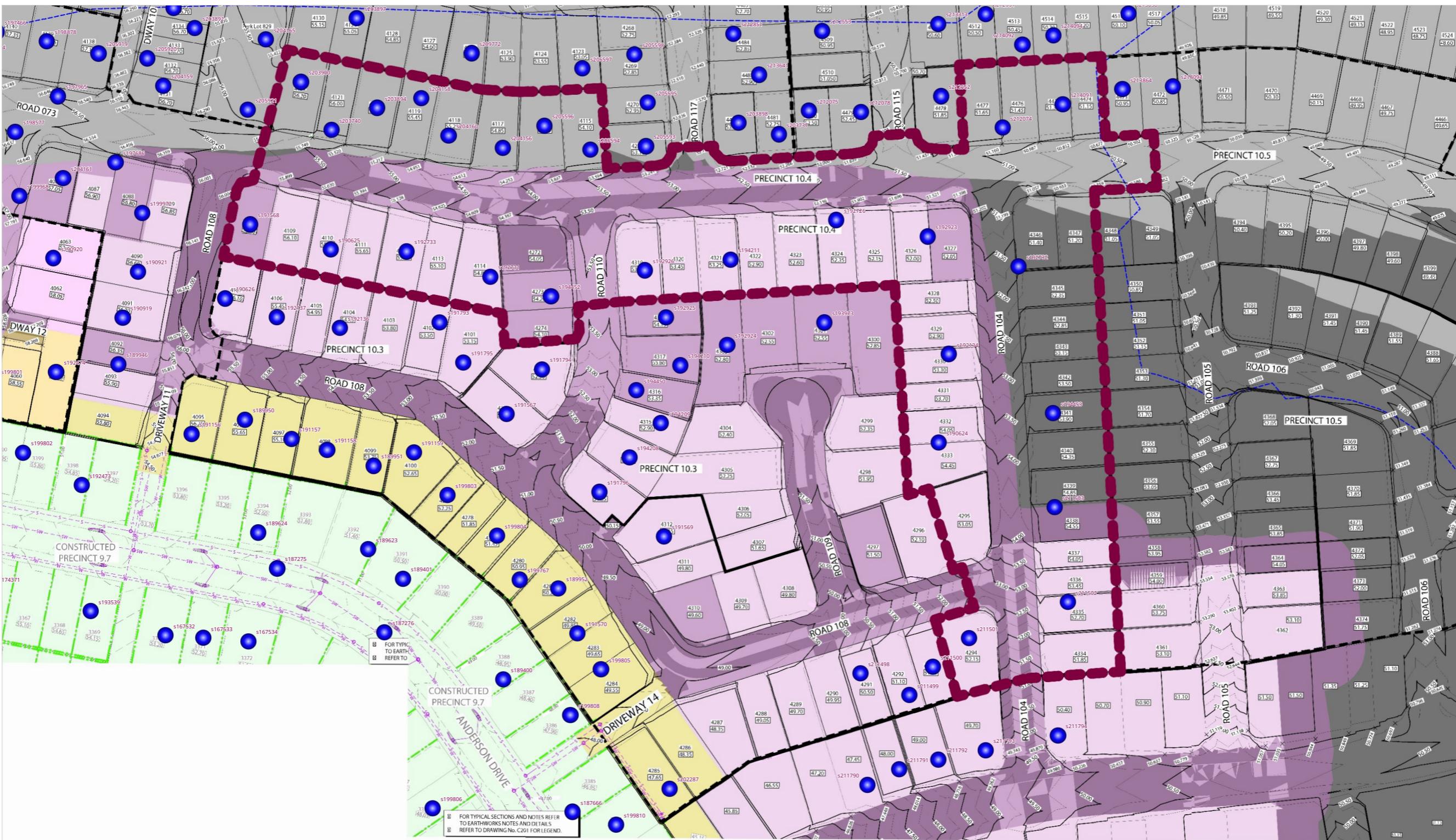
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ANDREW LANGDON
PROJECT MANAGER
LAURA CLIFFORD
PROJECT DIRECTOR
PATRICK BRADY
RPEQ 7112

SCALE
0 50 100 150m
SCALE 1:2500 (A1)
ORIGINAL SHEET SIZE A1

MIRVAC QLD PTY LTD
PROJECT EVERLEIGH PRECINCTS 8 & 10 BULK EARTHWORKS
LOCATION TEVIOT ROAD, GREENBANK
SHEET TITLE OVERALL EARTHWORKS LAYOUT PLAN

JOB CODE
MIR-1010
SHEET NUMBER
C200
REV
A



EVERLEIGH PRECINCT 10.4 - LEVEL 1 TESTS



Appendix B

Laboratory Test Reports

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Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 41/1		
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	18/07/2023		
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-		
Project Number :	PTP/11755				Page 1 of 1			
Location :	Lyons							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,							
Sample Number :	S/203737	S/203738	S/203739	S/203740	S/203741	S/203742		
Date Tested :	28/06/2023	28/06/2023	28/06/2023	28/06/2023	28/06/2023	28/06/2023		
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 / 175	150 / 175	150 / 175	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	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	14:00	14:10	14:20	14:30	14:40	14:50		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E 499369	E 499377	E 499397	E 499387	E 499377	E 499395		
Location 2 :	N 6932280	N 6932309	N 6932314	N 6932274	N 6932304	N 6932293		
Location 3 :	RL 55.70	RL 55.76	RL 55.80	RL 55.67	RL 55.84	RL 55.90		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm	<19mm	<19mm		
Oversize Wet :	7%	0%	13%	17%	17%	13%		
Oversize Density - Dry (t/m³) :	2.13	-	2.15	2.11	2.13	2.19		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/203737	S/203738	S/203739	S/203740	S/203741	S/203742		
MDR Test Date :	4/07/2023	4/07/2023	4/07/2023	4/07/2023	4/07/2023	4/07/2023		
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard		
Soil Description :	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown		
<i>MDR Test Results</i>								
PCWD (t/m³) :	2.06	2.11	2.02	2.03	2.12	2.02		
Moisture Variation :	2.0%	2.0%	2.0%	2.0%	1.0%	2.5%		
ADJ PCWD (t/m³) :	2.07	-	2.04	2.04	2.12	2.04		
ADJ Moisture Variation :	2.0%	-	2.0%	2.0%	1.0%	2.0%		
<i>Moisture Test Results</i>								
Field Moisture Content :	9.5%	10.0%	9.5%	8.5%	8.5%	10.0%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	1.0% Dry of OMC	2.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>								
Field Wet Density (t/m³) :	2.07	2.09	2.05	2.05	2.07	2.06		
Density Specification :	95%	95%	95%	95%	95%	95%		
Wet Density Ratio :	100.0%	99.0%	100.5%	100.5%	97.5%	100.5%		
Remarks :								
	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  Nick Dobson - Signatory			

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 42/1		
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	18/07/2023		
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-		
Project Number :	PTP/11755							
Location :	Lyons							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,							
Sample Number :	S/203889	S/203890	S/203891	S/203892	S/203893	S/203894		
Date Tested :	29/06/2023	29/06/2023	29/06/2023	29/06/2023	29/06/2023	29/06/2023		
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 / 175	150 / 175	150 / 175	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	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	09:20	09:30	09:40	09:50	10:00	10:10		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E 499397	E 499405	E 499375	E 499373	E 499376	E 499395		
Location 2 :	N 6932262	N 6932297	N 6932299	N 6932297	N 6932295	N 6932311		
Location 3 :	RL 55.79	RL 55.90	RL 55.89	RL 55.79	RL 55.80	RL 55.98		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm	<19mm	<19mm		
Oversize Wet :	0%	0%	0%	0%	0%	0%		
Oversize Density - Dry (t/m³) :	-	-	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/203889	S/203890	S/203891	S/203892	S/203893	S/203894		
MDR Test Date :	5/07/2023	5/07/2023	5/07/2023	5/07/2023	5/07/2023	5/07/2023		
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard		
Soil Description :	Sandy Gravelly CLAY - Brown	Sandy Gravelly CLAY - Brown	Sandy Gravelly CLAY - Brown	Sandy Gravelly CLAY - Brown	Sandy Gravelly CLAY - Brown	Sandy Gravelly CLAY - Brown		
<i>MDR Test Results</i>								
PCWD (t/m³) :	2.04	2.05	2.04	2.02	2.03	2.03		
Moisture Variation :	2.0%	2.0%	2.0%	2.5%	2.0%	2.0%		
ADJ PCWD (t/m³) :	-	-	-	-	-	-		
ADJ Moisture Variation :	-	-	-	-	-	-		
<i>Moisture Test Results</i>								
Field Moisture Content :	12.0%	12.0%	11.5%	12.0%	12.0%	11.0%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.5% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>								
Field Wet Density (t/m³) :	2.06	2.08	2.04	2.07	2.07	2.05		
Density Specification :	95%	95%	95%	95%	95%	95%		
Wet Density Ratio :	101.0%	102.0%	100.0%	102.5%	101.5%	101.0%		
Remarks :								
	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  Nick Dobson - Signatory				

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 42/1		
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	18/07/2023		
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-		
Project Number :	PTP/11755				Page 2 of 2			
Location :	Lyons							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,							
Sample Number :	S/203895	S/203896	S/203897	S/203898	S/203899	S/203900		
Date Tested :	29/06/2023	29/06/2023	29/06/2023	29/06/2023	29/06/2023	29/06/2023		
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 / 175	150 / 175	150 / 175	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	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	10:20	10:30	10:40	10:50	11:00	11:10		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E 499400	E 499398	E 499401	E 499393	E 499404	E 499396		
Location 2 :	N 6932310	N 6932307	N 6932307	N 6932309	N 6932290	N 6932284		
Location 3 :	RL 56.12	RL 56.09	RL 56.20	RL 56.22	RL 56.19	RL 56.17		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm	<19mm	<19mm		
Oversize Wet :	0%	0%	0%	0%	0%	0%		
Oversize Density - Dry (t/m³) :	-	-	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/203895	S/203896	S/203897	S/203898	S/203899	S/203900		
MDR Test Date :	5/07/2023	5/07/2023	5/07/2023	5/07/2023	5/07/2023	5/07/2023		
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard		
Soil Description :	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown		
<i>MDR Test Results</i>								
PCWD (t/m³) :	2.06	2.13	2.07	2.03	2.02	2.06		
Moisture Variation :	2.0%	2.0%	2.0%	1.5%	0.0%	1.5%		
ADJ PCWD (t/m³) :	-	-	-	-	-	-		
ADJ Moisture Variation :	-	-	-	-	-	-		
<i>Moisture Test Results</i>								
Field Moisture Content :	11.5%	11.0%	9.5%	12.5%	12.0%	11.0%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	1.5% Dry of OMC	0.0% Dry of OMC	1.5% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>								
Field Wet Density (t/m³) :	2.11	2.07	2.09	2.05	2.07	2.11		
Density Specification :	95%	95%	95%	95%	95%	95%		
Wet Density Ratio :	102.5%	97.0%	100.5%	101.0%	102.5%	102.5%		
Remarks :	-							
 <p>Accredited for Compliance with ISO/ IEC 17025 - Testing Protest Engineering (Gold Coast) Accreditation Number - 19667 Base Laboratory Site Number - 22838 - Gold Coast WORLD RECOGNISED ACCREDITATION</p>				APPROVED SIGNATORY  Nick Dobson - Signatory				

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 43/1		
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	18/07/2023		
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-		
Project Number :	PTP/11755							
Location :	Lyons							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,							
Sample Number :	S/204156	S/204157	S/204158	S/204159	S/204160	S/204161		
Date Tested :	30/06/2023	30/06/2023	30/06/2023	30/06/2023	30/06/2023	30/06/2023		
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 / 175	150 / 175	150 / 175	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	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b		
Time :	11:40	11:50	12:00	12:10	12:20	12:30		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E 499383	E 499389	E 499387	E 499382	E 499402	E 499380		
Location 2 :	N 6932311	N 6932314	N 6932309	N 6932307	N 6932304	N 6932304		
Location 3 :	RL 57.80	RL 57.84	RL 57.69	RL 58.04	RL 58.12	RL 58.21		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm	<19mm	<19mm		
Oversize Wet :	0%	0%	4%	0%	11%	5%		
Oversize Density - Dry (t/m³) :	-	-	2.02	-	2.10	2.12		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/204156	S/204157	S/204158	S/204159	S/204160	S/204161		
MDR Test Date :	6/07/2023	6/07/2023	6/07/2023	6/07/2023	6/07/2023	6/07/2023		
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard		
Soil Description :	Gravelly Clayey SAND - Brown	Gravelly Clayey SAND - Brown	Gravelly Clayey SAND - Brown	Gravelly Clayey SAND - Brown	Gravelly Clayey SAND - Brown	Gravelly Clayey SAND - Brown		
<i>MDR Test Results</i>								
PCWD (t/m³) :	2.06	2.06	2.05	2.05	2.07	2.06		
Moisture Variation :	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
ADJ PCWD (t/m³) :	-	-	2.05	-	2.08	2.06		
ADJ Moisture Variation :	-	-	2.0%	-	2.0%	2.0%		
<i>Moisture Test Results</i>								
Field Moisture Content :	8.0%	8.0%	7.5%	8.0%	8.5%	7.5%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>								
Field Wet Density (t/m³) :	2.03	2.05	2.03	2.05	2.04	2.02		
Density Specification :	95%	95%	95%	95%	95%	95%		
Wet Density Ratio :	98.5%	99.0%	99.0%	100.0%	98.5%	98.0%		
Remarks :								
	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  Nick Dobson - Signatory			

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 43/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	18/07/2023
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-
Project Number :	PTP/11755					
Location :	Lyons					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/204162	S/204163	S/204164	S/204165		
Date Tested :	30/06/2023	30/06/2023	30/06/2023	30/06/2023		
Material Source :	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	150 / 175	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	AS1289.1.2.1 - cl6.4b		
Time :	12:40	12:50	13:00	13:10		
Lot Number :	-	-	-	-		
Location 1 :	E 499398	E 499387	E 499385	E 499372		
Location 2 :	N 6932302	N 6932305	N 6932299	N 6932290		
Location 3 :	RL 58.20	RL 58.15	RL 58.12	RL 58.17		
Location 4 :	-	-	-	-		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	0%	1%	15%	11%		
Oversize Density - Dry (t/m³) :	-	1.64	2.10	2.07		
Assigned MDR (Yes/No) :	No	No	No	No		
MDR Sample Number :	S/204162	S/204163	S/204164	S/204165		
MDR Test Date :	6/07/2023	6/07/2023	6/07/2023	6/07/2023		
Compaction Type :	Standard	Standard	Standard	Standard		
Soil Description :	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown		
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.07	2.06	2.05	2.07		
Moisture Variation :	2.0%	2.0%	2.5%	2.5%		
ADJ PCWD (t/m³) :	-	2.05	2.06	2.07		
ADJ Moisture Variation :	-	2.0%	2.0%	2.0%		
<i>Moisture Test Results</i>						
Field Moisture Content :	9.0%	8.0%	7.0%	8.0%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.05	2.04	2.06	2.05		
Density Specification :	95%	95%	95%	95%		
Wet Density Ratio :	99.0%	99.5%	100.0%	99.0%		
Remarks :						
	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  Nick Dobson - Signatory	

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 46/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	18/07/2023
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-
Project Number :	PTP/11755					
Location :	Lyons				Page 1 of 1	
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/205593	S/205594	S/205595	S/205596	S/205597	S/205598
Date Tested :	10/07/2023	10/07/2023	10/07/2023	10/07/2023	10/07/2023	10/07/2023
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 / 175	150 / 175	150 / 175	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	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b
Time :	11:15	11:30	11:45	12:00	12:15	12:30
Lot Number :	-	-	-	-	-	-
Location 1 :	E 499523	E 499523	E 499523	E 499523	E 499523	E 499523
Location 2 :	N 6932246	N 6932242	N 6932254	N 693226146	N 6932269	N 6932271
Location 3 :	0.6m Below Finish Level	0.8m Below Finish Level	1m Below Finish Level	1.5m Below Finish Level	1m Below Finish Level	3m Below Finish Level
Location 4 :	-	-	-	-	-	-
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm
Oversize Wet :	0%	0%	0%	0%	0%	0%
Oversize Density - Dry (t/m³) :	-	-	-	-	-	-
Assigned MDR (Yes/No) :	No	No	No	No	No	No
MDR Sample Number :	S/205593	S/205594	S/205595	S/205596	S/205597	S/205598
MDR Test Date :	17/07/2023	17/07/2023	17/07/2023	17/07/2023	17/07/2023	17/07/2023
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard
Soil Description :	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown	Sandy CLAY - Brown
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.17	2.12	2.15	2.09	2.08	2.10
Moisture Variation :	0.0%	0.0%	0.5%	0.5%	0.5%	0.5%
ADJ PCWD (t/m³) :	-	-	-	-	-	-
ADJ Moisture Variation :	-	-	-	-	-	-
<i>Moisture Test Results</i>						
Field Moisture Content :	16.5%	15.0%	14.0%	14.0%	14.5%	15.0%
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC
Variation from OMC :	At OMC	0.0% Dry of OMC	0.5% Dry of OMC	0.5% Dry of OMC	0.5% Dry of OMC	0.5% Dry of OMC
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.15	2.13	2.16	2.13	2.15	2.13
Density Specification :	95%	95%	95%	95%	95%	95%
Wet Density Ratio :	99.0%	100.5%	100.5%	102.0%	103.0%	101.5%
Remarks :						
	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  Nick Dobson - Signatory		

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 63/1		
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	22/08/2023		
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-		
Project Number :	PTP/11755							
Location :	Lyons							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,							
Sample Number :	S/211498	S/211499	S/211500	S/211501	S/211502	S/211503		
Date Tested :	9/08/2023	9/08/2023	9/08/2023	9/08/2023	9/08/2023	9/08/2023		
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 :	175 / 200	175 / 200	175 / 200	175 / 200	175 / 200	175 / 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 :	10:10	10:20	10:30	10:40	10:50	11:00		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E 499623	E 499627	E 499647	E 499638	E 499666	E 499655		
Location 2 :	N 6932070	N 6932059	N 6932064	N 6932077	N 6932073	N 6932082		
Location 3 :	Finish Level	Finish Level	Finish Level	Finish Level	0.3m Below Finish Level	0.3m Below Finish Level		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	19%	20%	20%	20%	20%	20%		
Oversize Density - Dry (t/m³) :	2.57	2.43	2.55	2.48	2.46	2.41		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/211498	S/211499	S/211500	S/211501	S/211502	S/211503		
MDR Test Date :	15/08/2023	15/08/2023	15/08/2023	15/08/2023	15/08/2023	15/08/2023		
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard		
Soil Description :	Sandy CLAY - Dark Brown	Sandy CLAY - Dark Brown	Sandy CLAY - Dark Brown	Sandy CLAY - Dark Brown	Sandy CLAY - Dark Brown	Sandy CLAY - Dark Brown		
<i>MDR Test Results</i>								
PCWD (t/m³) :	2.21	2.21	2.20	2.20	2.21	2.19		
Moisture Variation :	0.5%	0.5%	0.0%	0.5%	0.5%	0.5%		
ADJ PCWD (t/m³) :	2.27	2.25	2.26	2.25	2.26	2.23		
ADJ Moisture Variation :	0.5%	0.5%	0.0%	0.5%	0.5%	0.5%		
<i>Moisture Test Results</i>								
Field Moisture Content :	8.0%	8.5%	7.5%	8.5%	8.5%	8.5%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	0.5% Dry of OMC	0.5% Dry of OMC	0.0% Dry of OMC	0.5% Dry of OMC	0.5% Dry of OMC	0.5% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>								
Field Wet Density (t/m³) :	2.21	2.21	2.20	2.19	2.21	2.19		
Density Specification :	95%	95%	95%	95%	95%	95%		
Wet Density Ratio :	97.5%	98.5%	97.5%	97.5%	98.0%	98.0%		
Remarks :								
	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  Nick Dobson - Signatory			

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 65/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	22/08/2023
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-
Project Number :	PTP/11755				Page 1 of 1	
Location :	Lyons				Page 1 of 1	
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/212073	S/212074	S/212075	S/212076	S/212077	S/212078
Date Tested :	11/08/2023	11/08/2023	11/08/2023	11/08/2023	11/08/2023	11/08/2023
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 :	175 / 200	175 / 200	175 / 200	175 / 200	175 / 200	175 / 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 :	10:20	10:30	10:40	10:50	11:00	11:10
Lot Number :	-	-	-	-	-	-
Location 1 :	E 499599	E 499612	E 499599	E 499614	E 499598	E 499618
Location 2 :	N 6932309	N 6932306	N 6932298	N 6932292	N 6932284	N 6932275
Location 3 :	RL 49.9	RL 49.6	RL 50.2	RL 49.6	RL 50.4	RL 50.4
Location 4 :	-	-	-	-	-	-
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm	<19mm	<19mm
Oversize Wet :	20%	14%	20%	17%	17%	16%
Oversize Density - Dry (t/m³) :	2.50	2.15	2.40	2.35	2.21	2.38
Assigned MDR (Yes/No) :	No	No	No	No	No	No
MDR Sample Number :	S/212073	S/212074	S/212075	S/212076	S/212077	S/212078
MDR Test Date :	21/08/2023	21/08/2023	21/08/2023	21/08/2023	18/08/2023	18/08/2023
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard
Soil Description :	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown	Clayey SAND - Brown
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.11	2.16	2.14	2.10	2.15	2.14
Moisture Variation :	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
ADJ PCWD (t/m³) :	2.18	2.16	2.19	2.14	2.16	2.17
ADJ Moisture Variation :	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>Moisture Test Results</i>						
Field Moisture Content :	11.0%	12.0%	11.5%	13.0%	11.5%	13.0%
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC
Variation from OMC :	0.0% Dry of OMC	0.0% Dry of OMC	0.0% Wet of OMC	0.0% Dry of OMC	0.0% Wet of OMC	0.0% Dry of OMC
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.19	2.18	2.20	2.18	2.20	2.19
Density Specification :	95%	95%	95%	95%	95%	95%
Wet Density Ratio :	100.5%	101.0%	100.5%	102.0%	102.0%	100.5%
Remarks :						
	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  Nick Dobson - Signatory		

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/11755 - 72/1		
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	7/09/2023		
Project Name :	Everleigh Precinct 8 and 10 BEW - LV1				Test Request :	-		
Project Number :	PTP/11755				Page 1 of 1			
Location :	Lyons							
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,							
Sample Number :	S/214089	S/214090	S/214091	S/214092	S/214093	S/214094		
Date Tested :	23/08/2023	23/08/2023	23/08/2023	23/08/2023	23/08/2023	23/08/2023		
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 :	175 / 200	175 / 200	175 / 200	175 / 200	175 / 200	175 / 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 :	10:10	10:20	10:30	10:40	10:50	11:00		
Lot Number :	-	-	-	-	-	-		
Location 1 :	E 499631	E 499639	E 499646	E 499656	E 499669	E 499675		
Location 2 :	N 6932304	N 6932290	N 6932301	N 6932286	N 6932311	N 6932293		
Location 3 :	RL 50.2	RL 50.3	RL 50.1	RL 50.3	RL 49.9	RL 50.5		
Location 4 :	-	-	-	-	-	-		
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm	<19mm	<19mm		
Oversize Wet :	0%	0%	0%	0%	0%	0%		
Oversize Density - Dry (t/m³) :	-	-	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No	No	No		
MDR Sample Number :	S/214089	S/214090	S/214091	S/214092	S/214093	S/214094		
MDR Test Date :	31/08/2023	31/08/2023	31/08/2023	31/08/2023	31/08/2023	31/08/2023		
Compaction Type :	Standard	Standard	Standard	Standard	Standard	Standard		
Soil Description :	Gravelly Sandy CLAY - Brown	Gravelly Sandy CLAY - Brown	Gravelly Sandy CLAY - Brown	Gravelly Sandy CLAY - Brown	Gravelly Sandy CLAY - Brown	Gravelly Sandy CLAY - Brown		
<i>MDR Test Results</i>								
PCWD (t/m³) :	2.08	2.07	2.07	2.08	2.09	2.06		
Moisture Variation :	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
ADJ PCWD (t/m³) :	-	-	-	-	-	-		
ADJ Moisture Variation :	-	-	-	-	-	-		
<i>Moisture Test Results</i>								
Field Moisture Content :	9.0%	9.5%	9.0%	9.0%	9.0%	9.5%		
Moisture Specification :	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC	+/-2.0% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>								
Field Wet Density (t/m³) :	2.07	2.08	2.07	2.08	2.08	2.09		
Density Specification :	95%	95%	95%	95%	95%	95%		
Wet Density Ratio :	99.5%	100.5%	100.0%	100.0%	99.5%	101.0%		
Remarks :								
 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  Nick Dobson - Signatory				

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/10047 - 115/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	10/05/2023
Project Name :	Everleigh Estate - Precinct 9.4 Earthworks				Test Request :	-
Project Number :	PTP/10047				Page 1 of 1	
Location :	Greenbank					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/192923	S/192924	S/192925	S/192926		
Date Tested :	21/04/2023	21/04/2023	21/04/2023	21/04/2023		
Material Source :	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	175 / 150	175 / 150	175 / 150	175 / 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		
Time :	11:00	11:15	11:30	11:45		
Lot Number :	-	-	-	-		
Location 1 :	General Fill Area 9.7	General Fill Area 9.7	General Fill Area 9.7	General Fill Area 9.7		
Location 2 :	E 499534	E 499545	E 499542	E 499523		
Location 3 :	N 6932227	N 6932177	N 6932190	N 6932195		
Location 4 :	0.9m Below Finish Level	0.6m Below Finish Level	0.3m Below Finish Level	0.3m Below Finish Level		
Test Fraction (mm) :	<19mm	<19mm	<19mm	<19mm		
Oversize Wet :	19%	20%	17%	0%		
Oversize Density - Dry (t/m³) :	2.29	2.23	2.23	-		
Assigned MDR (Yes/No) :	No	No	No	No		
MDR Sample Number :	S/192923	S/192924	S/192925	S/192926		
MDR Test Date :	27/04/2023	27/04/2023	27/04/2023	27/04/2023		
Compaction Type :	Standard	Standard	Standard	Standard		
Soil Description :	Gravelly SAND - Brown	Gravelly SAND - Brown	Gravelly SAND - Brown	Gravelly SAND - Brown		
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.14	2.15	2.17	2.13		
Moisture Variation :	3.0%	3.0%	3.0%	3.0%		
ADJ PCWD (t/m³) :	2.16	2.17	2.18	-		
ADJ Moisture Variation :	2.5%	2.5%	2.5%	-		
<i>Moisture Test Results :</i>						
Field Moisture Content :	4.5%	5.5%	4.5%	9.5%		
Moisture Specification :	-	-	-	-		
Variation from OMC :	2.5% Dry of OMC	2.5% Dry of OMC	2.5% Dry of OMC	3.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.16	2.17	2.18	2.11		
Density Specification :	95%	95%	95%	95%		
Wet Density Ratio :	99.5%	100.0%	100.0%	99.0%		
Remarks :						
	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  Nick Dobson - Signatory	

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/10047 - 119/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	24/05/2023
Project Name :	Everleigh Estate - Precinct 9.4 Earthworks				Test Request :	-
Project Number :	PTP/10047				Page 1 of 1	
Location :	Greenbank					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/192726	S/192731	S/192732	S/192733		
Date Tested :	20/04/2023	20/04/2023	20/04/2023	20/04/2023		
Material Source :	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	150 / 175	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	AS1289.1.2.1 - cl6.4b		
Time :	11:03	11:15	11:30	11:45		
Lot Number :	-	-	-	-		
Location 1 :	E 499466	E 499465	E 499453	E 499430		
Location 2 :	N 6932195	N 6932206	N 6932212	N 6932222		
Location 3 :	1.2m Below Finish Level	0.8m Below Finish Level	0.4m Below Finish Level	Finish Level		
Location 4 :	-	-	-	-		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	0%	0%	0%	0%		
Oversize Density - Dry (t/m³) :	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No		
MDR Sample Number :	S/192726	S/192731	S/192732	S/192733		
MDR Test Date :	26/04/2023	26/04/2023	26/04/2023	26/04/2023		
Compaction Type :	Standard	Standard	Standard	Standard		
Soil Description :	Sandy GRAVEL - Brown	Sandy GRAVEL - Brown	Sandy GRAVEL - Brown	Sandy GRAVEL - Brown		
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.17	2.14	2.16	2.15		
Moisture Variation :	2.0%	2.0%	2.0%	2.0%		
ADJ PCWD (t/m³) :	-	-	-	-		
ADJ Moisture Variation :	-	-	-	-		
Moisture Test Results :						
Field Moisture Content :	7.5%	6.5%	7.0%	7.5%		
Moisture Specification :	±2% of OMC	±2% of OMC	±2% of OMC	±2% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.19	2.19	2.17	2.18		
Density Specification :	95%	95%	95%	95%		
Wet Density Ratio :	101.0%	102.5%	100.5%	101.5%		
Remarks :						
 <small>WORLD RECOGNISED ACCREDITATION</small>	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  Nick Dobson - Signatory	

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/10047 - 124/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	24/05/2023
Project Name :	Everleigh Estate - Precinct 9.4 Earthworks				Test Request :	-
Project Number :	PTP/10047				Page 1 of 1	
Location :	Greenbank					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/194208	S/194209	S/194210	S/194211		
Date Tested :	3/05/2023	3/05/2023	3/05/2023	3/05/2023		
Material Source :	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	150 / 175	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	AS1289.1.2.1 - cl6.4b		
Time :	13:00	13:15	13:30	13:45		
Lot Number :	-	-	-	-		
Location 1 :	E 499513	E 499527	E 499534	E 499542		
Location 2 :	N 6932147	N 6932158	N 6932174	N 6932188		
Location 3 :	Finish Level	Finish Level	Finish Level	Finish Level		
Location 4 :	-	-	-	-		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	19%	13%	0%	19%		
Oversize Density - Dry (t/m³) :	2.21	2.34	-	2.26		
Assigned MDR (Yes/No) :	No	No	No	No		
MDR Sample Number :	S/194208	S/194209	S/194210	S/194211		
MDR Test Date :	11/05/2023	8/05/2023	8/05/2023	8/05/2023		
Compaction Type :	Standard	Standard	Standard	Standard		
Soil Description :	Sandy GRAVEL - Brown	Sandy GRAVEL - Brown	Sandy GRAVEL - Brown	Sandy GRAVEL - Brown		
MDR Test Results						
PCWD (t/m³) :	2.16	2.17	2.21	2.20		
Moisture Variation :	0.0%	0.0%	0.0%	0.0%		
ADJ PCWD (t/m³) :	2.17	2.19	-	2.21		
ADJ Moisture Variation :	0.0%	0.0%	-	-		
Moisture Test Results						
Field Moisture Content :	8.0%	9.0%	11.5%	9.0%		
Moisture Specification :	±2% of OMC	±2% of OMC	±2% of OMC	±2% of OMC		
Variation from OMC :	0.0% Wet of OMC	0.0% Wet of OMC	At OMC	At OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A		
Density Test Results						
Field Wet Density (t/m³) :	2.11	2.13	2.14	2.15		
Density Specification :	95%	95%	95%	95%		
Wet Density Ratio :	97.5%	97.5%	97.0%	97.5%		
Remarks :						
 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	
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Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadforths				Report Number :	SR/PTP/10047 - 125/1
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD				Report Date :	24/05/2023
Project Name :	Everleigh Estate - Precinct 9.4 Earthworks				Test Request :	-
Project Number :	PTP/10047					
Location :	Greenbank				Page 1 of 1	
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/194450	S/194452	S/194453	S/194454		
Date Tested :	4/05/2023	4/05/2023	4/05/2023	4/05/2023		
Material Source :	Onsite	Onsite	Onsite	Onsite		
For use as :	General Fill	General Fill	General Fill	General Fill		
Test / Layer Depths :	150 / 175	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	AS1289.1.2.1 - cl6.4b		
Time :	08:00	08:15	08:30	08:45		
Lot Number :	-	-	-	-		
Location 1 :	E 499489	E 499487	E 499488	E 499525		
Location 2 :	N 6932191	N 6932199	N 6932225	N 6932220		
Location 3 :	0.9m Below Finish Level	0.6m Below Finish Level	0.3m Below Finish Level	Finish Level		
Location 4 :	-	-	-	-		
Test Fraction (mm) :	< 19mm	< 19mm	< 19mm	< 19mm		
Oversize Wet :	0%	0%	0%	0%		
Oversize Density - Dry (t/m³) :	-	-	-	-		
Assigned MDR (Yes/No) :	No	No	No	No		
MDR Sample Number :	S/194450	S/194452	S/194453	S/194454		
MDR Test Date :	8/05/2023	8/05/2023	8/05/2023	8/05/2023		
Compaction Type :	Standard	Standard	Standard	Standard		
Soil Description :	Sandy GRAVEL - Grey	Sandy GRAVEL - Grey	Sandy GRAVEL - Grey	Sandy GRAVEL - Grey		
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.15	2.17	2.16	2.17		
Moisture Variation :	2.0%	2.0%	2.0%	1.5%		
ADJ PCWD (t/m³) :	-	-	-	-		
ADJ Moisture Variation :	-	-	-	-		
<i>Moisture Test Results</i>						
Field Moisture Content :	9.0%	9.5%	9.0%	9.5%		
Moisture Specification :	±2% of OMC	±2% of OMC	±2% of OMC	±2% of OMC		
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC	1.5% Dry of OMC		
Relative Moisture Ratio (Q250) :	-	-	-	-		
Moisture Ratio :	N/A	N/A	N/A	N/A		
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.18	2.18	2.16	2.16		
Density Specification :	95%	95%	95%	95%		
Wet Density Ratio :	101.5%	100.5%	100.0%	99.5%		
Remarks :						
	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  Nick Dobson - Signatory	

Soil Compaction and Density Tests Report - Compaction Control

Client :	Shadfords			Report Number :	SR/PTP/10047 - 109/1	
Client Address :	99 Sandalwood Lane, Forest Glen, 4556, QLD			Report Date :	24/04/2023	
Project Name :	Everleigh Estate - Precinct 9.4 Earthworks			Test Request :	-	
Project Number :	PTP/10047			Page 1 of 1		
Location :	Greenbank					
Test Methods :	AS1289.5.4.1, AS1289.5.8.1, AS1289.2.1.1, AS1289.5.7.1,					
Sample Number :	S/190624	S/190625	S/190626			
Date Tested :	11/04/2023	11/04/2023	11/04/2023			
Material Source :	Onsite	Onsite	Onsite			
For use as :	General Fill	General Fill	General Fill			
Test / Layer Depths :	175 / 150	175 / 150	175 / 150			
Sampling Method :	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b	AS1289.1.2.1 - cl6.4b			
Time :	12:00	12:15	12:30			
Lot Number :	-	-	-			
Location 1 :	E 499392	E 499408	E 499379			
Location 2 :	N 6932195	N 6932198	N 6932205			
Location 3 :	0.6m Below Finish Level	0.6m Below Finish Level	0.6m Below Finish Level			
Location 4 :	-	-	-			
Test Fraction (mm) :	< 19mm	< 19mm	< 37.5mm			
Oversize Wet :	16%	17%	16%			
Oversize Density - Dry (t/m³) :	2.78	2.81	2.79			
Assigned MDR (Yes/No) :	No	No	No			
MDR Sample Number :	S/190624	S/190625	S/190626			
MDR Test Date :	19/04/2023	19/04/2023	19/04/2023			
Compaction Type :	Standard	Standard	Standard			
Soil Description :	Gravelly Sandy CLAY Grey	Gravelly Sandy CLAY Grey	Gravelly Sandy CLAY Grey			
<i>MDR Test Results</i>						
PCWD (t/m³) :	2.11	2.10	2.11			
Moisture Variation :	2.5%	2.5%	2.5%			
ADJ PCWD (t/m³) :	2.19	2.20	2.19			
ADJ Moisture Variation :	2.0%	2.0%	2.0%			
<i>Moisture Test Results</i>						
Field Moisture Content :	8.0%	7.5%	7.5%			
Moisture Specification :	±2% of OMC	±2% of OMC	±2% of OMC			
Variation from OMC :	2.0% Dry of OMC	2.0% Dry of OMC	2.0% Dry of OMC			
Relative Moisture Ratio (Q250) :	-	-	-			
Moisture Ratio :	N/A	N/A	N/A			
<i>Density Test Results</i>						
Field Wet Density (t/m³) :	2.19	2.12	2.11			
Density Specification :	95%	95%	95%			
Wet Density Ratio :	100.0%	96.5%	96.0%			
Remarks :						
 <p>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  Nick Dobson - Signatory		