

Banyan Place Stage 7B

GITA Inspection Verification Report

Prepared For: Lojac Civil Pty Ltd

Report Number P231557A V1

Version Release Date 16 May 2024

Report Released By C Caulfield

Title Laboratory Manager

Signature



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1 Introduction

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical Inspection and Testing Authority (GITA) to provide Level 1 supervision and testing works on the earthworks component for Banyan Place Stage 7B. This work was conducted over the period of 17/08/2023 to 16/01/2024.

This report presents that the allotment earthworks was carried out in accordance with AS3798-2007 *Guidelines for Earthworks for Commercial and Residential Development* and in compliance with the compaction control specifications established by the contractor.

2 Scope of Work

2.1 Area of Work

The areas of work included lots 701 to 728, bounded by streets Ficus Way, Everlasting Road, Spray Alley and Horvath Boulevard. The site will be a Residential development.

The area on which fill was placed is shown on site plan (Appendix 1: *Test Location Plan*) based on drawings prepared by Charlton Degg (Drawing Reference: 1470-7/R04 E) and provided by Lojac Civil Pty Ltd.

The supervision work by the GITA involved both inspection of sub grade preparation work and full time inspection and testing of fill placement.

2.2 Specification

The technical specification (Reference from Drawings) for compaction control requirements was provided by Lojac Civil Pty Ltd and established that:

Test Rolling is required for all layers of structural fill and materials within 150mm of permanent subgrade level so as to withstand test rolling without visible deformation or springing. Corrective action is required where unstable areas exceed 20% of the area being considered by test rolling.

Section 5.2 of AS3798-2007 (Section 5.2) establishes a specification requirement for a minimum density ratio of not less than 95% noting that soils containing more than 20% of particles coarser than 37.5mm cannot be tested for relative compaction using the procedures of AS1289 5.1.1 and AS1289 5.2.1.

In accordance with Table 8.1 (AS3798), for large scale operations, (greater than 1500m²), the minimum testing frequency is 1 test per layer per material type per 2500m² or 1 test per 500m³ distributed reasonable evenly throughout full depth and area or 3 tests per lot. AS3798 defines a lot as “an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work”. All three of these test frequencies must be achieved and this is typically confirmed to have been achieved when 3 tests per visit (day) have been completed.

2.3 Limitations

Terra Firma Laboratories cannot verify any works completed by others outside of the time period specified in the introduction. Uncontrolled works may include, but are not limited to trenching for services, cut and fill works for slab preparation or subsequent removal of vegetation and back fill of holes unless specified in section 2.1 of this report.

Terra Firma Laboratories cannot verify that the material used as a filling medium is free from chemical or other contamination. The scope and the period of Terra Firma Laboratories as described in the introduction are subject to restrictions and limitations. Terra Firma Laboratories did not perform a complete assessment of all possible conditions and circumstances that may exist at the site. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by Terra Firma Laboratories.

Verification of finished surface level to design levels is outside of the scope of the GITA report.

Any drawings or marked locations presented in this report should be considered only as pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions should not be used for accurate calculations or dimensioning.

Where data has been supplied by the client or a third party, it is assumed that the information is correct unless otherwise stated. No responsibility is accepted by Terra Firma Laboratories for incomplete or inaccurate data supplied by others.

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3 Construction Method

3.1 Subgrade Preparation

At the time of subgrade inspection the following was observed:

- Subgrade preparation involved stripping the site of topsoil, vegetation and organic matter to a depth of approximately 200mm below existing levels.
- The site was cleared of all trees and stumps to the extent necessary for the fill placement to proceed
- The roots of all trees and any debris was removed from site prior to any fill placement

The sub-grade area was then proof-rolled to confirm it was capable of withstanding test rolling without visible deformation or springing and any areas observed to be soft or otherwise unsuitable were rectified. The sub-grade was watered and scarified prior to fill placement to aid layer bonding.

3.2 Fill Placement

The contractor was observed to have suitable construction equipment and plant available on-site during the construction period for use in the fill placement.

All fill was placed in layers of thicknesses not exceeding 300mm. At the completion of a placed layer, compaction testing was performed to confirm appropriate compaction had been achieved and supported the observations made. It should be noted that the compaction tests are representative samples of the fill placed and support the visual assessment of the works completed. Each house lot does not necessarily require a compaction test to have been conducted within the house allotment but may have been verified by testing conducted within up to a 2500m² area of the house lot.

Final fill placement levels were verified against design level by others. For the purposes of this report, it was observed that finished levels were in accordance with levels marked on site by survey markers.

The final 200mm of material placed across the site was placed as a topsoil layer or growing medium and should be considered as non-structural, as it was placed in an uncontrolled manner, as allowed by specifications and placement of the final 200mm of material was not observed by the GITA.

4 Construction Verification

Compaction Verification testing is summarized in a detailed test register with test certificates attached provided in Appendix 2: *Compaction Test Register and Test Certificates*. A test location

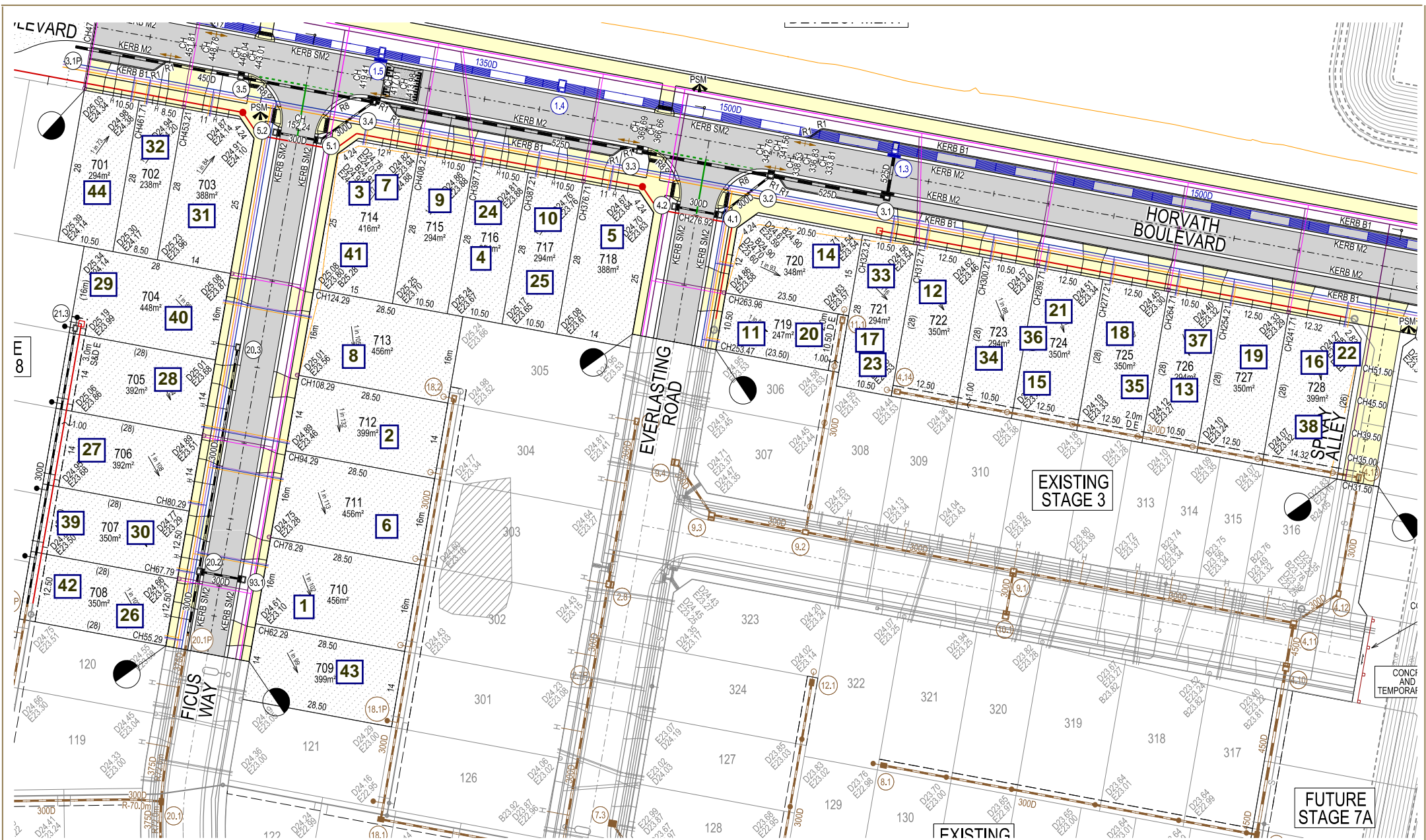
plan (P231557D1, Appendix 1) providing a schematic of test locations across the extent of scope of works for every placed layer of fill is also documented.

A total of 44 density tests (Hilf method in accordance with 1289 5.7.1) were undertaken with 4 failed results. The contractor was notified of any failed tests and the failed areas were ripped, watered, compacted and then re-tested to confirm compliance with the specification. The results summarised in the compaction test register (Appendix 2) confirm that for every layer of fill placed in a specific work area, satisfactory testing was completed.

5 Statement of Compliance

The intention of this report is to provide a description of the earthworks construction for Stage 7B at Banyan Place. For completed fill areas of greater than 300mm, and for works completed between 17/08/2023 and 16/01/2024, earthworks construction activities were conducted under the full time supervision of the Geotechnical Inspection and Testing Authority. Inspections and testing of the fill areas at this site indicate that both sub grade preparation and fill placement have been conducted in accordance with the specification. The earthworks construction for Stage 7B of Banyan Place was observed to be constructed in compliance with the requirements of the Technical Specification.

Appendix 1: Test Location Plan



Our Head Office
47 National Ave
Pakenham, VIC 3810

Our Laboratories
Pakenham 03 9769 5799
Deer Park 03 8348 5596
Bibra Lake 08 9395 7220

Test Location Plan

not to scale

Client: Lojac Civil Pty Ltd

Project: Banyan Place, Stage 7B

Reference: P231557 D1

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P231557 D1

Appendix 2: Compaction Test Register and Test Certificates



Compaction Test Register

Client: Lojac Civil Pty Ltd
Project: Banyan Place Stage 7B

Project No: P231557
Specification: 95%

Date:	Test No:	Layer:	Retest of:	Density:	Pass/Fail:	Lot No:	Report No:
17/08/2023	1	Layer 1		95.5%	Pass	Lot 710	P231557-1
17/08/2023	2	Layer 1		98.0%	Pass	Lot 712	P231557-1
17/08/2023	3	Layer 2		91.0%	Fail	Lot 714	P231557-1
24/08/2023	4	Layer 1		99.0%	Pass	Lot 716	P231557-2
24/08/2023	5	Layer 2		105.5%	Pass	Lot 718	P231557-2
24/08/2023	6	Layer 2		103.0%	Pass	Lot 711	P231557-2
28/08/2023	7	Layer 2	Test #3	100.5%	Pass	Lot 714	P231557-3
28/08/2023	8	Layer 3		98.5%	Pass	Lot 713	P231557-3
28/08/2023	9	Layer 3		100.0%	Pass	Lot 715	P231557-3
28/08/2023	10	Layer 4		89.0%	Fail	Lot 717	P231557-3
28/08/2023	11	Layer 1		99.5%	Pass	Lot 719	P231557-3
29/08/2023	12	Layer 1		95.5%	Pass	Lot 722	P231557-4
29/08/2023	13	Layer 1		101.5%	Pass	Lot 726	P231557-4
29/08/2023	14	Layer 1		103.5%	Pass	Lot 720	P231557-4
29/08/2023	15	Layer 1		102.0%	Pass	Lot 724	P231557-4
4/09/2023	16	Layer 2		94.0%	Fail	Lot 728	P231557-5
4/09/2023	17	Layer 2		93.0%	Fail	Lot 721	P231557-5
4/09/2023	18	Layer 2		96.5%	Pass	Lot 725	P231557-5
4/09/2023	19	Layer 2		97.5%	Pass	Lot 727	P231557-5
22/09/2023	20	Layer 3		98.0%	Pass	Lot 719	P231557-6
22/09/2023	21	Layer 3		102.0%	Pass	Lot 724	P231557-6
22/09/2023	22	Layer 2	Test #16	109.0%	Pass	Lot 728	P231557-6
16/11/2023	23	Layer 2	Test #17	96.0%	Pass	Lot 721	P231557-7
16/11/2023	24	Layer 5		99.5%	Pass	Lot 716	P231557-7
16/11/2023	25	Layer 4	Test #10	97.5%	Pass	Lot 717	P231557-7
7/12/2023	26	Layer 1		100.0%	Pass	Lot 708	P231557-8
7/12/2023	27	Layer 1		101.0%	Pass	Lot 706	P231557-8
7/12/2023	28	Layer 2		98.5%	Pass	Lot 705	P231557-8
7/12/2023	29	Layer 2		100.5%	Pass	Lot 704	P231557-8
8/12/2023	30	Layer 3		99.0%	Pass	Lot 707	P231557-9
8/12/2023	31	Layer 3		97.0%	Pass	Lot 703	P231557-9
8/12/2023	32	Layer 3		99.5%	Pass	Lot 702	P231557-9
18/12/2023	33	FSL		97.5%	Pass	Lot 721	P231557-10
18/12/2023	34	FSL		99.5%	Pass	Lot 723	P231557-10
18/12/2023	35	FSL		99.5%	Pass	Lot 725	P231557-10
20/12/2023	36	FSL		100.5%	Pass	Lot 724	P231557-11
20/12/2023	37	FSL		102.0%	Pass	Lot 726	P231557-11
20/12/2023	38	FSL		99.5%	Pass	Lot 728	P231557-11
15/01/2024	39	Layer 4		100.0%	Pass	Lot 707	P231557-12
15/01/2024	40	Layer 3		105.5%	Pass	Lot 704	P231557-12
15/01/2024	41	FSL		100.5%	Pass	Lot 714	P231557-12



Compaction Test Register

Client: Lojac Civil Pty Ltd

Project No: P231557

Project: Banyan Place Stage 7B

Specification: 95%

Date:	Test No:	Layer:	Retest of:	Density:	Pass/Fail:	Lot No:	Report No:
16/01/2024	42	FSL		96.0%	Pass	Lot 708	P231557-13
16/01/2024	43	FSL		97.0%	Pass	Lot 709	P231557-13
16/01/2024	44	FSL		98.0%	Pass	Lot 701	P231557-13

Material Test Report

Report Number: P231557-1
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
35/148 Chesterville Road, Moorabbin Vic 3189
Contact: Rick
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13176
Date Sampled: 17/08/2023
Dates Tested: 17/08/2023 - 18/08/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



Pakenham Laboratory
47 National Avenue Pakenham VIC 3810
Phone: (03) 9769 5799
Email: ccaulfield@terrafirmalabs.com.au



Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
Laboratory Manager
NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-13176A	P23-13176B	P23-13176C
Test Number	1	2	3
Date Tested	17/08/2023	17/08/2023	17/08/2023
Time Tested	**	**	**
Test Request #/Location	Lot 710	Lot 712	Lot 714
Layer / Reduced Level	Layer 1	Layer 1	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	9	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	0	0
Field Wet Density (FWD) t/m ³	2.08	2.07	2.00
Field Moisture Content %	17.9	17.8	18.7
Field Dry Density (FDD) t/m ³	1.79	1.76	1.69
Peak Converted Wet Density t/m ³	**	2.11	2.20
Adjusted Peak Converted Wet Density t/m ³	2.18	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	13.3	15.1	16.0
Adj. Field Moisture Content % (AS1289.5.4.1)	16.3	17.8	18.7
Moisture Ratio % (AS1289.5.4.1)	**	117.5	117.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	123.0	**	**
Moisture Variation (Wv) %	**	-2.5	-2.5
Adjusted Moisture Variation %	-3.0	**	**
Hilf Density Ratio (%)	95.5	98.0	91.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-2
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Contact: Rick
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13227
Date Sampled: 24/08/2023
Dates Tested: 24/08/2023 - 25/08/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place - Stage 7
Material: CLAY
Material Source: Imported



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 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-13227A	P23-13227B	P23-13227C
Test Number	4	5	6
Date Tested	24/08/2023	24/08/2023	24/08/2023
Time Tested	**	**	**
Test Request #/Location	Lot 716	Lot 718	Lot 711
Layer / Reduced Level	Layer 1	Layer 2	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	10	10	9
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.09	2.28	2.21
Field Moisture Content %	18.0	15.6	17.4
Field Dry Density (FDD) t/m ³	1.80	2.00	1.91
Peak Converted Wet Density t/m ³	**	**	**
Adjusted Peak Converted Wet Density t/m ³	2.11	2.16	2.15
Adj. Optimum Moisture Content % (AS1289.5.4.1)	15.5	13.3	14.9
Adj. Field Moisture Content % (AS1289.5.4.1)	16.3	14.0	15.8
Moisture Ratio % (AS1289.5.4.1)	**	**	**
Adjusted Moisture Ratio % (AS1289.5.4.1)	105.0	105.5	106.5
Moisture Variation (Wv) %	**	**	**
Adjusted Moisture Variation %	-1.0	-0.5	-1.0
Hilf Density Ratio (%)	99.0	105.5	103.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-3
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Contact: Rick
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13271
Date Sampled: 28/08/2023
Dates Tested: 28/08/2023 - 30/08/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



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Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1					
Sample Number	P23-13271A	P23-13271B	P23-13271C	P23-13271D	P23-13271E
Test Number	7	8	9	10	11
Date Tested	28/08/2023	28/08/2023	28/08/2023	28/08/2023	28/08/2023
Time Tested	**	**	**	**	**
Test Request #/Location	Lot 714 Retest #3	Lot 713	Lot 715	Lot 717	Lot 719
Layer / Reduced Level	Layer 2	Layer 3	Layer 3	Layer 4	Layer 1
Thickness of Layer (mm)	300	300	300	300	300
Soil Description	CLAY	CLAY	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	10	0	12	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**	**	**
Field Wet Density (FWD) t/m ³	2.09	2.18	2.07	1.99	2.12
Field Moisture Content %	18.4	14.6	17.5	15.7	14.9
Field Dry Density (FDD) t/m ³	1.76	1.93	1.76	1.75	1.84
Peak Converted Wet Density t/m ³	2.08	**	2.07	**	2.13
Adjusted Peak Converted Wet Density t/m ³	**	2.22	**	2.23	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	13.4	**	11.6	**
Adj. Field Moisture Content % (AS1289.5.4.1)	18.4	13.2	17.5	13.8	14.9
Moisture Ratio % (AS1289.5.4.1)	99.0	**	104.5	**	109.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	98.5	**	119.0	**
Moisture Variation (Wv) %	0.0	**	-1.0	**	-1.5
Adjusted Moisture Variation %	**	0.0	**	-2.0	**
Hilf Density Ratio (%)	100.5	98.5	100.0	89.0	99.5
Compaction Method	Standard	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-4
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Contact: Rick
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13288
Date Sampled: 29/08/2023
Dates Tested: 29/08/2023 - 30/08/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



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 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-13288A	P23-13288B	P23-13288C	P23-13288D
Test Number	12	13	14	15
Date Tested	29/08/2023	29/08/2023	29/08/2023	29/08/2023
Time Tested	**	**	**	**
Test Request #/Location	Lot 722	Lot 726	Lot 720	Lot 724
Layer / Reduced Level	Layer 1	Layer 1	Layer 1	Layer 1
Thickness of Layer (mm)	300	300	300	300
Soil Description	Silty Clay	Silty Clay	Silty Clay	Silty Clay
Test Depth (mm)	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	17	15	0	5
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**	**
Field Wet Density (FWD) t/m ³	2.23	2.03	2.07	2.11
Field Moisture Content %	15.3	15.9	17.0	14.6
Field Dry Density (FDD) t/m ³	1.98	1.79	1.77	1.85
Peak Converted Wet Density t/m ³	**	**	2.00	**
Adjusted Peak Converted Wet Density t/m ³	2.33	2.00	**	2.07
Adj. Optimum Moisture Content % (AS1289.5.4.1)	11.5	12.8	**	15.9
Adj. Field Moisture Content % (AS1289.5.4.1)	12.7	13.6	17.0	13.9
Moisture Ratio % (AS1289.5.4.1)	**	**	87.5	**
Adjusted Moisture Ratio % (AS1289.5.4.1)	110.5	105.5	**	87.0
Moisture Variation (Wv) %	**	**	2.5	**
Adjusted Moisture Variation %	-1.0	-0.5	**	2.0
Hilf Density Ratio (%)	95.5	101.5	103.5	102.0
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-5
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Contact: Rick
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13341
Date Sampled: 04/09/2023
Dates Tested: 04/09/2023 - 06/09/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



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Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1				
Sample Number	P23-13341A	P23-13341B	P23-13341C	P23-13341D
Test Number	16	17	18	19
Date Tested	04/09/2023	04/09/2023	04/09/2023	04/09/2023
Time Tested	**	**	**	**
Test Request #/Location	Lot 728	Lot 721	Lot 725	Lot 727
Layer / Reduced Level	Layer 2	Layer 2	Layer 2	Layer 2
Thickness of Layer (mm)	300	300	300	300
Soil Description	CLAY	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	8	9
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**	**
Field Wet Density (FWD) t/m ³	1.91	1.95	2.15	2.18
Field Moisture Content %	14.7	18.2	13.1	16.6
Field Dry Density (FDD) t/m ³	1.66	1.65	1.92	1.89
Peak Converted Wet Density t/m ³	2.03	2.09	**	**
Adjusted Peak Converted Wet Density t/m ³	**	**	2.23	2.23
Adj. Optimum Moisture Content % (AS1289.5.4.1)	14.6	15.9	11.8	13.0
Adj. Field Moisture Content % (AS1289.5.4.1)	14.7	18.2	12.0	15.1
Moisture Ratio % (AS1289.5.4.1)	101.0	114.0	**	**
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	102.0	117.0
Moisture Variation (Wv) %	0.0	-2.0	**	**
Adjusted Moisture Variation %	**	**	0.0	-2.0
Hilf Density Ratio (%)	94.0	93.0	96.5	97.5
Compaction Method	Standard	Standard	Standard	Standard
Report Remarks	**	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-6
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13489
Date Sampled: 22/09/2023 10:00
Dates Tested: 22/09/2023 - 25/09/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place St. 7 - Level One Fill
Material: CLAY
Material Source: Imported



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Approved Signatory: Chris Caulfield
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P23-13489A	P23-13489B	P23-13489C
Test Number	20	21	22
Date Tested	22/09/2023	22/09/2023	22/09/2023
Time Tested	13:37	13:44	13:52
Test Request #/Location	Lot 719	Lot 724	Lot 728 Retest #16
Layer / Reduced Level	Layer 3	Layer 3	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	0
Field Wet Density (FWD) t/m ³	2.03	2.12	2.25
Field Moisture Content %	18.0	17.9	16.3
Field Dry Density (FDD) t/m ³	1.72	1.80	1.93
Peak Converted Wet Density t/m ³	2.07	2.08	2.06
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	17.0	17.1	18.3
Adj. Field Moisture Content % (AS1289.5.4.1)	18.0	17.9	16.3
Moisture Ratio % (AS1289.5.4.1)	106.5	104.5	89.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-1.0	-1.0	2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	98.0	102.0	109.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-7
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Contact: Rick
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 13924
Date Sampled: 16/11/2023
Dates Tested: 16/11/2023 - 17/11/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: Gravelly CLAY
Material Source: Imported



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 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-13924A	P23-13924B	P23-13924C
Test Number	23	24	25
Date Tested	16/11/2023	16/11/2023	16/11/2023
Time Tested	**	**	**
Test Request #/Location	Lot 721 Retest #17	Lot 716	Lot 717 Retest #10
Layer / Reduced Level	Layer 2	Layer 5	Layer 4
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	1.99	2.01	2.06
Field Moisture Content %	12.5	14.4	14.9
Field Dry Density (FDD) t/m ³	1.77	1.76	1.80
Peak Converted Wet Density t/m ³	2.07	2.02	2.11
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	14.3	16.3	14.6
Adj. Field Moisture Content % (AS1289.5.4.1)	12.5	14.4	14.9
Moisture Ratio % (AS1289.5.4.1)	88.0	88.0	101.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	1.5	2.0	0.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	99.5	97.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-8
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14088
Date Sampled: 06/12/2023
Dates Tested: 06/12/2023 - 08/12/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-14088A	P23-14088B	P23-14088C
Test Number	26	27	28
Date Tested	07/12/2023	07/12/2023	07/12/2023
Time Tested	**	**	**
Test Request #/Location	Lot 708	Lot 706	Lot 705
Layer / Reduced Level	Layer 1	Layer 1	Layer 2
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.08	2.10	2.05
Field Moisture Content %	17.1	18.1	18.9
Field Dry Density (FDD) t/m ³	1.78	1.78	1.73
Peak Converted Wet Density t/m ³	2.08	2.08	2.08
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	17.1	18.1	18.9
Moisture Ratio % (AS1289.5.4.1)	102.0	102.5	116.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-0.5	-0.5	-2.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.0	101.0	98.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-9
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14098
Date Sampled: 07/12/2023
Dates Tested: 07/12/2023 - 08/12/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



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Approved Signatory: Chris Caulfield
Laboratory Manager
NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-14098A		
Test Number	29		
Date Tested	07/12/2023		
Time Tested	**		
Test Request #/Location	Lot 704		
Layer / Reduced Level	Layer 2		
Thickness of Layer (mm)	300		
Soil Description	CLAY		
Test Depth (mm)	275		
Sieve used to determine oversize (mm)	19.0		
Percentage of Wet Oversize (%)	0		
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**		
Field Wet Density (FWD) t/m ³	2.08		
Field Moisture Content %	21.0		
Field Dry Density (FDD) t/m ³	1.72		
Peak Converted Wet Density t/m ³	2.07		
Adjusted Peak Converted Wet Density t/m ³	**		
Adj. Optimum Moisture Content % (AS1289.5.4.1)	18.0		
Adj. Field Moisture Content % (AS1289.5.4.1)	21.0		
Moisture Ratio % (AS1289.5.4.1)	117.0		
Adjusted Moisture Ratio % (AS1289.5.4.1)	**		
Moisture Variation (Wv) %	-3.0		
Adjusted Moisture Variation %	**		
Hilf Density Ratio (%)	100.5		
Compaction Method	Standard		
Report Remarks	**		

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-10
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14118
Date Sampled: 08/12/2023
Dates Tested: 08/12/2023 - 11/12/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Imported



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Accredited for compliance with ISO/IEC 17025 - Testing

Approved Signatory: Chris Caulfield
 Laboratory Manager
 NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-14118A	P23-14118B	P23-14118C
Test Number	30	31	32
Date Tested	08/12/2023	08/12/2023	08/12/2023
Time Tested	**	**	**
Test Request #/Location	Lot 707	Lot 703	Lot 702
Layer / Reduced Level	Layer 3	Layer 3	Layer 3
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.10	2.05	2.09
Field Moisture Content %	16.3	17.9	19.5
Field Dry Density (FDD) t/m ³	1.80	1.74	1.75
Peak Converted Wet Density t/m ³	2.11	2.11	2.10
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	15.3	16.1	17.5
Adj. Field Moisture Content % (AS1289.5.4.1)	16.3	17.9	19.5
Moisture Ratio % (AS1289.5.4.1)	106.5	111.0	111.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-1.0	-2.0	-2.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	99.0	97.0	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-11
Issue Number: 1
Date Issued: 21/12/2023
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14188
Date Sampled: 18/12/2023
Dates Tested: 18/12/2023 - 20/12/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Onsite



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Approved Signatory: Chris Caulfield
 Project Manager

NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1			
Sample Number	P23-14188A	P23-14188B	P23-14188C
Test Number	33	34	35
Date Tested	18/12/2023	18/12/2023	18/12/2023
Time Tested	**	**	**
Test Request #/Location	Lot 721	Lot 723	Lot 725
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	0	0	0
Field Wet Density (FWD) t/m ³	2.02	2.08	2.05
Field Moisture Content %	18.5	17.3	19.1
Field Dry Density (FDD) t/m ³	1.71	1.77	1.72
Peak Converted Wet Density t/m ³	2.08	2.09	2.07
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	17.6	16.5	18.2
Adj. Field Moisture Content % (AS1289.5.4.1)	18.5	17.3	19.1
Moisture Ratio % (AS1289.5.4.1)	105.0	104.5	105.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-1.0	-0.5	-1.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	97.5	99.5	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-12
Issue Number: 1
Date Issued: 15/01/2024
Client: Lojac Civil Pty Ltd
35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14207
Date Sampled: 13/12/2023
Dates Tested: 20/12/2023 - 21/12/2023
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Onsite



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Approved Signatory: Benjamin McLeod
Senior Technician

NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P23-14207A	P23-14207B	P23-14207C
Test Number	36	37	38
Date Tested	20/12/2023	20/12/2023	20/12/2023
Time Tested	**	**	**
Test Request #/Location	Lot 724	Lot 726	Lot 728
Layer / Reduced Level	Last Layer	Last Layer	Last Layer
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	**
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.08	2.09	2.06
Field Moisture Content %	15.8	22.9	21.2
Field Dry Density (FDD) t/m ³	1.79	1.70	1.70
Peak Converted Wet Density t/m ³	2.06	2.05	2.07
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	15.8	22.9	**
Moisture Ratio % (AS1289.5.4.1)	98.0	117.0	117.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	0.5	-3.5	-3.0
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.5	102.0	99.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-13
Issue Number: 1
Date Issued: 22/01/2024
Client: Lojac Civil Pty Ltd
35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14230
Date Sampled: 15/01/2024
Dates Tested: 15/01/2024 - 16/01/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Onsite



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Project Manager

NATA Accredited Laboratory Number: 15357

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P24-14230A	P24-14230B	P24-14230C
Test Number	39	40	41
Date Tested	15/01/2024	15/01/2024	15/01/2024
Time Tested	**	**	**
Test Request #/Location	Lot 707	Lot 704	Lot 714
Layer / Reduced Level	Layer 4	Layer 4	Layer 4
Thickness of Layer (mm)	300	300	300
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	0	0
Field Wet Density (FWD) t/m ³	2.09	2.12	2.10
Field Moisture Content %	19.8	12.8	15.4
Field Dry Density (FDD) t/m ³	1.75	1.88	1.82
Peak Converted Wet Density t/m ³	2.09	2.01	2.09
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	15.4	15.7
Adj. Field Moisture Content % (AS1289.5.4.1)	19.8	12.8	15.4
Moisture Ratio % (AS1289.5.4.1)	118.5	83.5	98.0
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-3.0	2.5	0.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	100.0	105.5	100.5
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC

Negative values = test is wet of OMC

Material Test Report

Report Number: P231557-14
Issue Number: 2 - This version supersedes all previous issues
Reissue Reason:
Date Issued: 16/05/2024
Client: Lojac Civil Pty Ltd
 35/148 Chesterville Road, Moorabbin Vic 3189
Project Number: P231557
Project Name: Banyan Place Stage 7 - Level One
Project Location: Officer
Work Request: 14242
Date Sampled: 16/01/2024
Dates Tested: 16/01/2024 - 17/01/2024
Sampling Method: AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted
Specification: 95%
Site Selection: Selected by Client
Location: Banyan Place Stage 7 - Level One
Material: CLAY
Material Source: Onsite



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Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1

Sample Number	P24-14242A	P24-14242B	P24-14242C
Test Number	42	43	44
Date Tested	16/01/2024	16/01/2024	16/01/2024
Time Tested	**	**	**
Test Request #/Location	Lot 708	Lot 709	Lot 701
Layer / Reduced Level	FSL	FSL	FSL
Thickness of Layer (mm)	200	200	200
Soil Description	CLAY	CLAY	CLAY
Test Depth (mm)	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0
Percentage of Dry Oversize (%) (AS1289.5.4.1)	**	**	**
Field Wet Density (FWD) t/m ³	2.03	2.02	2.03
Field Moisture Content %	15.8	18.5	19.2
Field Dry Density (FDD) t/m ³	1.76	1.70	1.70
Peak Converted Wet Density t/m ³	2.12	2.08	2.07
Adjusted Peak Converted Wet Density t/m ³	**	**	**
Adj. Optimum Moisture Content % (AS1289.5.4.1)	**	**	**
Adj. Field Moisture Content % (AS1289.5.4.1)	15.8	18.5	19.2
Moisture Ratio % (AS1289.5.4.1)	104.5	108.5	108.5
Adjusted Moisture Ratio % (AS1289.5.4.1)	**	**	**
Moisture Variation (Wv) %	-0.5	-1.5	-1.5
Adjusted Moisture Variation %	**	**	**
Hilf Density Ratio (%)	96.0	97.0	98.0
Compaction Method	Standard	Standard	Standard
Report Remarks	**	**	**

Moisture Variation Note:

Positive values = test is dry of OMC
 Negative values = test is wet of OMC

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 701

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 701 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 702

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 702 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 703

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 703 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 704

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 704 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 705

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 705 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 706

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 706 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 707

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 707 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 708

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 708 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 709

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 709 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 710

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 710 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 711

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 711 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 712

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 712 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 713

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 713 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 714

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 714 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 715

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 715 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 716

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 716 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 717

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 717 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 718

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 718 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 719

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 719 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 720

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 720 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 721

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 721 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 722

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 722 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

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For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 723

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 723 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

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For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 724

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 724 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 725

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 725 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

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For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 726

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 726 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 727

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 727 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager

16 May 2024

TO WHOM IT MAY CONCERN

Re: Banyan Place Stage 7B
Officer
Lot 728

Terra Firma Laboratories was engaged by Lojac Civil Pty Ltd as the Geotechnical and Inspection Testing Authority (GITA) to provide Level 1 supervision and testing on the earthworks component for Banyan Place, Stage 7B, Officer in accordance with Australian Standard AS3798 Guidelines for Earthworks for Commercial and Residential Development.

Lot 728 as defined in drawing Ref 1470-7/R04 E from *Charlton Degg*, provided by the contractor, was included in the scope of works.

With regard to any fill placement please consider the following:

- Controlled fill was placed up to 200mm below finished surface level. The final 200mm material is considered top soil and organic matter and not controlled fill.
- Verification of finished surface level to design levels is outside of the scope of the GITA Inspection and Verification report.
- Compaction tests results documented in a level 1 GITA report verify the construction methods observed on site are satisfactory. Testing is conducted with random sampling across an area of work that is defined in the Australian Standard as a "lot" which is "an area of work that is essentially homogenous in relation to material type and moisture condition, rolling response and compaction technique, and which has been used for the assessment of the relative compaction of an area of work" (AS 3798-2007). As such, any test completed is representative of an area that may be up to 2500m² in area and across several house lots.

A GITA Inspection Verification report (Reference: P231557A) has been published on 16 May 2024 and documents that the allotment earthworks were carried out in accordance with AS3798 and in compliance with the project specification provided by the contractor.

For and on behalf of

Terra Firma Laboratories



C Caulfield
Laboratory Manager