

REPORT

Level 1 Geotechnical Inspection and Testing Authority Services

Meridian Green Estate Clyde North Stage 49 Lots 4901 to 4912, 4924 to 4926 and 4934 to Lot 4945

Prepared for: Greenridge Properties Pty Ltd

25 June 2024 Our Ref: 1091936.049.v1

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25 June 2024	1091936.049.V1	Meridian Green Estate Stage 49 Level One Geotechnical Inspection and Testing Authority Services	STPA and RHB	RWMC	TJJC					

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1 Introduction

Chadwick Geotechnics Pty Ltd (Chadwick Geotechnics), was engaged by Greenridge Properties Pty Ltd, to provide Level 1 Geotechnical Inspection and Testing Authority (GITA), services for the earthworks conducted within Stage 49 of the Meridian Green Estate in Clyde North between project dates 14 August 2023 and 17 May 2024.

Level 1 GITA services as defined in AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development," requires full time inspection and field and laboratory testing of earthworks in accordance with AS1289 "Methods of Testing Soils for Engineering Purposes."

2 Project details

2.1 Location

Stage 49 is located to the East of Balcarra Street and West of Rhodes Way. Stage 47 and 48 are within the same development area.

The included works are shown on the Site Plan in **Appendices A**. Figure 2.1 below is an extract from Nearmap taken at the time of writing this report.



Figure 2.1: Extract from Nearmap

2.2 Roles

The organisations and their roles are presented in Table 2.1

Table 2.1:Roles on the Project

Role	Organisation
Developer	Greenridge Properties Pty Ltd
Geotechnical Inspection and Testing Authority (GITA)	Chadwick Geotechnics Pty Ltd
Designer / Superintendent	Charlton Degg Pty Ltd
Earthworks Contractor	Brown Property Group Pty Ltd

Chadwick Geotechnics undertook the field density testing, and the compaction control laboratory testing was conducted in our NATA accredited laboratories.

2.3 Dates on Site

Geotechnical technical and engineering staff from Chadwick Geotechnics were onsite for the duration of the earthworks program on the days shown in Table 2.2 below.

Table 2.2: Level 1 GITA – Onsite Presence

Month	Dates on site
August 2023	14, 15, 16
September 2023	15, 18, 20, 21, 25, 28,
April 2024	18, 29, 30, 29, 30
May 2024	2, 7, 8, 9, 14, 15, 16, 17

2.4 Included Areas

This report is applicable to material placed by the contractor on the residential lots within Meridian Green Estate Stage 49, as shown on the Site Plan in **Appendix A**, and with reference to Section 2.5 (Excluded Areas) of this report.

The following Lots were filled (or partially filled) during the Level 1 GITA supervision:

• The residential lots filled include Lot's 4901 to 4912, 4924 to 4926 and 4934 to Lot 4945.

2.5 Excluded Areas

This report does not include fill outside the general boundary of the filled areas as shown in **Appendix A** of this report. No fill was placed on the lots not mentioned in Section 2.4 of this report.

Backfill of trenches for the underground services, fill on footpaths, driveways and roads, or placement of topsoil, were not part of the scope for the works supervised by Chadwick Geotechnics.

3 Specifications

The works were to be conducted in general accordance with the 'Guidelines on earthworks for commercial and residential developments' of AS 3798-2007.

The following items were adopted as part of the project earthworks specifications:

- All Filling, in excess, of 200mm depth within the residential lots shall be undertaken to specifications satisfying the requirements of AS 3798-2007 "Guidelines on Earthworks for Commercial and Residential Development".
- The fill soils to comply with the 'Suitable Material' in accordance with Section 4.4 of the AS3798-2007, and the following:
 - Maximum particle size of 150mm.
 - \circ $\;$ Particles over 37.5mm diameter not to exceed 20% of the material.
- Organic soils, topsoil, silts, or soils containing organic matter, wood, plastics, metal, or other deleterious materials are not acceptable.
- Subgrade to be proof rolled prior to placement of an engineered fill.
- Fill to be compacted in near horizontal layers not exceeding 250mm loose thickness.
- Compaction to achieve a ratio of at least 95% Standard Maximum Dry Density (SMDD).
- Frequency of testing to be in accordance with Table 8.1 of AS3798-2007.
- Finished fill surface to be surveyed prior to placement of topsoil.

4 Inspection and Testing

The inspection and testing of earthworks have been carried out in accordance with AS3798-2007, 'Guidelines on earthworks for commercial and residential developments', with a frequency of field density tests as per Table 8.1 (explained in Section 4.5 of this report). Compaction control laboratory testing was performed in a Chadwick Geotechnics NATA accredited laboratory in accordance with AS1289 'Methods of Testing Soils for Engineering Purposes'.

4.1 Earthworks

The earthworks for the project comprised of the following phases:

- Stripping of topsoil from the proposed fill areas.
- Scarifying, moisture conditioning and compacting the Subgrade.
- Assessment, remediation, and proof rolling of subgrade.
- Geotechnical compliance testing of the soils used for fill, and,
- Placement and compaction of engineered fill.

4.2 Fill material

Material used for the construction of the fill comprised of local gravelly and silty clays won from the road boxing and trench excavations on this and the surrounding sites.

Samples were taken from the site comprising of local material used for fill was taken for geotechnical compliance testing during the works. The material compliance test results are summarised in **Table 4.1** The laboratory test certificate is attached in **Appendix C.**

Sample #	Particle	e Size Dis	stributio	on (PSD))		Liquid Limit %	Plastic	Plasticity	Source	
	37.5	13.2	4.75	1.18	425	0.75					
	mm	mm	mm	mm	μm	μm					
S23DS-06784	100	97	93	89	81	69	62	19	43	On-site	
S24DS-02657	100	100	93	82	73	61	52	21	31	On-site	

Table 4.1: Compliance test Result Summary

The laboratory test results indicate the fill material is clay of high plasticity and satisfied the requirements of the Specification.

The material was deemed as being derived from natural soils. The soil is considered as 'Suitable Material' in accordance with Section 4.4 of the AS3798-2007.

The fill material was not tested for classification of 'Fill Material' as defined in EPA Publication IWRG621. Environmental testing is not within Chadwick Geotechnics scope.

Any observed organic or deleterious matter including any oversize cobbles or boulders were removed from the tested areas during the fill placement.

Photographs of typical materials used during construction are shown below.

Photograph 4.1: Photographs of the material used on site





Photograph 1: Typical on-site clay material

Photograph 2: Silty Mottled Orange Brown Clay

4.3 Subgrade Assessment / Proof Roll

The Subgrade of the site was progressively assessed during the period Chadwick Geotechnics personnel were on site.

Subgrade assessments were conducted following the removal of the topsoil and the wet soils that were present on site.

The subgrade inspections were performed in accordance with the Level 1 guidelines presented in AS 3798–2007 Section 5.5. No soft spots or deflections were encountered during the inspections and the area was found to be firm and free of vegetation and other deleterious material.

Two photographs of the subgrade assessment phase at the project are shown below. **Photograph 4.2:** Subgrade assessment photographs





Photograph 3: Proof roll with Pad foot



4.4 Engineered Fill Construction

All fill material was brought by tandem trucks or from local or imported sources. The fill was spread with a bulldozer and compacted with a pad foot roller. A water cart was present onsite during the works for moisture conditioning of the materials.

All fill material was placed in lift sequences comprising horizontal layers. Chadwick Geotechnics verified that the surface of the stripped area, and that of additional lifts, was thoroughly scarified and moisture conditioned prior to placement of additional layers to prevent delamination at the layer interface. Once the placed fill was approved, the layer was compacted accordingly.

Chadwick Geotechnics personnel were on site on a fulltime basis during the placement, moisture conditioning, compaction, and testing of the fill on the dates noted in Table 2.2 of this report.

The following machinery was on site during earthworks.

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Table 4.2: Earthworks plant on site

Equipment type	Model
Dozer	CAT D6 Dozer
Pad foot roller	CAT 15 Tonne CP56B
Water cart	1
Scraper	1
Dump trucks	Tandem
Excavator	1

Photographs of typical machinery on site used during construction are shown below.

Photograph 4.3: General Earthwork machinery and fill construction photographs





Photograph 5: Pad foot Roller compacting.

Photograph 6: Excavator placing fill





Photograph 7: Bulldozer.

Photograph 8: Grader

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4.5 Density and Moisture testing

Field density and moisture content testing was undertaken progressively during construction on the compacted fill using a calibrated portable density and moisture gauge in accordance with AS 1289.5.8.1. The HILF rapid compaction test was used for peak converted wet density determinations in accordance with AS 1289.5.7.1. Test locations were recorded using a handheld GPS unit. A site plan showing the field density test locations is provided in **Appendix A**.

Testing was undertaken under the frequencies listed below, subject to the area and volume worked on the day of testing:

• 1 test per material type per layer per 2500m² or 1 test per 500m³ distributed reasonably evenly or 3 tests per lot – whichever requires the most tests in accordance with Type 1 Earthworks (large scale operations) as defined in Table 8.1 of the AS 3798-2007;

Thirty- four (34) tests were performed during the filling process. Four (4) of the tests did not achieve the recommended moisture ratio initially. The failed areas were reworked and retested accordingly. The retests returned passing density and moisture test results.

A summary table of HILF density tests is provided in **Appendix B** and the laboratory test reports are provided in **Appendix C**. Two photographs of field density testing conducted on site are shown below.



Photograph 4.4: Field Density/Moisture Testing photographs



Photo 9: Field density/moisture test

Photo 10: Field density/moisture test

5 Conclusion

On the basis, of our inspections and after considering all test results relating to the project, it is our opinion, so far as it is to be determined, that:

- The materials, used by the earth-works contractor met the geotechnical property requirements of the specification.
- The sourced fill was, considered to be natural, clean, and suitable for use at the site.
- The fill material placed was tested at a suitable frequency in accordance with AS 3798-2007-Table 8.1 and the results indicate the compacted clay achieved the density requirement of the specification.
- Given the consistent construction practices followed by the earthworks contractor and as witnessed by the Chadwick Geotechnics, combined with the satisfactory verification of test results achieved, it is inferred that areas of the site between test locations were performed to the same standard as those areas that have been tested.
- Based on observations made by Chadwick Geotechnics Level 1 personal and the results of field and laboratory tests, we consider that the engineered fill within the site (noted in Section 2.5), as far as we have been able to reasonably determine, have been placed in general accordance with the intent of the specification.
- It is our opinion that the earthworks undertaken have been performed in accordance with the requirements of Section 8.2 Level 1 Inspection and Testing AS3798-2007 Guidelines on Earthworks for Commercial and Residential Developments.

After earthwork construction works the maintenance of the fill is the sole responsibility of the Contractor. If the fill is not well maintained or protected with a sacrificial layer of topsoil or other fill, the uppermost layers and the exposed faces of the engineered fill may deteriorate as a result from exposure to varying weather conditions which can cause cracking or heaving of the fill. Any deterioration will need to be remediated prior to further construction on the site. Chadwick Geotechnics has not provided supervision since the above date and is not responsible for any subsequent deterioration that may have occurred or may occur since that date.

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6 Applicability

This report has been prepared for the exclusive use of our client Greenridge Properties Pty Ltd in good faith and in accordance with the Chadwick Geotechnics quality system for the earthworks filling at the site.

This report is based on the nature of the project and the prevailing conditions between 14 August 2023 and 17 May 2024. No responsibility or liability will be accepted, and Chadwick Geotechnics is indemnified to the full extent permitted by law in respect of the use of this report where there has been a change in the nature of the project or the conditions on site that may alter or affect the conclusions of this report.

Should you require any further information regarding this report, please do not hesitate to contact the undersigned on (03) 8796 7900.

Chadwick Geotechnics Pty Ltd

Report prepared by:

Kober Barden

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Robert Barden Project Manager Ì

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Authorised for Chadwick Geotechnics Pty Ltd by:

Timothy Chadwick Project Director

Report reviewed by:

Robert McKenzie Principal Geotechnical Engineer RPEV Number: PE0005222 p:\1091936\1091936.049 stage 49 meridian greens estate\level 1 report\1091936.049.v1 meridian green st 49 l1 report.docx

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	EOTE	CHN	103		Hilf [Density Test	Fax: (03) 9706 9431				
Report No	Sample No	Date	Test Number	Location [E]	Location [N]	Area/Lot No	RL / FSL	Hilf Density Ratio	Moisture Variation From OMC	Pass / Fail	Remarks
HDR:W23DS01951	S23DS-06748	14/08/2023	1	357255	5781573	4941 / 1	35.286	96.5	0 dry	Pass	
HDR:W23DS01966	S23DS-06779	15/08/2023	1	357252	5781559	4942 / 2	35.698	104	0.5 dry	Pass	
HDR:W23DS01966	S23DS-06780	15/08/2023	2	357248	5781544	4943 / 3	36.127	99.5	1.5 wet	Pass	
HDR:W23DS01980	S23DS-06829	16/08/2023	1	357250	5781557	4942 / 4	36.192	104	1 dry	Pass	
HDR:W23DS02210	\$23DS-07687	15/09/2023	1	357014	5781567	4907 / 1	43.033	102	2 dry	Pass	
HDR:W23DS02210	S23DS-07688	15/09/2023	2	357018	5781595	4909 / 1	42.869	100	0.5 dry	Pass	
HDR:W23DS02210	S23DS-07689	15/09/2023	3	357022	5781620	4911 / 1	42.622	107.5	2.5 dry	Pass	
HDR:W23DS02224	\$23DS-07753	18/09/2023	1	356989	5781587	4905 / 1	43.362	102	4.5 dry	Fail	See Retest S23DS-07927
HDR:W23DS02224	S23DS-07754	18/09/2023	2	356994	5781611	4903 / 1	43.248	105.5	3.5 dry	Fail	See Retest S23DS-08020
HDR:W23DS02224	S23DS-07755	18/09/2023	3	356997	5781635	4901 / 1	43.066	102.5	4 dry	Fail	See Retest S23DS-07928
HDR:W23DS02247	S23DS-07876	20/09/2023	1	357015	5781579	4907 / 2	43.262	105	0.5 dry	Pass	
HDR:W23DS02247	S23DS-07877	20/09/2023	2	357019	5781607	4910 / 2	43.031	107	2.5 dry	Pass	
HDR:W23DS02247	S23DS-07878	20/09/2023	3	357023	5781631	4912 / 2	42.926	105.5	1 dry	Pass	
HDR:W23DS02263	S23DS-07927	21/09/2023	1	356988	5781584	4905 / 1	-	101	3 dry	Pass	Retest of S23DS-07753
HDR:W23DS02263	S23DS-07928	21/09/2023	2	356996	5781631	4901 / 1	-	104.5	3 dry	Pass	Retest of S23DS-07755
HDR:W23DS02286	S23DS-08020	25/09/2023	1	356991	5781609	4903 / 1		96.5	4 Dry	Fail	Retest of S23DS-07754, See Retest 08409
HDR:W23DS02340	S23DS-08409	28/09/2023	1	356986	5781606	4903 / 1		102.5	3 dry	Pass	Retest of S23DS-08020
HDR:W24DS00594	S24DS-02427	18/04/2024	1	357091	5781599	4926 / 1	41.51	100	2.5 dry	Pass	
HDR:W24DS00594	S24DS-02428	18/04/2024	2	357081	5781585	4927 / 1	41.74	104	2 dry	Pass	
HDR:W24DS00642	S24DS-02631	29/04/2024	1	357178	5781574	4934 / 1	38.538	105.5	2.5 dry	Pass	
HDR:W24DS00649	S24DS-02656	30/04/2024	1	357166	5781575	4934 / 2	38.91	101	2 dry	Pass	
HDR:W24DS00667	S24DS-02740	2/05/2024	1	357163	5781578	4934 / 5	39.287	101	3 dry	Pass	
HDR:W24DS00697	S24DS-02854	7/05/2024	1	357206	5781573	4940 / 2	37.28	100	3 dry	Pass	
HDR:W24DS00705	S24DS-02872	8/05/2024	1	357180	5781553	4937 / 1	38.52	102	2 dry	Pass	
HDR:W24DS00705	S24DS-02873	8/05/2024	2	357195	5781560	4938 / 1	37.756	102.5	3 dry	Pass	
HDR:W24DS00705	S24DS-02874	8/05/2024	3	357208	5781552	4939 / 1	37.422	100	1.5 dry	Pass	
HDR:W24DS00716	S24DS-02890	9/05/2024	1	357208	5781552	4939 / 2	37.6	98.5	4 dry	Pass	
HDR:W24DS00743	S24DS-02995	14/05/2024	1	357245	5781560	4942 / 2	35.645	107	1 dry	Pass	
HDR:W24DS00755	S24DS-03036	15/05/2024	1	357245	5781551	4943 / 3	36.023	101.5	3 dry	Pass	
HDR:W24DS00755	S24DS-03037	15/05/2024	2	357248	5781574	4941/3	35.668	106	0.5 dry	Pass	
HDR:W24DS00766	S24DS-03070	16/05/2024	1	357237	5781580	4941 / 4+18:138	36.088	103.0	2.5 dry	Pass	
HDR:W24DS00766	S24DS-03071	16/05/2024	2	357158	5781527	4944 / 1	39.325	104.5	2.5 dry	Pass	
HDR:W24DS00770	S24DS-03088	17/05/2024	1	357236	5781547	4942 / 5	36.486	106.0	1.5 Dry	Pass	
HDR:W24DS00770	S24DS-03089	17/05/2024	2	357154	5781515	4945 / 2	39.698	98.0	2.0 Dry	Pass	

CHADWICK GEOTECHNICS	Think Act Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SO Ph: + 61 3 8796 7 Fax: +61 3 9706 9	n UTH, VIC 3175 900 431	
	_		R	eport No: HDR:	N23DS01951
HILF Density Rati	o Repo	rt			13300 110. 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123	Pty Ltd			Accredited for complian – Testing	nce with ISO/IEC 17025
Project: Meridian Green Estate,	Stage 49		The conduction	In I	m J
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TRN: L	ot No.:		Site Number: 12712	2 Date of Issue: 24/0	
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Sample Details					
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Specification Requirements: Minim		Patia of 05%			
Field Test procedures: AS 12		Ratio 01 95%			
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Material: Silty (Clav				
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Address: PO Box 3131 AUBURN VIC 3123					– Testing	\wedge
Project: Meridian Green Estate, Project No.: 1091936.049	Stage 49				J. L	hand
Order No.: C	G Request No.:			Accreditation Number: 12719	Approved Signator	y: J. Lamont r - CMT)
TRN: L	ot No.:			Site Number: 12712	Date of Issue: 24/	06/2024
Sample Details						
Location:						
Client Request ID:						
Specification Requirements: Minim	ium Hilf Density	Ratio of 95%				
Laboratory Test procedures: AS 12	289.5.8.1	00 5 7 4				
Sampling Method:	289.2.1.1, AS 12 89.1.2.1 Clause	69.5.7.1 67.(b)				
Source: Onsite	09.1.2.1 Clause	0.4 (b)				
Material: Silty (Jav					
Sample Data	00000 00770	00000 00700	1			
Sample ID Field Sample ID	S23DS-06779	S23DS-06780				
Client Sample ID	1	2				
Date Tested	15/08/2023	15/08/2023				
Time Tested	09.11	14.27				
F:	357251 946	357247 841				
N:	5781558 543	5781544 313				
EL:	35 698	36 127				
Lot / Layer:	4942 / 2	4943 / 3				
Field and Laboratory Data						1
Depth of Test (mm)	225	225				
Depth of Layer (mm)	250	250				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Moisture Content (%)	25.9	22.6				
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.97	1.99				
Field Dry Density (t/m³)	1.57	1.62				
Peak Converted Wet Density (t/m ³)	1.89	2.00				
Optimum Moisture Content (%)	26.5	21.0				
Compactive Effort	Standard	Standard				
Moisture Ratio (%)	97.5	108.0				
Moisture Variation (%)	0.5 dry	1.5 wet				
Hilf Density Ratio (%)	104.0	99.5				

GEOTECHNICS HII F Density Rati	Safe Be	rt	Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943 Rep	⁻ H, VIC 3175 0 1 Dort No: HDR:\	W23DS01980 Issue No: 1
Address: PO Box 3131 AUBURN VIC 3123	Pty Ltd				
Project: Meridian Green Estate,	Stage 49				
Project No.: 1091936.049					
Order No.: C	G Request No.:				
TRN: L	ot No.:			Date of Issue:	
Sample Details					
Client Request ID:					
Specification Requirements: Minim	num Hilf Density	Ratio of 95%			
Leberatery Test procedures: AS 12	289.5.8.1	00 5 7 4			
Campling Method	289.2.1.1, AS 12 20.1.2.1 Clause	89.5.7.1 6.4.(b)			
Source: Opsit		0.4 (D)			
Matorial: Silty (
Sample Data					
Sample ID	S23DS-06829				
Sample ID Field Sample ID	S23DS-06829 1				
Sample ID Field Sample ID Client Sample ID	S23DS-06829 1 4				
Sample ID Field Sample ID Client Sample ID Date Tested	S23DS-06829 1 4 16/08/2023				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested	S23DS-06829 1 4 16/08/2023 13:45				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E:	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5704550.014				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N:	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 20.400				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL:	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4042/4				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content Method	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content Method Field Wet Density (t/m³)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content (%) Field Moisture Content Method Field Wet Density (t/m³) Field Dry Density (t/m³)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05 1.75				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content (%) Field Moisture Content Method Field Wet Density (t/m ³) Field Dry Density (t/m ³) Peak Converted Wet Density (t/m ³)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05 1.75 1.97				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content Method Field Wet Density (t/m ³) Field Dry Density (t/m ³) Peak Converted Wet Density (t/m ³)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05 1.75 1.97 18.0				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content Method Field Wet Density (t/m ³) Field Dry Density (t/m ³) Peak Converted Wet Density (t/m ³) Optimum Moisture Content (%) Compactive Effort	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05 1.75 1.97 18.0 Standard				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content (%) Field Moisture Content Method Field Wet Density (t/m ³) Field Dry Density (t/m ³) Peak Converted Wet Density (t/m ³) Optimum Moisture Content (%) Compactive Effort Moisture Ratio (%)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05 1.75 1.97 18.0 Standard 95.5				
Sample ID Field Sample ID Client Sample ID Date Tested Time Tested E: N: EL: Lot / Layer: Field and Laboratory Data Depth of Test (mm) Depth of Test (mm) Depth of Layer (mm) AS Sieve Size (mm) Oversize Wet (%) Field Moisture Content (%) Field Moisture Content (%) Field Moisture Content (%) Field Dry Density (t/m ³) Field Dry Density (t/m ³) Peak Converted Wet Density (t/m ³) Optimum Moisture Content (%) Compactive Effort Moisture Variation (%)	S23DS-06829 1 4 16/08/2023 13:45 357250.298 5781556.911 36.192 4942 / 4 225 250 19.0 0 17.1 AS 1289.2.1.1 2.05 1.75 1.97 18.0 Standard 95.5 1.0 dry				

NUMERATION Report Supervise Projectile SPLUE Address: PO Box 313: Address: PO Box 313: TRN: Lot No: Address: PO Box 313: Address: PO Box 313: Address: PO Box 313: Address: PO Box 313: Address: PO Box 314: Address: PO B	GEOTECHNICS	Chink Act Safe Be	ACN 143 009 330 25 Metcalf Street DANDENONG SOUTH, VIC 3175 Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431				
Client: Greenindge Properties Pty Ltd Address: PO Box 3131 AUBURN VIC 3123 Project No:: Project: Meridian Green Estate, Stage 49 Project No:: CG Request No:: TRN: Lot No.: Sample Details Accredition Number: Location: Client Request ID: Specification Requirements: Minimum Hilf Density Ratio of 95% Field Tost procedures: AS 1289.5.8.1 Laboratory Test procedures: AS 1289.5.7.1 Sample ID 5 Sample ID 1 Silv Clay 5 Sample ID 1 Sample ID	HILF Density Rati	o Repoi	rt		Kej	port No: HDR:	Issue No: 1
TRN: Lot No.: Site Number: 12712 Date of Issue: 24/06/2024 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL Sample Details	Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Project No.: 1091936.049 Order No.: C	- ⊃ty Ltd Stage 49 G Request No.:			Accreditation Number: 12719	Accredited for complia – Testing Approved Signator (Discipline Manage	y: J. Lamont
Junction of the second state of	TRN: L	ot No.:			Site Number: 12712 THIS DOCUMENT SHAL	Date of Issue: 24/	06/2024 D EXCEPT IN FULL
Sample Details Location: Client Request ID: Specification Requirements: Minimum Hilf Density Ratio of 95%. Field Test procedures: AS 1289.5.8.1 Laboratory Test procedures: AS 1289.1.2.1 Clause 6.4 (b) Source: Onsite Material: Silty Clay Sample D 52305-07688 52305-07689 Client Sample ID 1 2 3 Client Sample ID 5 6 7 Date Tested 15/09/2023 15/09/2023 15/09/2023 Time Fested 12/25 12/32 12/40 E: 357014.423 357018.280 578159.488 Lot / Layer: 4307.11 4909.11 4911.11 Field Cata Laboratory Data 578159.489 578159.489 Dath Test (mm) 175 175 175 Silty Clay: 4907.11 4909.11 4911.11 Silty Clay: 4907.11 4909.1 4911.11 Depth of Test (mm) 175 175 175 Doversize Wet (Sample Dotaile						
Sample Data Sample ID \$23DS-07687 \$23DS-07688 \$23DS-07689 Field Sample ID 1 2 3 Client Sample ID 5 6 7 Date Tested 15/09/2023 15/09/2023 15/09/2023 Time Tested 12:25 12:32 12:40 E: 357014.423 357018.200 357021.710 N: 5781566.774 5781584.689 578161.828 EL: 43.003 42.869 42.622 Lot / Layer: 4907/1 4909/1 4911/1 Field and Laboratory Data AS Sieve Size (mm) 19.0 19.0 19.0 Oversize Wet (%) 0 0 0 0 Field Moisture Content	Sample DetailsLocation:Client Request ID:Specification Requirements:Field Test procedures:AS 12Laboratory Test procedures:AS 12Sampling Method:Source:OnsiteMaterial:Silty (num Hilf Density 289.5.8.1 289.2.1.1, AS 12 89.1.2.1 Clause e Clay	Ratio of 95% 89.5.7.1 6.4 (b)				
Sample ID S23DS-07687 S23DS-07688 S23DS-07689 Image ID Field Sample ID 1 2 3 Image ID ImageI	Sample Data						
Field Sample ID 1 2 3 4 Client Sample ID 5 6 7 6 Date Tested 15/09/2023 15/09/2023 15/09/2023 15/09/2023 Time Tested 12:25 12:32 12:40 6 E: 357014.423 357018.290 357021.710 6 N: 5781566.774 5781594.689 5781619.828 6 Lot / Layer: 43033 42.869 42.622 6 Lot / Layer: 4907 / 1 4909 / 1 4911 / 1 6 Peth of Test (mm) 175 175 175 6 Depth of Layer (mm) 200 200 200 200 200 AS Sieve Size (mm) 19.0 19.0 19.0 19.0 19.0 Oversize Wet (%) 0 0 0 0 6 1 Field Moisture Content (%) 27.4 27.0 18.0 1 1 Field Moisture Content (%) 1.48 1.52 1.75 1 1 Field Moisture Content (%) 30.0 27.5 <	Sample ID	S23DS-07687	S23DS-07688	S23DS-076	89		
Client Sample ID 5 6 7 Date Tested 15/09/2023 15/09/2023 15/09/2023 Time Tested 12:25 12:32 12:40 E: 357014.423 357018.290 357021.710 N: 5781566.774 5781564.689 5781619.828 EL: 43.033 42.869 42.622 Lot / Layer: 4907 / 1 4909 / 1 4911 / 1 Field and Laboratory Data Opth of Test (mm) 175 175 175 Depth of Layer (mm) 200 200 200 Oversize Wet (%) 0 0 0 0 0 Field Moisture Content (%) 27.4 27.0 18.0 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 S 1289.2.1.1 S 1289.2.1.1 Field Dry Density (t/m³) 1.89 1.94 2.07 <th>Field Sample ID</th> <th>1</th> <th>2</th> <th>3</th> <th></th> <th></th> <th></th>	Field Sample ID	1	2	3			
Date fested 15/09/2023 15/09/2023 15/09/2023 15/09/2023 Time Tested 12:25 12:32 12:40 E: 357014.423 357018.290 357021.710 N: 5781566.774 5781594.689 5781619.828 EL: 43.033 42.869 42.622 Jopt of Test (mm) 175 175 175 Depth of Test (mm) 175 175 175 Oversize (mm) 19.0 19.0 19.0 Field Moisture Content (%) 27.4 27.0 18.0 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 Field Moisture Content (%) 27.4 27.0 18.0 Field Moisture Content (%) 30.0 27.5 2.07 <th>Client Sample ID</th> <th>5</th> <th>6</th> <th>7</th> <th></th> <th></th> <th></th>	Client Sample ID	5	6	7			
Time fested 12:25 12:32 12:40 Image fested Image fested <thimage fested<="" th=""> Image fested <thimage f<="" th=""><th>Date lested</th><th>15/09/2023</th><th>15/09/2023</th><th>15/09/202</th><th>23</th><th></th><th></th></thimage></thimage>	Date lested	15/09/2023	15/09/2023	15/09/202	23		
L. 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 33/014.423 57/014.223 57/014.223 57/014.223 57/014.223 57/014.223 57/014.223 57/014.223 57/014.233		12:25	12:32	12:40	0		
N. S761560.774 S76159.028 S76159.028 S76159.028 EL: 43.033 42.869 42.622 Image: Content of	C. N·	357014.423	5791504 690	5791610 9	29		
Lot. 40.000 42.000 44.022 Image: Content (Content (Conte	FI ·	43 033	12 869	12 622	20		
Field and Laboratory Data 175 175 175 175 Depth of Test (mm) 175 175 175 175 Depth of Layer (mm) 200 200 200 200 AS Sieve Size (mm) 19.0 19.0 19.0 19.0 Oversize Wet (%) 0 0 0 0 0 Field Moisture Content (%) 27.4 27.0 18.0 14.00 14.00 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 Field Dry Density (t/m³) 1.89 1.94 2.07 14.00	Lot / Laver:	4907 / 1	4909 / 1	42.022			
Depth of Test (mm) 175 175 175 Depth of Layer (mm) 200 200 200 200 AS Sieve Size (mm) 19.0 19.0 19.0 19.0 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 27.4 27.0 18.0 100 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 Field Dry Density (t/m³) 1.89 1.94 2.07 100	Field and I aboratory Data	1001 / 1	1000 / 1	101171			
Depth of Layer (mm) 200 200 200 200 AS Sieve Size (mm) 19.0 <th< th=""><th>Depth of Test (mm)</th><th>175</th><th>175</th><th>175</th><th></th><th></th><th></th></th<>	Depth of Test (mm)	175	175	175			
AS Sieve Size (mm) 19.0 19.0 19.0 19.0 Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 27.4 27.0 18.0 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 Field Wet Density (t/m³) 1.89 1.94 2.07 Field Dry Density (t/m³) 1.48 1.52 1.75 Peak Converted Wet Density (t/m³) 1.85 1.94 1.92 Optimum Moisture Content (%) 30.0 27.5 20.5 Compactive Effort Standard Standard Standard Moisture Ratio (%) 92.0 99.0 88.5 Moisture Variation (%) 2.0 dry 0.5 dry 2.5 dry Hilf Density Ratio (%) 102.0 100.0 107.5	Depth of Laver (mm)	200	200	200			
Oversize Wet (%) 0 0 0 0 Field Moisture Content (%) 27.4 27.0 18.0 Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 Field Wet Density (t/m³) 1.89 1.94 2.07 Field Dry Density (t/m³) 1.85 1.94 1.92 Peak Converted Wet Density (t/m³) 1.85 1.94 1.92 Optimum Moisture Content (%) 30.0 27.5 20.5 Moisture Ratio (%) 92.0 99.0 88.5 Moisture Variation (%) 2.0 dry 0.5 dry 2.5 dry Hilf Density Ratio (%) 102.0 100.0 107.5	AS Sieve Size (mm)	19.0	19.0	19.0			
Field Moisture Content (%) 27.4 27.0 18.0 Field Moisture Content Method AS 1289.2.1.1	Oversize Wet (%)	0	0	0			
Field Moisture Content Method AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 AS 1289.2.1.1 Field Wet Density (t/m³) 1.89 1.94 2.07 <	Field Moisture Content (%)	27.4	27.0	18.0			
Field Wet Density (t/m³) 1.89 1.94 2.07 Image: married state stat	Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.	1.1		
Field Dry Density (t/m³) 1.48 1.52 1.75 Image: Converted Wet Density (t/m³) Peak Converted Wet Density (t/m³) 1.85 1.94 1.92 Image: Converted Wet Density (t/m³) Im	Field Wet Density (t/m³)	1.89	1.94	2.07			
Peak Converted Wet Density (t/m³) 1.85 1.94 1.92 Image: Converted Wet Density (t/m³) Image: Converted Wet Density (t/m³) <t< th=""><th>Field Dry Density (t/m³)</th><th>1.48</th><th>1.52</th><th>1.75</th><th></th><th></th><th></th></t<>	Field Dry Density (t/m³)	1.48	1.52	1.75			
Optimum Moisture Content (%) 30.0 27.5 20.5 Compactive Effort Standard Standard Standard Moisture Ratio (%) 92.0 99.0 88.5 Moisture Variation (%) 2.0 dry 0.5 dry 2.5 dry Hilf Density Ratio (%) 102.0 100.0 107.5	Peak Converted Wet Density (t/m ³)	1.85	1.94	1.92			
Compactive Effort Standard Standard Standard Standard Standard Moisture Ratio (%) 92.0 99.0 88.5	Optimum Moisture Content (%)	30.0	27.5	20.5			
Moisture Ratio (%) 92.0 99.0 88.5 Moisture Variation (%) 2.0 dry 0.5 dry 2.5 dry Hilf Density Ratio (%) 102.0 100.0 107.5	Compactive Effort	Standard	Standard	Standar	d		
Moisture Variation (%) 2.0 dry 0.5 dry 2.5 dry Hilf Density Ratio (%) 102.0 100.0 107.5	Moisture Ratio (%)	92.0	99.0	88.5			
Hilf Density Ratio (%) 102.0 100.0 107.5	Moisture Variation (%)	2.0 dry	0.5 dry	2.5 dry			
	Hilf Density Ratio (%)	102.0	100.0	107.5			

GEOTECHNICS	Be			DANDENONG SOU ⁻ Ph: + 61 3 8796 790 Fax: +61 3 9706 943	TH, VIC 3175 00 1	NOODSOOODA
HILF Density Rat	io Repo	rt				Issue No: 1
Client: Greenridge Properties Address: PO Box 3131 AUBURN VIC 3123 AUBURN VIC 3123 Project: Meridian Green Estate Project No.: 1091936.049 Order No.: C TRN: L	Pty Ltd , Stage 49 CG Request No.: _ot No.:			Accreditation Number: 12719 Site Number: 12712 THIS DOCUMENT SHALL	Accredited for complia – Testing Approved Signatory (Discipline Manage Date of Issue: 24/10 NOT BE REPRODUCE	r. J. Lamont r CMT) 06/2024 D EXCEPT IN FULL
Samplo Dotaile						
Location: Client Request ID: Specification Requirements: Minin Field Test procedures: AS 1 Laboratory Test procedures: AS 1 Sampling Method: AS12 Source: Onsi Material: Silty	mum Hilf Density 289.5.8.1 289.2.1.1, AS 12 289.1.2.1 Clause te CLAY	Ratio of 95% 89.5.7.1 6.4 (b)				
Sample Data						
Sample ID	S23DS-07753	S23DS-07754	S23DS-077	/55		
Field Sample ID	1	2	3			
Client Sample ID	8	9	10			
Date Tested	18/09/2023	18/09/2023	18/09/202	23		
	12:25	12:36	12:47	10		
	356989.349	356993.579	356997.14	80		
n. Fl·	13 362	3701010.007	13 066	00		
L ct / Laver:	43.302	43.248	43.000			
Field and Laboratory Data	400071	4300/1	430171			
Depth of Test (mm)	175	175	175			
Depth of Laver (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0				
Field Moisture Content (%)	21.8	24.7	22.5			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.	1.1		
Field Wet Density (t/m³)	1.90	1.95	1.90			
Field Dry Density (t/m³)	1.56	1.56	1.55			
Peak Converted Wet Density (t/m ³) 1.86	1.85	1.86			
Optimum Moisture Content (%)	26.5	28.5	26.5			
Compactive Effort	Standard	Standard	Standar	d		
Moisture Ratio (%)	82.5	86.5	84.5			
Moisture Variation (%)	4.5 dry	3.5 dry	4.0 dry			
Hilf Density Ratio (%)	102.0	105.5	102.5			

GEOTECHNICS	Think Act Safe Be			ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943	TH, VIC 3175 0 1
HILF Density Rati	o Repoi	rt		Rep	oort No: HDR:W23DS02247 Issue No: 1
Client:Greenridge Properties FAddress:PO Box 3131 AUBURN VIC 3123Project:Meridian Green Estate,Project No.:1091936.049Order No.:CTRN:Logonal	Pty Ltd Stage 49 G Request No.: ot No.:			Accreditation Number: 12719 Site Number: 12712 THIS DOCUMENT SHALL	Accredited for compliance with ISO/IEC 17025 – Testing Approved Signatory: J. Lamont (Discipline Manager - CMT) Date of Issue: 24/06/2024 NOT BE REPRODUCED EXCEPT IN FULL
Sample Details					
Location:Client Request ID:Specification Requirements:Field Test procedures:AS 12Laboratory Test procedures:Sampling Method:Source:OnsiteMaterial:Silty C	um Hilf Density 289.5.8.1 289.2.1.1, AS 12 89.1.2.1 Clause e Clay	Ratio of 95% 89.5.7.1 6.4 (b)			
Sample Data					
Sample ID	S23DS-07876	S23DS-07877	S23DS-078	78	
Field Sample ID	1	2	3		
Client Sample ID	11	2	13		
Date Tested	20/09/2023	20/09/2023	20/09/202	23	
Time Tested	09:34	09:49	09:58		
E:	357015	357019.048	357023.19	5	
N:	5781579.494	5781606.732	5781631.18	88	
EL:	43.262	43.031	42.926		
Field and Laboratory Data	490772	4910 / 2	4912/2		
	475	475	475		
Depth of lest (mm)	175	1/5	1/5		
	200	200	200		
AS Sieve Size (IIIII) Oversize Wet (%)	19.0	19.0	19.0		
Field Moisture Content (%)	22.0	24.3	24.8		
Field Moisture Content Method	ΔS 1289 2 1 1	ΔS 1289 2 1 1	ΔS 1289 2	11	
Field Wet Density (t/m ³)	1.94	2.03	2.00		
Field Dry Density (t/m ³)	1.59	1.63	1.60		
Peak Converted Wet Density (t/m ³)	1.85	1.90	1.89		
Optimum Moisture Content (%)	22.5	27.0	25.5		
Compactive Effort	Standard	Standard	Standard	d	
Moisture Ratio (%)	97.5	90.5	96.5		
Moisture Variation (%)	0.5 dry	2.5 dry	1.0 dry		
Hilf Density Ratio (%)	105.0	107.0	105.5		
			-		

HILF Density Rati	Safe Be o Repoi	rt	Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUTH, VIC 3175 Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431 Report No: HDR:W23DS02263 Issue No: 1
Address: PO Box 3131 AUBURN VIC 3123			
Project: Meridian Green Estate, Project No.: 1091936.049	Stage 49		The figure and the figure of t
Order No.: C	G Request No.:		Accreditation Number: Approved Signatory: J. Lamont
TRN: Lo	ot No.:		Site Number: 12712 Date of Issue: 24/06/2024
			THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL
Sample Details			
Location:			
Client Request ID:			
Specification Requirements: Minim	ium Hilf Density	Ratio of 95%	
Field lest procedures: AS 12	289.5.8.1		
Laboratory lest procedures: AS 12	289.2.1.1, AS 12	89.5.7.1	
Sampling Method: AS12	89.1.2.1 Clause	6.4 (D)	
Source: Onsite	9		
Material: Sandy	Silty Clay		
Sample Data			
Sample ID	S23DS-07927	S23DS-07928	
Field Sample ID	1	2	
Client Sample ID	14	15	
Date Tested	21/09/2023	21/09/2023	
Time Tested	08:27	10:01	
E:	356988	356996	
N:	5781584	5781631	
EL:	-	-	
Lot / Layer:	4905 / 1	4901 / 1	
	Retest of S23DS-07753	Retest of S23DS-07755	
Field and Laboratory Data			
Depth of Test (mm)	175	175	
Depth of Layer (mm)	200	200	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	21.3	20.5	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	1.94	2.02	
Field Dry Density (t/m³)	1.60	1.68	
Peak Converted Wet Density (t/m ³)	1.92	1.94	
Optimum Moisture Content (%)	24.5	23.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	87.5	87.5	
Moisture Variation (%)	3.0 dry	3.0 dry	
Hilf Density Ratio (%)	101.0	104.5	

GEOTECHNICS	Safe Be	rt	Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 7900 Fax: +61 3 9706 943 ⁻⁷ Rep	TH, VIC 3175 0 1 9 00rt No: HDR:\	W23DS02286 Issue No: 1
	o Kehoi	L			
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Project No.: 1091936.049	Pty Ltd Stage 49		Accreditation Number:	Accredited for complian	r. J. Lamont
Order No.: C	G Request No.:		12719	(Discipline Manage	r - CMT)
IRN: L	ot No.:		Site Number: 12712 THIS DOCUMENT SHALL	NOT BE REPRODUCE	06/2024 D EXCEPT IN FULL
Sample Details			·		
Location:					
Client Request ID:					
Specification Requirements: Minim	um Hilf Density	Ratio of 95%			
Field Test procedures: AS 12	89.5.8.1				
Laboratory Test procedures: AS 12	89.2.1.1, AS 12	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)			
Source: Onsite	e				
Material: Sandy	/ Clay				
Sample Data					
Sample ID	S23DS-08020				
Field Sample ID	1				
Client Sample ID	16				
Date Tested	25/09/2023				
Time Tested	10:00				
E:	356991		 		
N:	5781609				
EL:	-				
Lot / Layer:	4903 / 1 Rotost of		 		
	S23DS-07754				
Field and Laboratory Data					
Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0		 		
Oversize Wet (%)	0		 		
Field Moisture Content (%)	19.2				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m [*])	1.84				
Pleid Dry Delisity (t/ll1) Roak Converted Wet Density (t/m ³)	1.04				
Optimum Moisture Content (%)	23.0				
Compactive Effort	Standard				
Moisture Ratio (%)	82.5				
Moisture Variation (%)	4.0 drv		 		
Hilf Density Ratio (%)	96.5				

GEOTECHNICS	Think Act Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431	"H, VIC 3175 0 1	N02D202240
HILF Density Rati	o Repoi	rt	Kep		Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Project No.: 1091936.049	Pty Ltd Stage 49			Accredited for complia – Testing	nce with ISO/IEC 17025
Order No.: C TRN: Lo	G Request No.: ot No.:		Accreditation Number: 12719 Site Number: 12712 THIS DOCUMENT SHALL	Approved Signatory (Discipline Manage Date of Issue: 24/0 NOT BE REPRODUCE	/: J. Lamont r - CMT) 06/2024 D EXCEPT IN FULL
Sample Details					
Location: Client Request ID:					
Specification Requirements: Minim	um Hilf Density	Ratio of 95%			
Field Test procedures: AS 12	289.5.8.1				
Laboratory Test procedures: AS 12	289.2.1.1, AS 12	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)			
Source: Onsite	e				
Material: Silty S	Sandy Clay				
Sample Data					
Sample ID	S23DS-08409				
Field Sample ID	1				
Client Sample ID	17				
Date Tested	28/09/2023				
Time Tested	07:35				
E:	356986				
N:	5781606				
EL:	-				
Lot / Layer:	4903 / Final Rotost of				
	S23DS-08020				
Field and Laboratory Data					
Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0		 		
Field Moisture Content (%)	22.0				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m ³)	1.90				
Field Dry Density (Um ²) Rock Converted Wet Donoity (t/m ³)	1.00				
Ontimum Moisture Content (%)	25.5				
Compactive Effort	Standard		 		
Moisture Ratio (%)	87.0		 		
Moisture Variation (%)	3.0 drv				
Hilf Density Ratio (%)	102.5				

GEOTECHNICS	think Act Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943	"H, VIC 3175 0 1	
HILF Density Rati	o Repoi	rt	Ker	oort NO: HDR:\	N24DS00594 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123	Pty Ltd			Accredited for complian	nce with ISO/IEC 17025
Project: Meridian Green Estate,	Stage 49		Franklin V	An I	mi
Project No.: 1091936.049			-outline		
Order No.: C	G Request No.:		Accreditation Number: 12719	Approved Signatory (Discipline Manage	/: J. Lamont r - CMT)
TRN: Lo	ot No.:		Site Number: 12712	Date of Issue: 24/0)6/2024
Semale Deteile					
Sample Details					
Location:					
Client Request ID:					
Specification Requirements: Minim	Ium Hilf Density	Ratio of 95%			
Field Test procedures: AS 12	89.5.8.1	00 5 7 4			
Campling Mathed	289.2.1.1, AS 12	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (D)			
Source: Onsite	9				
Materiai: Clay					
Sample Data					
Sample ID	S24DS-02427	S24DS-02428			
Field Sample ID	1	2			
Date Tested	18/04/2024	18/04/2024			
Time Tested	12:20				
E:	357091.333	357080.627			
N:	5781598.728	5781584.546			
EL:	41.51	41.74			
Lot / Lift:	4926 / 1	4927 / 1			
Field and Laboratory Data					
Depth of Test (mm)	125	125			
Depth of Layer (mm)	150	150			
AS Sieve Size (mm)	19.0	19.0			
Oversize Wet (%)	0	0			
Field Moisture Content (%)	22.7	21.7			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m³)	1.91	2.02			
Field Dry Density (t/m³)	1.56	1.66			
Peak Converted Wet Density (t/m ³)	1.91	1.94			
Optimum Moisture Content (%)	25.0	24.0			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	90.0	90.5			
Moisture Variation (%)	2.5 dry	2.0 dry			
Hilf Density Ratio (%)	100.0	104.0			

GEOTECHNICS	Think Act Safe Be		Dandenong Sou ACN 143 009 330 25 Metcalf Street DANDENONG SO Ph: + 61 3 8796 Fax: +61 3 9706 9	th) OUTH, VIC 3175 7900 9431	
HILF Density Rati	o Repoi	rt	I	Report No: HDR:	W24DS00642 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate,	Pty Ltd Stage 49		Hac-MRA NA	Accredited for complia – Testing	ance with ISO/IEC 17025
Project No.: 1091936.049	0		Malahaha V	07	
Order No.: C	G Request No.:		Accreditation Numb	er: Approved Signator	y: J. Lamont
TRN: Lo	ot No.:		Site Number: 1271 THIS DOCUMENT S	(Discipline Manage 12 Date of Issue: 24, 34411 NOT BE REPRODUCE	er - CMT) /06/2024 ED EXCEPT IN FULL
Sample Details					
Location:					
Client Request ID:					
Specification Requirements: Minim	um Hilf Density	Ratio of 95%			
Field Test procedures: AS 12	89.5.8.1				
Laboratory Test procedures: AS 12	89.2.1.1, AS 12	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)			
Source: Onsite	9				
Material: Clay					
Sample Data					
Sample ID	S24DS-02631				
Field Sample ID	1				
Date Tested	29/04/2024				
E:	357178.318				
N:	5781573.607				
EL:	38.538				
Lot / Lift:	4934 / 1				
Field and Laboratory Data					
Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize wet (%)	0		 		
Field Moisture Content (%)	27.J				
Field Wot Donsity (t/m ³)	AS 1269.2.1.1				
Field Dry Density (t/m ³)	1.97				
Peak Converted Wet Density (t/m ³)	1.34		 		
Optimum Moisture Content (%)	30.0		 		
Compactive Effort	Standard				
Moisture Ratio (%)	92.0				
Moisture Variation (%)	2.5 drv				
Hilf Density Ratio (%)	105.5				

CHADWICK GEOTECHNICS Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUTH, VIC 3 Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431	175
HILF Density Ratio Report	HDR:W24DS00649 Issue No: 1
Client: Greenridge Properties Pty Ltd Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Stage 49	or compliance with ISO/IEC 17025
Project No.: 1091936 049	N
Order No : CG Request No : Accreditation Number: Approved	Signatory: M. Longfield
TEN: Lot No : 12719 (Senior Te	chnician) u.e. 6/05/2024
THIS DOCUMENT SHALL NOT BE REF	RODUCED EXCEPT IN FULL
Sample Details	
Location:	
Client Request ID:	
Specification Requirements: Minimum Hilf Density Ratio of 95%	
Field Test procedures: AS 1289.5.8.1	
Laboratory Test procedures: AS 1289 2 1 1 AS 1289 5 7 1	
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)	
Source: Onsite	
Material: Clay	
Sample Data	
Sample Data	
Sample ID S24DS-02000	
Date Tested	
Time Tested 13:10	
F: 257165 714	
N: 5781575 406	
FI : 38 010	
Lot / Laver: 4934 / 2	
Field and Laboratory Data	
Depth of Test (mm) 175	
Depth of Laver (mm) 200	
AS Sieve Size (mm) 19.0	
Oversize Wet (%)	
Field Moisture Content (%) 25.2	
Field Moisture Content Method AS 1289.2.1.1	
Field Wet Density (t/m ³) 1.94	
Field Dry Density (t/m ³) 1.55	
Peak Converted Wet Density (t/m ³) 1.92	
Ontimum Moisture Content (%) 27.5	
Compactive Effort Standard	
Compactive Effort Standard Moisture Ratio (%) 92.0	
Compactive Effort Standard Moisture Ratio (%) 92.0 Moisture Variation (%) 2.0 dry	

GEOTECHNICS	Think Act Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431	H, VIC 3175) I	
HILF Density Rati	o Repoi	rt	Rep	oort No: HDR:\	N24DS00667 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Project No.: 1091936.049	Pty Ltd Stage 49			Accredited for complian – Testing	nce with ISO/IEC 17025
Order No.: C	G Request No.:		Accreditation Number:	Approved Signatory	/: M. Longfield
TRN: Lo	ot No.:		12719 Site Number: 12712 THIS DOCUMENT SHALL	(Senior Technician) Date of Issue: 6/08 NOT BE REPRODUCE	5/2024 D EXCEPT IN FULL
Sample Details					
Client Request ID:					
Specification Requirements:					
Field lest procedures: AS 12	289.5.8.1				
Laboratory lest procedures: AS 12	289.2.1.1, AS 120	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (D)			
Source: Unsite	9				
Material: Silly C	Jay				
Sample Data					
Sample ID	S24DS-02740				
Field Sample ID	1				
Date Tested	2/05/2024				
Time Tested	10:15				
E:	357163.336				
N:	5781577.705				
RL:	39.287				
Lot / Layer:	4934 / 5				
Field and Laboratory Data					
Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	18.9				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.94				
Field Dry Density (t/m ³)	1.63				
Peak Converted Wet Density (t/m ³)	1.92				
Optimum Moisture Content (%)	22.0				
Compactive Effort	Standard				
Moisture Ratio (%)	85.0				
Moisture Variation (%)	3.0 dry				
Hilf Density Ratio (%)	101.0				

GEOTECHNICS	Think Act Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431	H, VIC 3175	
HILF Density Rati	o Repoi	rt	Rep	ort No: HDR:\	N24DS00697 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate	Pty Ltd			Accredited for complian – Testing	nce with ISO/IEC 17025
Project No : 1091936 049	olage 40		The databalant	N	V
Order No :	G Request No :		Accreditation Number:	Approved Signatory	/: M. Longfield
	G Request No		12719 Site Number: 12712	(Senior Technician)) 5/2024
	51 NO		THIS DOCUMENT SHALL	NOT BE REPRODUCE	D EXCEPT IN FULL
Sample Details					
Location:					
Client Request ID:					
Specification Requirements: Minim	um Hilf Densitv	Ratio of 95%			
Field Test procedures: AS 12	289 5 8 1				
Laboratory Test procedures: AS 12	289 2 1 1 AS 12	89571			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)			
Source: Onsite	j	011 (12)			
Material: Clav	-				
Comple Data					
Sample ID	S24DS-02854				
Pielo Sample ID	1				
Date Tested	//05/2024				
	14.10				
E.	357206.038				
	37 300				
Lot / Lavor:	37.200				
Field and Laboratory Data	494072				
Depth of Test (mm)	175				
Depth of Lavor (mm)	200				
AS Sieve Size (mm)	10.0		 	·	
Augusta Wet (%)	0		 	·	
Field Moisture Content (%)	18.9				
Field Moisture Content Method	ΔS 1289 2 1 1				
Field Wet Density (t/m ³)	1.98				
Field Dry Density (t/m ³)	1.67				
Peak Converted Wet Density (t/m ³)	1.98				
Optimum Moisture Content (%)	22.0			·	
Compactive Effort	Standard				
Moisture Ratio (%)	86.5				
Moisture Variation (%)	3.0 drv				
Hilf Density Ratio (%)	100.0		 		
			 	1	

GEOTECHNICS	Safe Be	rt		ACN 143 009 330 25 Metcalf Street DANDENONG SOU ⁷ Ph: + 61 3 8796 790 Fax: +61 3 9706 943 Re	TH, VIC 3175 00 11 port No: HDR:\	W24DS00705 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Project No.: 1091936.049	Pty Ltd Stage 49			Accreditation Number:	Accredited for complia – Testing Jack Jack Jack Jack Jack Jack Jack Jack	nce with ISO/IEC 17025
TRN: C	G Request No.: ot No.:			12719 Site Number: 12712	(Discipline Manage Date of Issue: 24/	r - CMT) 06/2024
	-			THIS DOCUMENT SHAL	L NOT BE REPRODUCE	D EXCEPT IN FULL
Sample DetailsLocation:Client Request ID:Specification Requirements:Field Test procedures:AS 12Laboratory Test procedures:Sampling Method:Source:ImporMaterial:Clay	um Hilf Density 89.5.8.1 89.2.1.1, AS 12 89.1.2.1 Clause t - Stage 48	Ratio of 95% 89.5.7.1 6.4 (b)				
Sample Data						
Sample ID	S24DS-02872	S24DS-02873	S24DS-028	74		
Field Sample ID	1	2	3			
Date Tested	8/05/2024	8/05/2024	8/05/2024	4		
	08:10	08:20	08:30	-		
E:	357180.247	357194.725	357208.09	9		
	5781553.115	5781559.539	5781551.9	97		
LL.	/037 / 1	/038 / 1	37.422 /030/1			
Field and Laboratory Data	430171	430071	430371			
Depth of Test (mm)	175	175	175			
Depth of Laver (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0					
Field Moisture Content (%)	16.8	16.9	20.0			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1	1.1		
Field Wet Density (t/m³)	2.05	1.92	2.05			
Field Dry Density (t/m³)	1.75	1.65	1.71			
Peak Converted Wet Density (t/m³)	2.01	1.88	2.05			
Optimum Moisture Content (%)	19.0	20.0	21.5			
Compactive Effort	Standard	Standard	Standar	d		
Moisture Ratio (%)	88.5	84.0	92.5			
Moisture variation (%)	2.0 ary	3.0 ary	1.5 dry			
niii Density Katio (%)	102.0	102.5	100.0			

GEOTECHNICS	Act Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943	TH, VIC 3175 0 1	
HILF Density Rati	o Repo	rt	Kej	DORT NO: HUR:	W24DS00716 Issue No: 1
Client: Greenridge Properties Address: PO Box 3131 AUBURN VIC 3123	Pty Ltd			Accredited for complia – Testing	nce with ISO/IEC 17025
Project: Meridian Green Estate,	Stage 49			-	
Project No.: 1091936.049			²⁰ dalabov	14	V .
Order No.: C	G Request No.:		Accreditation Number:	Approved Signatory	y: M. Longfield
TRN: L	ot No.:		Site Number: 12712	Date of Issue: 16/) 05/2024
			THIS DOCUMENT SHALL	NOT BE REPRODUCE	D EXCEPT IN FULL
Sample Details					
Location:					
Client Request ID:					
Specification Requirements: Minim	num Hilf Density	Ratio of 95%			
Field Test procedures: AS 12	289.5.8.1				
Laboratory Test procedures: AS 12	289.2.1.1, AS 12	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)			
Source: Impo	rt - Stage 55				
Material: Clay	C C				
Sample Data					
Sample ID	S24DS-02890				
Field Sample ID	1				
Date Tested	9/05/2024				
Time Tested	11:00				
E:	357208.331				
N:	5781551.846				
EL:	37.600				
Lot / Lift:	4939 / 2				
Field and Laboratory Data	1	1			1
Depth of Test (mm)	175				
Depth of Layer (mm)	200				
AS Sieve Size (mm)	19.0				
Oversize Wet (%)	0				
Field Moisture Content (%)	16.9				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.89				
Field Dry Density (t/m³)	1.61				
Peak Converted Wet Density (t/m³)	1.91				
Optimum Moisture Content (%)	21.0				
Compactive Effort	Standard				
Moisture Ratio (%)					
-	80.5				
Moisture Variation (%)	80.5 4.0 dry				

GEOTECHNICS	Think Act Safe Be			Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431	'H, VIC 3175)	
HILF Density Rati	o Repoi	rt		Rep	oort No: HDR:\	N24DS00743 Issue No: 1
Client: Greenridge Properties Pty Ltd Address: PO Box 3131 AUBURN VIC 3123 Project: Meridian Green Estate, Stage 49				Accredited for complia – Testing	nce with ISO/IEC 17025	
Project No.: 1091936.049				2000/0000	14	<i>,</i>
Order No.: C	G Request No.:			Accreditation Number:	Approved Signatory	: M. Longfield
TRN: Lo	ot No.:			Site Number: 12719 THIS DOCUMENT SHALL	Date of Issue: 17/0 NOT BE REPRODUCE) 5/2024 D EXCEPT IN FULL
Sample Details						
Client Request ID:						
Specification Requirements: Minim	ium Hilf Density	Ratio of 95%				
Field lest procedures: AS 12	289.5.8.1					
Laboratory lest procedures: AS 12	289.2.1.1, AS 12	89.5.7.1				
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)				
Source: Onsite	9					
Material: Clay						
Sample Data						
Sample ID	S24DS-02995					
Field Sample ID	1					
Date Tested	14/05/2024					
Time Tested	15:00					
E:	357245.063					
N:	5781559.641					
EL:	35.645					
Lot / Lift:	4942 / 2					
Field and Laboratory Data						
Depth of Test (mm)	175					
Depth of Layer (mm)	200					
AS Sieve Size (mm)	19.0					
Oversize Wet (%)	0					
Field Moisture Content (%)	22.0					
Field Moisture Content Method	AS 1289.2.1.1					
Field Wet Density (t/m³)	2.02					
Field Dry Density (t/m³)	1.66					
Peak Converted Wet Density (t/m ³)	1.89					
Optimum Moisture Content (%)	23.0					
Compactive Effort	Standard					
Moisture Ratio (%)	96.5					
Moisture Variation (%)	1.0 dry					
Hilf Density Ratio (%)	107.0					

GEOTECHNICS	Think Safe Be		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943	"H, VIC 3175 0 1	
HILF Density Rati	o Repoi	t	Rep	oort No: HDR:\	N24DS00755 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123	Pty Ltd			Accredited for complian – Testing	nce with ISO/IEC 17025
Project: Meridian Green Estate,	Stage 49			лІ	[]
Project No.: 1091936.049			annos 🔶	14	
Order No.: C	G Request No.:		Accreditation Number: 12719	Approved Signatory (Senior Technician)	/: M. Longfield
TRN: Lo	ot No.:		Site Number: 12712 THIS DOCUMENT SHALL	Date of Issue: 17/0 NOT BE REPRODUCE	05/2024 D EXCEPT IN FULL
Sample Details					
Client Request ID:					
Field Test presedures:		Ratio of 95%			
Laboratory Test procedures: AS 12		20 5 7 1			
Sampling Mothod:	.09.2.1.1, AS 120 80.1.2.1 Clause	6 1 (b)			
Source: Offsite	Stage 48	0.4 (b)			
Material: Clay	e - Slaye 40				
Sample Data					
Sample ID	S24DS-03036	S24DS-03037			
Field Sample ID	1	2			
Date Tested	15/05/2024	15/05/2024			
Time Tested	11:20	11:40			
E:	357245.302	357248.206			
N:	5781597.455	5781574.324			
EL:	36.023	35.668			
Lot / Layer:	4943 / 3	4941 / 3			
Field and Laboratory Data					
Depth of Test (mm)	175	175			
Depth of Layer (mm)	200	200			
AS Sieve Size (mm)	19.0	19.0			
Oversize Wet (%)	0	0			
Field Moisture Content (%)	20.7	19.9			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m ³)	1.94	2.02			
Field Dry Density (t/m³)	1.60	1.68			
Peak Converted Wet Density (t/m ³)	1.90	1.90	 		
Optimum Moisture Content (%)	23.5	20.5	 		
Compactive Effort	Standard	Standard	 		
Woisture Katio (%)	δ/.5	97.5			
Moisture variation (%)	3.0 ary	0.5 dry			
HIIT Density Ratio (%)	101.5	106.0			

GEOTECHNICS	Safe Be	-t		Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943 Rep	TH, VIC 3175 0 1 2000 NO: HDR:\	W24DS00766 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131	Pty Ltd				Accredited for complian – Testing	nce with ISO/IEC 17025
AUBURN VIC 3123	Charles 40			Hac-MRA NATA		Λ
Project: Meridian Green Estate,	Stage 49			Flindalahahaha	N	/
Project No.: 1091936.049				Accreditation Number	Approved Signatory	/ M. Longfield
Order No.: C	G Request No.:			12719	(Senior Technician)	
TRN: Lo	ot No.:			Site Number: 12712 THIS DOCUMENT SHALL	Date of Issue: 27/0 NOT BE REPRODUCE.	05/2024 D EXCEPT IN FULL
Sample Details				······		
Location:						
Client Request ID:						
Specification Requirements: Minim	um Hilf Density	Ratio of 95%				
Field Test procedures: AS 12	289 5 8 1					
Laboratory Test procedures: AS 12	289.2.1.1 AS 12	89571				
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)				
Source: Impor	ted - Stage 55					
Material: Clay						
Sample Data						
Sample ID	S24DS 03070	S24DS 03071				
Field Sample ID	1	2				
Date Tested	16/05/2024	16/05/2024				
Time Tested	09.15	11.20				
F [.]	357236 587	357157 572				
N:	5781579 523	5781526 544				
EL:	36.088	39 325				
Lot / Lift:	4941 / 4	4944 / 1				
Field and Laboratory Data			1			
Depth of Test (mm)	175	175				
Depth of Layer (mm)	200	200				
AS Sieve Size (mm)	19.0	19.0				
Oversize Wet (%)	0	0				
Field Moisture Content (%)	21.5	24.8				
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m³)	1.97	1.98				
Field Dry Density (t/m³)	1.62	1.59				
Peak Converted Wet Density (t/m ³)	1.91	1.89				
Optimum Moisture Content (%)	24.0	27.5				
Compactive Effort	Standard	Standard				
Moisture Ratio (%)	89.0	90.5				
Moisture Variation (%)	2.5 dry	2.5 dry				
Hilf Density Ratio (%)	103.0	104.5				

HILF Density Rati	Safe Be	ſ	Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUT Ph: + 61 3 8796 790 Fax: +61 3 9706 943 Rep	TH, VIC 3175 0 1 Dort No: HDR:\	W24DS00770 Issue No: 1
Client: Greenridge Properties F Address: PO Box 3131 AUBURN VIC 3123	- Pty Ltd			Accredited for complian – Testing	nce with ISO/IEC 17025
Project: Meridian Green Estate,	Stage 49		The contraction	AL	//
Project No.: 1091936.049			-autor	" ~	
Order No.: C	G Request No.:		Accreditation Number: 12719	Approved Signatory (Senior Technician)	r: M. Longfield
TRN: Lo	ot No.:		Site Number: 12712	Date of Issue: 27/0)5/2024
			THIS DOCUMENT SHALL	. NOT BE REPRODUCE	DEXCEPT IN FULL
Sample Details					
Location:					
Client Request ID:					
Specification Requirements: Minim	um Hilf Density	Ratio of 92%			
Field Test procedures: AS 12	89.5.8.1				
Laboratory Test procedures: AS 12	289.2.1.1, AS 12	89.5.7.1			
Sampling Method: AS12	89.1.2.1 Clause	6.4 (b)			
Source: Impor	ted - Stage 55				
Material: Clay					
Sample Data					
Sample ID	S24DS-03088	S24DS-03089			
Field Sample ID	1	2			
Date Tested	17/05/2024	17/05/2024			
Time Tested	09:10	10:30			
E:	357235.868	357153.622			
N:	5781547.385	5781814.904			
EL:	36.486	39.698			
Lot / Lift:	4942 / 5	4945 / 2			
Field and Laboratory Data				1	
Depth of Test (mm)	175	175			
Depth of Layer (mm)	200	200			
AS Sieve Size (mm)	19.0	19.0			
Oversize Wet (%)	0	0			
Field Moisture Content (%)	26.0	16.7			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m³)	1.99	1.96			
Field Dry Density (t/m ³)	1.58	1.68			
Peak Converted Wet Density (t/m ³)	1.87	2.00			
Optimum Moisture Content (%)	28.0	19.0			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	93.5	88.0			
Moisture Variation (%)	1.5 dry	2.0 drv			
Hilf Density Ratio (%)	106.0	98.0			
,,		-	 		





Material Test Report

Client: Greenridge Properties Pty Ltd Address: PO Box 3131 AUBURN VIC 3123 **Project:** Meridian Green Estate, Stage 49 Project No.: 1091936.049 Order No.: CG Request No.: TRN: Lot No.:

Sample Details

Sample Location	
Field Sample ID	1
Date Sampled	15/08/2023
Time Sampled	09:11
Source	Onsite
Material	Silty Clay
Specification	AS Grading
Sampling Method	AS1289.1.2.1
Sample ID	S23DS-06784

Other Test Results			
Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	24.0	
Sample History	AS 1289.1.1	Oven-dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	16.0	
Mould Length (mm)		250	
Crumbling		No	

Clause 6.4 (b)

Particle Size Distribution



Comments

N/A

Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUTH, VIC 3175

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Dandenong South ACN 143 009 330 25 Metcalf Street DANDENONG SOUTH, VIC 3175

Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431

Mater	ial Test Report	Report No: MAT:S23DS-06784/1 Issue No: 1
Client: Address: Project: Project No	Greenridge Properties Pty Ltd PO Box 3131 AUBURN VIC 3123 Meridian Green Estate, Stage 49	Accredited for compliance with ISO/IEC 17025 – Testing
Order No.: TRN:	CG Request No.: Lot No.:	Accreditation Number: Approved Signatory: M. Longfield 12719 (Senior Technician) Site Number: 12712 Date of Issue: 13/09/2023 THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Other Test Results			
Description	Method	Result	Limits
Curling		Yes	
Cracking		No	
Liquid Limit (%)	AS 1289.3.1.2	62	
Plastic Limit (%)	AS 1289.3.2.1	19	
Plasticity Index (%)	AS 1289.3.3.1	43	
Date Tested		25/08/2023	

Act Sat Be	ACN 143 009 330 25 Metcalf Street DANDENONG SOUTH, VIC 3175 Ph: + 61 3 8796 7900 Fax: +61 3 9706 9431 Report No: MAT:S24DS-02657/1
ial Test Report	Issue No: 1
Greenridge Properties Pty Ltd PO Box 3131 AUBURN VIC 3123 Meridian Green Estate, Stage 4 o.: 1091936.049	Accredited for compliance with ISO/IEC 17025 - Testing Accreditation Number: Approved Signatory: M. Longfield
: CG Requi	12719 (Senior Technician) Site Number: 12712 Date of Issue: 16/05/2024
Details cation 357165.714, 5" ble ID 1 bled 30/04/2024 bled 13:10 Onsite Clay on AS Grading Method AS1289.1.2.1 (S24DS-02657)	8.910, 4934 / 2
est Results	
n ontent (%)	Result Limits 11 18.6
story i nkage (%) gth (mm)	1 Oven-dried 1 Dry Sieved 4.1 15.0 250 No
Size Distribution	AS 1289.3.6.1
issing	Drying By: Oven Date Tested: 7/05/2024
75µm 150µm 600µm 6118mm	Note: Sample Washed Sieve Size % Passing Limits 19.0mm 100 13.2mm 100 9.5mm 99 6.7mm 97 4.75mm 93 2.36mm 87 1.18mm 82 600µm 76 425µm 73 300µm 71 150µm 61
75µm 150µm 800µm 600µm 1.18mm	75μm 9.5μm μμμμ 2.5 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6 9.6

N/A



Other Test Results

Description	Method	Result	Limits
Curling		Yes	
Cracking		Yes	
Liquid Limit (%)	AS 1289.3.1.2	52	
Plastic Limit (%)	AS 1289.3.2.1	21	
Plasticity Index (%)	AS 1289.3.3.1	31	
Date Tested		7/05/2024	



CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT : Meridian Green Estate Stage 49 Lots 4901 to 4912, 4924 to 4926 and 4934 to Lot 4945. Chadwick Geotechnics REF: 1091936.049v1

DATE: 25 June 2024

CLIENT : Greenridge Properties Pty Ltd

P.O Box 4136

Dandenong South Victoria, 3164

SUMMARY

Chadwick Geotechnics Pty Ltd conducted, Level 1 inspection and testing, in accordance with Section 8.2 Level 1 inspection and Testing AS3798-2007, Guidelines on earthworks for commercial and residential developments, during the filling of the site.

So far as can be determined, the fill was placed in accordance with the Specification that required a minimum density ratio of 95% of HILF Density (AS1289.5.7.1) to be achieved.

LIMITATIONS

This Certificate has been commissioned for the filling of the area mentioned above. No responsibility or liability will be accepted for the use of this report for any purpose other than that for which Chadwick Geotechnics Pty Ltd was engaged, specifically for Level 1 Inspection and Testing of the structural fill (excluding topsoil).

This report is based on the conditions present and factors affecting the soil at the time of inspection (14 August 2023 and was completed on 17 May 2024). No responsibility or liability will be accepted and Chadwick Geotechnics Pty Ltd is indemnified to the full extent permitted by law in respect of the use of this Certificate where there has been a change in the nature of the project, or in the site conditions since the site testing.

CHADWICK GEOTECHNICS PTY LTD

Rober Barden

Robert Barden Project Manager

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Timothy Chadwick Project Director

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