



REPORT

Level 1 Geotechnical Inspection and Testing Authority Services

**Riverfield Square Estate Stage 22
Lots 2201 to 2240 & 2243 to Lot 2251**

Prepared for:

Greenridge Properties Pty Ltd

17 December 2024

Our Ref: 1091938.022.v1

Table of contents

1	Introduction	3
2	Project details	3
2.1	Location	3
2.2	Roles	4
2.3	Dates on Site	5
2.4	Included Areas	5
2.5	Excluded Areas	5
3	Specifications	6
4	Inspection and Testing	6
4.1	Earthworks	6
4.2	Fill material	7
4.3	Subgrade Assessment / Proof Roll	8
4.4	Engineered Fill Construction	9
4.5	Density and Moisture testing	11
5	Conclusion	12
6	Applicability	13

Appendix A	Test Location Plan
Appendix B	Hilf Density Test Summary
Appendix C	NATA endorsed reports
Appendix D	Controlled Fill Certificate

Document Control

Title: Level One Inspection and testing Services.					
Date	Version	Description	Prepared by:	Reviewed by:	Authorised by
17 December 2024	V1	Level One Report	STPA and RHB	RWMC	MCDM

Distribution

Greenridge Properties Pty Ltd

1 PDF Copy

Chadwick Geotechnics Pty Ltd

1 PDF Copy

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 22 of the Riverfield Square Estate in Clyde North between 24 June 2024 and 20th November 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 22 is located to the East of Tuckers Road and North of Ballarto Rd. Stages 21 and 23 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: Approximate site area



Source: (Nearmap image dated 17.12.2024)

2.2 Roles and Abbreviations

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	Beveridge Williams 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.

The abbreviations used in this report are listed in Table 2.2 below.

Table 2.2: Abbreviations

Abbreviation	Definition
AS	Australian Standard
AS3798-2007	Guidelines on earthworks for commercial and residential developments
EPA	Environmental Protection Authority
GITA	Geotechnical Inspection and Testing Authority
NATA	National Association of Testing Authorities (Australia)
MDD	Maximum Dry Density
MC	Moisture Content
OMC	Optimum moisture content

2.3 Dates on Site

Geotechnical 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 2.3: Level 1 GITA – Onsite Presence

Month	Dates on site
June 2024	24, 25, 26, 27, 28
July 2024	2, 3, 4, 5, 6, 8, 24, 26
August 2024	1, 3, 7, 8, 12, 13, 14, 15, 16, 19, 21, 22, 26, 27, 28, 29, 30
Sep 2024	2, 10, 11, 12, 13, 16, 18, 23, 24
Nov 2024	7, 8, 11, 18, 20

2.4 Included Areas

This report is applicable to material placed by the contractor on the residential lots within Riverfield Square Estate Stage 22, as shown on **Figure 2.1** and 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:

- Lot 2201 to 2240 and 2243 to Lot 2251.

2.5 Excluded Areas

This report does not include fill outside the general boundary of the filled areas as shown in **Figure 2.1** and the drawing 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

Project specifications were prepared by Beveridge Williams Pty Ltd for the project and presented on the drawing titled Stage 22 DWG 10 Rev P5, under reference 2101578, August 2022.

The works were to be conducted in general accordance with the 'Guidelines on earthworks for commercial and residential developments' of AS3798-2007.

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 AS3798-2007 "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.
 - 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).
- Moisture content of the fill material is to be within $\pm 3\%$ of the soils Standard Optimum Moisture Content (SOMC).
- 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.
- Assessment, remediation, and proof rolling of subgrade.
- Geotechnical compliance testing of the soils used for fill.
- 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 taken from the site stockpiles comprising local material used for fill were taken for geotechnical compliance testing during the works. The material compliance test results are summarised in **Table 4.1** The laboratory test certificates are attached in **Appendix C**.

Table 4.1: Compliance test Result Summary

Sample #	Particle Size Distribution (PSD)						Liquid Limit %	Plastic Limit %	Plasticity Index %
	37.5 mm	13.2 mm	4.75 mm	1.18 mm	425 µm	0.75 µm			
S24DS-04263	100	99	98	95	89	51	25	13	12
S24DS-05468	100	99	98	96	92	39	38	16	22

The laboratory test results indicated material is clay of medium 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 material imported and placed at the site by [BPG] was assessed by [the Superintendent] as being derived from natural soils and meeting the classification of 'Fill Material' as defined in EPA publication 1828.2-2021 "Waste disposal categories – characteristics and thresholds". Environmental testing of the material was 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 clay material used on site



Photograph 2: Silty Sandy Clay used

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 that were present on site.

The subgrade inspections were performed in accordance with the Level 1 guidelines presented in AS3798–2007 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.

As per the Specifications requirements, the subgrade was scarified in the uppermost 150mm, moisturised and compacted. Density and moisture testing of the subgrade was conducted, and the results met the specified requirements (further discussed in Section 4.5).

Two photographs of the subgrade assessment phase at the project are shown below.

Photograph 4.2: Subgrade assessment photographs



Photograph 3: Subgrade assessed with Pad foot roller



Photograph 4: Subgrade assessment using loaded Dump Truck

4.4 Engineered Fill Construction

All fill material was brought by dump trucks from the local stockpiles, 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.

Table 4.2: Earthworks plant on site

Equipment type	Model
Dozer	CAT D6
Pad foot roller	BPG 15 T Pad Foot Roller
Water cart	Volvo 25 T
Dump Trucks	Volvo
Excavator	CAT 25 T

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

Photograph 4.3: General Earthwork machinery and fill construction photographs



Photograph 5: Dozer used during fill construction



Photograph 6: Excavator used during fill construction



Photograph 7: Padfoot Roller used during fill construction



Photograph 8: Water cart used during fill construction

4.5 Density and Moisture testing

Field density and moisture content testing was undertaken progressively during the subgrade assessment and the construction on the compacted fill using a calibrated portable density and moisture gauge in accordance with AS1289.5.8.1. The HILF rapid compaction test was used for peak converted wet density determinations in accordance with AS1289.5.7.1. 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 AS3798-2007;

One hundred and twenty (120) tests were performed during the subgrade assessment and the filling process. Thirteen (13) of the tests did not achieve the required density and or 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 AS3798-2007- 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.
- Chadwick Geotechnics completed its Inspection and testing services on, 20 November 2024. After this date, 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 of 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.

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 24th June 2024 and 20th November 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:



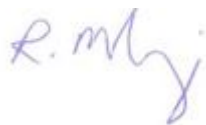
.....
Robert Barden
Project Manager

Authorised for Chadwick Geotechnics Pty Ltd by:



.....
Michael DiMeglio
Project Director

Report reviewed by:



.....
Robert McKenzie
Principal Geotechnical Engineer
PE0005222

\\\\ttgroup.local\\corporate\\dandenong\\geo projects\\1091938\\workingmaterial\\1091938.022 riverfield square stage 22\\level 1 report\\1091938.022 riverfield square stage 22 l1 report.docx

Appendix A Test Location Plan



Appendix B Hilf Density Test Summary

HILF Density Testing - Field Summary

Report No	Sample No	Date	Test Number	Lot No	Easting	Northing	Layer/RL	Density Ratio	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS00990	S24DS-04169	24/06/2024	1	2250 / 1	355359	5778569	18.447	97.5	1 wet	Pass	
HDR:W24DS00990	S24DS-04170	24/06/2024	2	2248 / 1	355329	5778558	18.583	94.5	0 wet	Fail	See Retest S24DS-4210
HDR:W24DS01000	S24DS-04210	25/06/2024	1	2248 / 1	355330	5778562	18.506	100	0 wet	Pass	Retest of S24DS-04170
HDR:W24DS01012	S24DS-04257	26/06/2024	1	2247 / 2	355311	5778559	18.63	95	1.5 dry	Pass	
HDR:W24DS01012	S24DS-04258	26/06/2024	2	2249 / 2	355345	5778564	18.4	97.5	0 wet	Pass	
HDR:W24DS01012	S24DS-04259	26/06/2024	3	2211 / 1	355284	5778591	18.4	98	2 dry	Pass	
HDR:W24DS01012	S24DS-04260	26/06/2024	4	2209 / 1	355247	5778555	18.65	95	0 dry	Pass	
HDR:W24DS01012	S24DS-04261	26/06/2024	5	2206 / 1	355256	5778559	19.12	99	0.5 wet	Pass	
HDR:W24DS01012	S24DS-04262	26/06/2024	6	2250 / 4	355356	5778567	19.03	101	3 wet	Pass	
HDR:W24DS01022	S24DS-04285	27/06/2024	1	2210 / 2	355246	5778583	18.809	92.5	3.5 wet	Fail	See Retest S24DS-4311
HDR:W24DS01022	S24DS-04286	27/06/2024	2	2214 / 2	355275	5778558	18.794	95	0.5 dry	Pass	
HDR:W24DS01022	S24DS-04287	27/06/2024	3	2207 / 2	355222	5778594	19.261	98.5	2 dry	Pass	
HDR:W24DS01022	S24DS-04288	27/06/2024	4	2246 / 5	355311	5778560	19.014	99.5	0.5 wet	Pass	
HDR:W24DS01022	S24DS-04289	27/06/2024	5	2212 / 3	355279	5778578	19.027	95	0 wet	Pass	
HDR:W24DS01030	S24DS-04309	28/06/2024	1	2216 / 3	355254	5778564	19.193	97	0.5 wet	Pass	
HDR:W24DS01030	S24DS-04310	28/06/2024	2	2212 / 4	355282	5778574	19.526	98	0.5 wet	Pass	
HDR:W24DS01030	S24DS-04311	28/06/2024	3	2210 / 2	355265	5778584	18.847	99	0 wet	Pass	Retest of S24DS-04285
HDR:W24DS01030	S24DS-04312	28/06/2024	4	2208 / 9	355234	5778584	19.319	97	0 wet	Pass	
HDR:W24DS01051	S24DS-04418	2/07/2024	1	2217 / 4	355242	5778564	19.249	96.5	0.5 wet	Pass	
HDR:W24DS01051	S24DS-04419	2/07/2024	2	2204 / 1	355177	5778598	19.2	99.5	0.5 wet	Pass	
HDR:W24DS01051	S24DS-04420	2/07/2024	3	2215 / 1	355273	5778542	18.694	96.5	0.5 wet	Pass	
HDR:W24DS01060	S24DS-04451	3/07/2024	1	2237 / 1	355273	5778513	18.165	98.5	1 wet	Pass	
HDR:W24DS01060	S24DS-04452	3/07/2024	2	2244 / 1	355308	5778508	18.695	96.5	2.5 wet	Pass	
HDR:W24DS01070	S24DS-04476	4/07/2024	1	2218 / 5	355234	5778571	19.565	102.5	0.5 wet	Pass	

HILF Density Testing - Field Summary

Report No	Sample No	Date	Test Number	Lot No	Easting	Northing	Layer/RL	Density Ratio	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS01070	S24DS-04477	4/07/2024	2	2207 / 5	355214	5778583	18.779	97	1.5 wet	Pass	
HDR:W24DS01070	S24DS-04478	4/07/2024	3	2203 / 2	355165	5778611	19.755	93.5	3 wet	Fail	See Retest S24DS-04500
HDR:W24DS01075	S24DS-04497	6/07/2024	1	2208 / 6	355231	5778581	20.043	97.5	0 dry	Pass	
HDR:W24DS01075	S24DS-04498	6/07/2024	2	2207 / 6	355219	5778584	19.996	96	0.5 wet	Pass	
HDR:W24DS01075	S24DS-04499	6/07/2024	3	2203 / 3	355163	5778603	19.725	95.5	0.5 wet	Pass	
HDR:W24DS01076	S24DS-04500	5/07/2024	1	2203 / 2	355164	5778608	19.572	97.5	2.5 wet	Pass	Retest of S24DS-04478
HDR:W24DS01076	S24DS-04501	5/07/2024	2	2243 / 2	355309	5778509	19.06	99	0.5 wet	Pass	
HDR:W24DS01076	S24DS-04502	5/07/2024	3	2245 - 2	355307	5778539	18.937	96	3 wet	Pass	
HDR:W24DS01076	S24DS-04503	5/07/2024	4	2216 / 2	355255	5778541	18.787	95.5	0.5 wet	Pass	
HDR:W24DS01076	S24DS-04504	5/07/2024	5	2218 / 1	355226	5778550	18.768	95.5	2.5 wet	Pass	
HDR:W24DS01086	S24DS-04527	8/07/2024	1	2216 / 3	355258	5778541	-	99	0.5 wet	Pass	
HDR:W24DS01086	S24DS-04528	8/07/2024	2	2213 / Final	355278	5778566	19.204	99	1 wet	Pass	
HDR:W24DS01086	S24DS-04529	8/07/2024	3	2219 / 3	355212	5778560	18.969	100.5	1.5 wet	Pass	
HDR:W24DS01086	S24DS-04530	8/07/2024	4	2205 / 6	355190	5778588	19.976	94	2 wet	Fail	See Retest S24DS-05042
HDR:W24DS01086	S24DS-04531	8/07/2024	5	2234 / 2	355236	5778511	17.291	99	0.5 dry	Pass	
HDR:W24DS01163	S24DS-04829	24/07/2024	1	2206 / 7	355196	5778582	20.221	96	3.0 Wet	Pass	
HDR:W24DS01180	S24DS-04887	26/07/2024	1	2240 / 1	355266	5778482	17.88	101	2 wet	Pass	
HDR:W24DS01208	S24DS-05042	1/08/2024	1	2205 / 6	355191	5778588	19.976	98.5	2 wet	Pass	Retest of S24DS-04530
HDR:W24DS01208	S24DS-05043	1/08/2024	2	2215 / 6	355273	5778537	19.229	100.5	2 wet	Pass	
HDR:W24DS01221	S24DS-05078	3/08/2024	1	2231	355185	5778518	18.024	100.5	2 wet	Pass	
HDR:W24DS01221	S24DS-05079	3/08/2024	2	2217	355244	5778547	19.356	96	2.5 wet	Pass	
DDR:W24DS01236	S24DS-05130	3/08/2021	3	2231	355185	5778518	18.024	96.5	4.5 Wet	Fail	See Retest S24DS-05443
DDR:W24DS01261	S24DS-05221	7/08/2024	1	2225/1	355125	5778576	18.97	98	4.5 Wet	Fail	See Retest S24DS-05424
HDR:W24DS01272	S24DS-05270	8/08/2024	1	2224 / -	355136	5778562	18.836	101.5	3 wet	Pass	
HDR:W24DS01302	S24DS-05422	12/08/2024	1	2225 / 2	355127	5778572	19.631	97.5	0 dry	Pass	

HILF Density Testing - Field Summary

Report No	Sample No	Date	Test Number	Lot No	Easting	Northing	Layer/RL	Density Ratio	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS01302	S24DS-05424	12/08/2024	2	2225 / -	355128	5778576	18.97	97.5	1.5 wet	Pass	Retest of S24DS-05221
HDR:W24DS01307	S24DS-05442	13/08/2024	1	2229 / 1	355153	5778511	19.11	98.5	0.5 wet	Pass	
HDR:W24DS01307	S24DS-05443	13/08/2024	2	2231 / 2	355191	5778518	18.224	95	1 wet	Pass	Retest of S24DS-05130
HDR:W24DS01307	S24DS-05444	13/08/2024	3	2228 / 2	355138	5778511	19.372	96.5	2.5 wet	Pass	
HDR:W24DS01327	S24DS-05551	14/08/2024	1	2232 / 2	355201	5778517	18.316	96.5	2.5 wet	Pass	
HDR:W24DS01327	S24DS-05554	14/08/2024	2	2231 / 3	355185	5778513	19.029	102.5	2.5 wet	Pass	
HDR:W24DS01327	S24DS-05555	14/08/2024	3	2228 / 4	355140	5778529	14.546	99.5	3 wet	Pass	
DDR:W24DS01334	S24DS-05571	14/08/2024	4	2230	355171	5778529	19.122	98.5	4.0 Wet	Fail	See Retest S24DS-05576
DDR:W24DS01334	S24DS-05572	14/08/2024	5	2222	355165	5778560	18.043	97	5.0 Wet	Fail	See Retest S24DS-05577
HDR:W24DS01335	S24DS-05573	15/08/2024	1	2232 / 4	355198	5778497	19.214	97.5	1.5 wet	Pass	
HDR:W24DS01335	S24DS-05576	15/08/2024	2	2230 / 3	355171	5778525	19.116	97.5	2.5 wet	Pass	Retest of 05571
HDR:W24DS01335	S24DS-05577	15/08/2024	3	2222 / 1	355165	5778560	18.064	98	3 wet	Pass	Retest of 05572
HDR:W24DS01335	S24DS-05578	15/08/2024	4	2220 / 1	355201	5778562	19.602	101.5	3 wet	Pass	
HDR:W24DS01335	S24DS-05579	15/08/2024	5	2235 / 2	355241	5778493	18.308	95.5	3 wet	Pass	
DDR:W24DS01343	S24DS-05594	15/08/2024	6	2236	355254	5778497	18.34	93.5	4.0 Wet	Fail	See Retest S24DS-05620
HDR:W24DS01352	S24DS-05620	16/08/2024	1	2236/1	355254	5778497	18.34	97	2 wet	Pass	Retest of S24DS-05594
HDR:W24DS01362	S24DS-05670	19/08/2024	1	2221 / 4	355186	5778563	19.656	97.5	2.5 wet	Pass	
HDR:W24DS01362	S24DS-05671	19/08/2024	2	2227 / -	355126	5778525	19.623	101.5	0 wet	Pass	
HDR:W24DS01362	S24DS-05672	19/08/2024	3	2238 / -	355212	5778494	18.155	99	0.5 dry	Pass	
HDR:W24DS01362	S24DS-05673	19/08/2024	4	2239 / 4	355269	5778487	-	98	3 wet	Pass	
HDR:W24DS01377	S24DS-05724	21/08/2024	1	2219 / 7	355210	5778562	19.782	98.5	0.5 wet	Pass	
HDR:W24DS01377	S24DS-05725	21/08/2024	2	2235 / 8	355241	5778493	18.706	96.5	3 wet	Pass	
HDR:W24DS01377	S24DS-05726	21/08/2024	3	2234 / 8	355231	5778522	18.97	96	3 wet	Pass	
HDR:W24DS01377	S24DS-05727	21/08/2024	4	2204 / 8	355175	5778591	20.303	98.5	2.5 wet	Pass	

HILF Density Testing - Field Summary

Report No	Sample No	Date	Test Number	Lot No	Easting	Northing	Layer/RL	Density Ratio	Moisture Variation	Pass / Fail	Comments (Retest No) Compliance test taken ect
HDR:W24DS01387	S24DS-05749	22/08/2024	1	2251 / -	355266	5778466	18.651	97	0.5 wet	Pass	
HDR:W24DS01387	S24DS-05750	22/08/2024	2	2221 / -	355196	5778550	19.81	97	1.5 wet	Pass	
HDR:W24DS01387	S24DS-05751	22/08/2024	3	2223 / -	355173	5778571	19.81	101	1 wet	Pass	
HDR:W24DS01395	S24DS-05765	26/08/2024	1	2203 / 9	355162	5778600	20.089	96.5	3.5 wet	Fail	See Retest S24DS-05876
HDR:W24DS01395	S24DS-05766	26/08/2024	2	2225 / 2	355128	5778557	19.752	100	2.5 dry	Pass	
HDR:W24DS01395	S24DS-05767	26/08/2024	3	2226 / 2	355117	5778521	20.025	103.5	1.5 dry	Pass	
HDR:W24DS01395	S24DS-05768	26/08/2024	4	2232 / -	355202	5778501	19.035	99.5	0.5 wet	Pass	
HDR:W24DS01395	S24DS-05769	26/08/2024	5	2230 / -	355172	5778518	19.576	99.5	2.5 dry	Pass	
HDR:W24DS01395	S24DS-05770	26/08/2024	6	2204 / 10	355180	5778594	20.82	95	3 wet	Pass	
HDR:W24DS01413	S24DS-05831	26/08/2024	1	2226 / -	355120	5778518	20.369	96.5	3 wet	Pass	
HDR:W24DS01422	S24DS-05875	27/08/2024	1	2224 / -	355142	5778568	19.588	99	0.5 dry	Pass	
HDR:W24DS01422	S24DS-05876	27/08/2024	2	2203 / -	355162	5778595	20.04	98	2 wet	Pass	Retest of S24DS-05765
HDR:W24DS01422	S24DS-05877	27/08/2024	3	2229 / Final	355164	5778524	19.872	98.5	0 dry	Pass	
HDR:W24DS01422	S24DS-05878	27/08/2024	4	2223 / -	355154	5778552	19.519	101.5	0.5 dry	Pass	
HDR:W24DS01422	S24DS-05879	27/08/2024	5	2232 / -	355196	5778506	19.615	101.5	0 dry	Pass	
HDR:W24DS01430	S24DS-05934	28/08/2024	1	2204 / -	355177	5778588	20.033	94.5	3 wet	Fail	See Retest S24DS-05991
HDR:W24DS01430	S24DS-05935	28/08/2024	2	2249 / -	355269	5778473	19.28	100	0 wet	Pass	
HDR:W24DS01430	S24DS-05936	28/08/2024	3	2202 / 1	355156	5778596	19.172	103	0.5 dry	Pass	
HDR:W24DS01430	S24DS-05937	28/08/2024	4	2224 / -	355149	5778569	20.194	102	2.5 wet	Pass	
HDR:W24DS01430	S24DS-05938	28/08/2024	5	2251 / -	355143	5778558	19.197	100.5	0 wet	Pass	
HDR:W24DS01430	S24DS-05939	28/08/2024	6	2201 / 2	355149	5778596	19.475	95.5	0 wet	Pass	
HDR:W24DS01442	S24DS-05990	29/08/2024	1	2202 / 3	355144	5778603	19.931	103.5	0.5 dry	Pass	
HDR:W24DS01442	S24DS-05991	29/08/2024	2	2203 / -	355178	5778587	20.962	95.5	0 wet	Pass	Retest of S24DS-05934

[illegible]

Appendix C NATA endorsed reports



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:W24DS00990

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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: Sandy Clay

Sample Data

Sample ID	S24DS-04169	S24DS-04170				
Field Sample ID	1	2				
Date Tested	24/06/2024	24/06/2024				
Time Tested	09:36	14:00				
E:	355359	355329				
N:	5778569	5778558				
RL:	18.447	18.583				
Lot / Layer:	2250 / 1	2248 / 1				

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 (%)	16.2	14.3				
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1				
Field Wet Density (t/m ³)	2.05	1.97				
Field Dry Density (t/m ³)	1.77	1.73				
Peak Converted Wet Density (t/m ³)	2.10	2.09				
Optimum Moisture Content (%)	15.5	14.5				
Compactive Effort	Standard	Standard				
Moisture Ratio (%)	105.0	100.0				
Moisture Variation (%)	1.0 wet	0.0				
Hilf Density Ratio (%)	97.5	94.5				

Comments



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:W24DS01000

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04210				
Field Sample ID	1				
Date Tested	25/06/2024				
Time Tested	09:30				
E:	355330				
N:	5778562				
EL:	48.506				
Lot / Layer:	2248 / 1				
	Retest of S24DS-04170				

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 (%)	17.1				
Field Moisture Content Method	AS 1289.2.1.1				
Field Wet Density (t/m ³)	2.05				
Field Dry Density (t/m ³)	1.75				
Peak Converted Wet Density (t/m ³)	2.05				
Optimum Moisture Content (%)	17.0				
Compactive Effort	Standard				
Moisture Ratio (%)	101.0				
Moisture Variation (%)	0.0				
Hilf Density Ratio (%)	100.0				

Comments



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:W24DS01012

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04257	S24DS-04258	S24DS-04259	S24DS-04260	S24DS-04261	S24DS-04262
Field Sample ID	1	2	3	4	5	6
Date Tested	26/06/2024	26/06/2024	26/06/2024	26/06/2024	26/06/2024	26/06/2024
Time Tested	08:50	09:00	09:15	14:30	14:50	15:10
E:	355311	355345	355284	35547	355256	355356
N:	5778559	5778564	5728591	5778555	5779859	5778567
EL:	18.63	18.40	18.40	18.65	19.12	19.030
Lot / Layer:	2247 / 2	2249 / 2	2211 / 1	2209 / 1	2206 / 1	2250 / 4

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	10.8	14.3	9.9	13.0	14.3	18.8
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.01	2.02	2.12	2.02	2.10	2.06
Field Dry Density (t/m ³)	1.81	1.76	1.92	1.79	1.84	1.74
Peak Converted Wet Density (t/m ³)	2.11	2.07	2.16	2.14	2.13	2.05
Optimum Moisture Content (%)	12.5	14.0	12.0	13.0	14.0	16.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	88.0	101.5	83.0	99.5	103.5	117.0
Moisture Variation (%)	1.5 dry	0.0	2.0 dry	0.0	0.5 wet	3.0 wet
Hilf Density Ratio (%)	95.0	97.5	98.0	95.0	99.0	101.0

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing



Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04285	S24DS-04286	S24DS-04287	S24DS-04288	S24DS-04289
Field Sample ID	1	2	3	4	5
Date Tested	27/06/2024	27/06/2024	27/06/2024	27/06/2024	27/06/2024
Time Tested	10:50	11:00	13:00	14:45	16:15
E:	355246	355275	355222	355311	355279
N:	5778583	5778558	5778594	5778560	5778578
EL:	18.809	18.794	19.261	19.014	19.027
Lot / Layer:	2210 / 2	2214 / 2	2207 / 2	2246 / 5	2212 / 3

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175
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	0
Field Moisture Content (%)	21.2	13.4	13.9	16.3	19.4
Field Moisture Content Method	AS 1289.2.1.1	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)	2.01	2.00	2.01	2.09	1.92
Field Dry Density (t/m³)	1.66	1.77	1.76	1.79	1.61
Peak Converted Wet Density (t/m³)	2.17	2.10	2.04	2.10	2.02
Optimum Moisture Content (%)	17.5	14.0	16.0	16.0	19.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	120.0	96.0	88.5	102.0	100.0
Moisture Variation (%)	3.5 wet	0.5 dry	2.0 dry	0.5 wet	0.0
Hilf Density Ratio (%)	92.5	95.0	98.5	99.5	95.0

Comments



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:W24DS01030

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04309	S24DS-04310	S24DS-04311	S24DS-04312		
Field Sample ID	1	2	3	4		
Date Tested	28/06/2024	28/06/2024	28/06/2024	28/06/2024		
Time Tested	09:00	12:30	14:30	14:45		
E:	355254	355282	355265	355234		
N:	5778564	5778574	5778584	5778584		
EL:	19.193	19.526	18.847	19.319		
Lot / Lift:	2216 / 3	2212 / 4	2210 / 2	2208 / 9		
			Retest of S24DS-04285			

Field and Laboratory Data

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		
Field Moisture Content (%)	16.5	16.7	17.9	16.0		
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/m ³)	2.00	2.10	2.05	2.08		
Field Dry Density (t/m ³)	1.72	1.80	1.73	1.80		
Peak Converted Wet Density (t/m ³)	2.06	2.14	2.07	2.14		
Optimum Moisture Content (%)	16.0	16.5	17.5	16.0		
Compactive Effort	Standard	Standard	Standard	Standard		
Moisture Ratio (%)	104.5	102.5	101.0	101.5		
Moisture Variation (%)	0.5 wet	0.5 wet	0.0	0.0		
Hilf Density Ratio (%)	97.0	98.0	99.0	97.0		

Comments



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:W24DS01051

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04418	S24DS-04419	S24DS-04420			
Field Sample ID	1	2	3			
Date Tested	2/07/2024	2/07/2024	2/07/2024			
Time Tested	09:45	09:15	13:50			
E:	355242	355177	355273			
N:	5778564	5778598	5778542			
EL:	19.249	19.20	18.694			
Lot / Layer:	2217 / 4	2204 / 1	2215 / 1			

Field and Laboratory Data

Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Moisture Content (%)	16.4	17.9	17.0			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m ³)	2.04	2.09	2.05			
Field Dry Density (t/m ³)	1.75	1.77	1.75			
Peak Converted Wet Density (t/m ³)	2.11	2.10	2.12			
Optimum Moisture Content (%)	16.0	17.0	16.5			
Compactive Effort	Standard	Standard	Standard			
Moisture Ratio (%)	103.5	104.0	103.0			
Moisture Variation (%)	0.5 wet	0.5 wet	0.5 wet			
Hilf Density Ratio (%)	96.5	99.5	96.5			

Comments



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:W24DS01060

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04451	S24DS-04452			
Field Sample ID	1	2			
Date Tested	3/07/2024	3/07/2024			
Time Tested	14:30	15:00			
E:	355273	355308			
N:	5778513	577308			
EL:	18.165	18.695			
Lot / Lift:	2237 / 1	2244 / 1			

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 (%)	13.4	15.4			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m ³)	2.13	2.09			
Field Dry Density (t/m ³)	1.88	1.81			
Peak Converted Wet Density (t/m ³)	2.16	2.16			
Optimum Moisture Content (%)	12.5	13.0			
Compactive Effort	Standard	Standard			
Moisture Ratio (%)	107.0	117.5			
Moisture Variation (%)	1.0 wet	2.5 wet			
Hilf Density Ratio (%)	98.5	96.5			

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:

Accredited for compliance with ISO/IEC 17025
– Testing



Accreditation Number: 12719
Site Number: 12712

Approved Signatory: J. Lamont
(Discipline Manager - CMT)
Date of Issue: 8/07/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-04476	S24DS-04477	S24DS-04478			
Field Sample ID	1	2	3			
Date Tested	4/07/2024	4/07/2024	4/07/2024			
Time Tested	14:20	14:35	15:40			
E:	355234	355214	355165			
N:	5778571	5778583	5778611			
EL:	19.565	18.779	19.755			
Lot/ Lift:	2218 / 5	2207 / 5	2203 / 2			

Field and Laboratory Data

Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Moisture Content (%)	15.8	14.6	21.4			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m ³)	2.22	2.15	1.96			
Field Dry Density (t/m ³)	1.92	1.87	1.61			
Peak Converted Wet Density (t/m ³)	2.17	2.21	2.09			
Optimum Moisture Content (%)	15.5	13.0	18.5			
Compactive Effort	Standard	Standard	Standard			
Moisture Ratio (%)	103.5	111.5	115.5			
Moisture Variation (%)	0.5 wet	1.5 wet	3.0 wet			
Hilf Density Ratio (%)	102.5	97.0	93.5			

Comments



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:W24DS01075

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04497	S24DS-04498	S24DS-04499			
Field Sample ID	1	2	3			
Date Tested	6/07/2024	6/07/2024	6/07/2024			
Time Tested	13:00	13:10	13:20			
E:	355231	355219	355163			
N:	5778581	5778584	5778603			
EL:	20.043	19.996	19.725			
Lot / Lift:	2208 / 6	2207 / 6	2203 / 3			

Field and Laboratory Data

Depth of Test (mm)	175	175	175			
Depth of Layer (mm)	200	200	200			
AS Sieve Size (mm)	19.0	19.0	19.0			
Oversize Wet (%)	0	0	0			
Field Moisture Content (%)	14.6	14.1	17.6			
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1			
Field Wet Density (t/m ³)	2.05	2.04	2.01			
Field Dry Density (t/m ³)	1.79	1.79	1.71			
Peak Converted Wet Density (t/m ³)	2.11	2.13	2.10			
Optimum Moisture Content (%)	14.5	13.5	17.0			
Compactive Effort	Standard	Standard	Standard			
Moisture Ratio (%)	99.5	102.5	104.0			
Moisture Variation (%)	0.0	0.5 wet	0.5 wet			
Hilf Density Ratio (%)	97.5	96.0	95.5			

Comments



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:W24DS01076

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:

Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde
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 ID	S24DS-04500	S24DS-04501	S24DS-04502	S24DS-04503	S24DS-04504
Field Sample ID	1	2	3	4	5
Date Tested	5/07/2024	5/07/2024	5/07/2024	5/07/2024	5/07/2024
Time Tested	14:00	14:45	15:00	15:10	15:20
E	355164	355309	3553607	355255	355226
N	5778608	5778509	5778539	5778541	5778550
EL	19.572	19.060	18.937	18.787	18.768
Lot / Layer:	2203 / 2	2243 / 2	2245 - 2	2216 / 2	2218 / 1
	Retest of S24DS-04478				

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175
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	0
Field Moisture Content (%)	19.8	19.3	17.7	16.2	17.1
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.02	2.04	2.04	2.05	2.03
Field Dry Density (t/m ³)	1.68	1.71	1.73	1.76	1.73
Peak Converted Wet Density (t/m ³)	2.07	2.07	2.12	2.14	2.12
Optimum Moisture Content (%)	17.0	18.5	15.0	16.0	14.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	115.0	103.0	120.0	102.0	118.5
Moisture Variation (%)	2.5 wet	0.5 wet	3.0 wet	0.5 wet	2.5 wet
Hilf Density Ratio (%)	97.5	99.0	96.0	95.5	95.5

Comments



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:W24DS01086

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 12/07/2024

Sample Details

Location: Clyde
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 ID	S24DS-04527	S24DS-04528	S24DS-04529	S24DS-04530	S24DS-04531
Field Sample ID	1	2	3	4	5
Date Tested	8/07/2024	8/07/2024	8/07/2024	8/07/2024	8/07/2024
Time Tested	09:45	10:00	11:00	13:45	14:10
E:	355258	355278	355212	355190	355236
N:	5778541	5778566	5778560	5778588	5778511
EL:	-	19.204	18.969	19.976	17.291
Lot / Lift:	2216 / 3	2213 / Final	2219 / 3	2205 / 6	2234 / 2

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175
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	0
Field Moisture Content (%)	17.8	18.0	18.5	16.8	17.5
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.07	2.05	2.07	1.97	2.05
Field Dry Density (t/m ³)	1.76	1.74	1.75	1.69	1.74
Peak Converted Wet Density (t/m ³)	2.09	2.07	2.06	2.09	2.07
Optimum Moisture Content (%)	17.5	17.0	17.0	15.0	18.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	102.5	104.5	110.0	112.5	98.0
Moisture Variation (%)	0.5 wet	1.0 wet	1.5 wet	2.0 wet	0.5 dry
Hilf Density Ratio (%)	99.0	99.0	100.5	94.0	99.0

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 1/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22
Client Request ID:
Specification Requirements: Minimum Hilf Density Ratio of 95% (+- 3% of OMC)
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 ID	S24DS-04829		
Field Sample ID	1		
Date Tested	24/07/2024		
Time Tested	15:15		
E	355196		
N	5778582		
Elevation	20.221		
Lot	2206		
Layer	7		
Soil Description	Clay		

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/m ³)	2.00		
Field Dry Density (t/m ³)	1.68		
Peak Converted Wet Density (t/m ³)	2.08		
Optimum Moisture Content (%)	16.0		
Compactive Effort	Standard		
Moisture Ratio (%)	118.0		
Moisture Variation (%)	3.0 wet		
Hilf Density Ratio (%)	96.0		

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 1/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22
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: Sandy Clay

Sample Data

Sample ID	S24DS-04887
Field Sample ID	1
Date Tested	26/07/2024
Time Tested	14:00
E:	355266
N:	5778482
RL:	17.88
Layer:	1
Lot	2240
Soil Description	Sandy CLAY

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 (%)	20.7
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.09
Field Dry Density (t/m ³)	1.73
Peak Converted Wet Density (t/m ³)	2.07
Optimum Moisture Content (%)	18.5
Compactive Effort	Standard
Moisture Ratio (%)	112.5
Moisture Variation (%)	2.0 wet
Hilf Density Ratio (%)	101.0


Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025
– Testing



K. B. Patel

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 7/08/2024

Sample Details

Location: Riverfield Square Estate, Stage 22
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: Imported - Rescue Area
Material: Clay

Sample Data

Sample ID	S24DS-05042	S24DS-05043	
Field Sample ID	1	2	
Date Tested	1/08/2024	1/08/2024	
Time Tested	14:40	15:10	
E:	-	355273	
N:	-	5778537	
EL:	-	19.229	
Lot / Layer:	2204 / 6	2215 / 6	
	Retest of S24DS-04530		
Soil Description	Clay	Clay	

Field and Laboratory Data

Depth of Test (mm)	200	200	
Depth of Layer (mm)	175	175	
AS Sieve Size (mm)	19.0	19.0	
Oversize Wet (%)	0	0	
Field Moisture Content (%)	17.6	20.4	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.08	2.06	
Field Dry Density (t/m ³)	1.77	1.71	
Peak Converted Wet Density (t/m ³)	2.11	2.05	
Optimum Moisture Content (%)	15.5	18.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	114.5	111.5	
Moisture Variation (%)	2.0 wet	2.0 wet	
Hilf Density Ratio (%)	98.5	100.5	

Comments



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:W24DS01221

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 7/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)

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: Imported - Reserve Area
Material: Clay

Sample Data

Sample ID	S24DS-05078	S24DS-05079
Field Sample ID	1	2
Date Tested	3/08/2024	3/08/2024
Time Tested	09:30	10:20
E:	355185	355244
N:	5778518	5778547
EL:	18.024	19.356
Lot / Layer:	2231 / 1	2217 / 5

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 (%)	21.7	18.7
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.06	2.05
Field Dry Density (t/m ³)	1.69	1.72
Peak Converted Wet Density (t/m ³)	2.05	2.13
Optimum Moisture Content (%)	19.5	16.0
Compactive Effort	Standard	Standard
Moisture Ratio (%)	110.5	115.5
Moisture Variation (%)	2.0 wet	2.5 wet
Hilf Density Ratio (%)	100.5	96.0

Comments



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: DDR:W24DS01236

Issue No: 1

Dry Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 7/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test Procedures: AS 1289.5.8.1
Laboratory Test Procedures: AS 1289.2.1.1, AS 1289.5.4.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Imported - Reserve Area
Material: Clay

Sample Data

Sample ID	S24DS-05130		
Field Sample ID	1		
Date Tested	3/08/2024		
Time Tested	10:40		
E:	355185		
N:	5778518		
EL:	18.024		
Lot / Layer:	2231 / 1		
Soil Description	Clay		

Field and Laboratory Data

Sample ID	S24DS-05130		
Depth of Test (mm)	175		
Depth of Layer (mm)	200		
AS Sieve Size (mm)	19.0		
Oversize Wet (%)	0		
Oversize Dry (%)	0		
Field Moisture Content (%)	23.9		
Field Wet Density (t/m ³)	2.00		
Field Dry Density (t/m ³)	1.62		
Lab Result from Test No.	S24DS-05130		
Maximum Dry Density (t/m ³)	1.68		
Optimum Moisture Content (%)	19.5		
Compactive Effort	Standard		
Moisture Ratio (%)	123.5		
Moisture Variation	4.5 wet		
Density Ratio (%)	96.5		
Compactive Effort	Standard		

Comments



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: DDR:W24DS01261

Issue No: 1

Dry Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 13/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22, Clyde North
Client Request ID:
Specification Requirements: Minimum Hilt Density Ratio of 95%
Field Test Procedures: AS 1289.5.8.1
Laboratory Test Procedures: AS 1289.2.1.1, AS 1289.5.4.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: Clay

Sample Data

Sample ID	S24DS-05221	
Field Sample ID	1	
Date Tested	7/08/2024	
Time Tested	11:30	
E:	355125	
N:	5778576	
EL:	19.090	
Lot / Layer:	2225 / -	
	FAILED CONVERTED TO MDD	
Soil Description	Clay	

Field and Laboratory Data

Sample ID	S24DS-05221	
Depth of Test (mm)	175	
Depth of Layer (mm)	200	
AS Sieve Size (mm)	19.0	
Oversize Wet (%)	0	
Oversize Dry (%)	0	
Field Moisture Content (%)	28.3	
Field Wet Density (t/m ³)	2.00	
Field Dry Density (t/m ³)	1.56	
Lab Result from Test No.	S24DS-05221	
Maximum Dry Density (t/m ³)	1.58	
Optimum Moisture Content (%)	24.0	
Compactive Effort	Standard	
Moisture Ratio (%)	118.0	
Moisture Variation	4.5 wet	
Density Ratio (%)	98.0	
Compactive Effort	Standard	

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 13/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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: Sandy Clay

Sample Data

Sample ID	S24DS-05270
Field Sample ID	1
Date Tested	8/08/2024
Time Tested	11:50
E:	- (5136)
N:	- (78562)
EL:	18.836
Lot / Layer:	2224 / -
Soil Description	Sandy Clay

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 (%)	31.1
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.00
Field Dry Density (t/m ³)	1.52
Peak Converted Wet Density (t/m ³)	1.97
Optimum Moisture Content (%)	27.5
Compactive Effort	Standard
Moisture Ratio (%)	112.5
Moisture Variation (%)	3.0 wet
Hilf Density Ratio (%)	101.5

Comments



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:W24DS01302

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 14/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22, Clyde North
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: Imported - Meridian Green
Material: Clay

Sample Data

Sample ID	S24DS-05422	S24DS-05424	
Field Sample ID	1	2	
Date Tested	12/08/2024	12/08/2024	
Time Tested	09:45		
E:	355127	355128	
N:	5778572	5778576	
EL:	19.631	18.970	
Lot / Layer:	2225 / 2	2225 / -	
		Retest of S24DS-05221	
Soil Description	Clay	Clay	

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 (%)	16.7	19.2	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.03	2.03	
Field Dry Density (t/m ³)	1.74	1.70	
Peak Converted Wet Density (t/m ³)	2.08	2.08	
Optimum Moisture Content (%)	17.0	17.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	100.0	110.0	
Moisture Variation (%)	0.0	1.5 wet	
Hilf Density Ratio (%)	97.5	97.5	

Comments



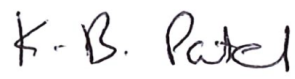
HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:

Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 15/08/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22, Clyde North
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 ID	S24DS-05442	S24DS-05443	S24DS-05444
Field Sample ID	1	2	3
Date Tested	13/08/2024	13/08/2024	13/08/2024
Time Tested	11:20	14:00	15:00
E:	355153	355191	355138
N:	5778511	5778518	5778511
EL:	19.110	18.224	19.372
Lot / Layer:	2229 / 1	2231 / 2	2228 / 2
Soil Description	Clay	Clay	Clay

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	19.9	17.9	17.6
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.05	2.02	2.02
Field Dry Density (t/m ³)	1.71	1.71	1.72
Peak Converted Wet Density (t/m ³)	2.09	2.13	2.10
Optimum Moisture Content (%)	19.5	17.0	15.0
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	102.0	105.5	117.5
Moisture Variation (%)	0.5 wet	1.0 wet	2.5 wet
Hilf Density Ratio (%)	98.5	95.0	96.5

Comments



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:W24DS01327

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 16/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Riverfield Square Estate, Stage 22, Clyde North
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 ID	S24DS-05551	S24DS-05554	S24DS-05555
Field Sample ID	1	4	5
Date Tested	14/08/2024	14/08/2024	14/08/2024
Time Tested	11:00	12:50	14:30
E:	355201	355185	355140
N:	5778517	5778513	5778829
EL:	18.316	19.029	14.546
Lot / Layer:	2232 / 2	2231 / 3	2228 / 4
Soil Description	Clay	Clay	Clay

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	21.1	21.3	19.1
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.03	2.06	2.07
Field Dry Density (t/m ³)	1.68	1.70	1.73
Peak Converted Wet Density (t/m ³)	2.11	2.01	2.07
Optimum Moisture Content (%)	18.5	18.5	16.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	115.5	114.5	117.0
Moisture Variation (%)	2.5 wet	2.5 wet	3.0 wet
Hilf Density Ratio (%)	96.5	102.5	99.5

Comments



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: DDR:W24DS01334

Issue No: 1

Dry Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 16/08/2024

Sample Details

Location: Riverfield Square Estate, Stage 22, Clyde North

Client Request ID:

Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction

Field Test Procedures: AS 1289.5.8.1

Laboratory Test Procedures: AS 1289.2.1.1, AS 1289.5.4.1

Sampling Method: AS1289.1.2.1 Clause 6.4 (b)

Source: Onsite

Material: Clay

Sample Data

Sample ID	S24DS-05571	S24DS-05572
Field Sample ID	1	2
Date Tested	14/08/2024	14/08/2024
Time Tested	11:15	12:30
E:	355171	- (5164.254)
N:	5778529	- (78554.705)
EL:	19.122	18.043
Lot / Layer:	2230 / 3	2222 / 1
Soil Description	Clay	Clay

Field and Laboratory Data

Sample ID	S24DS-05571	S24DS-05572
Depth of Test (mm)	175	175
Depth of Layer (mm)	200	200
AS Sieve Size (mm)	19.0	19.0
Oversize Wet (%)	0	0
Oversize Dry (%)	0	0
Field Moisture Content (%)	19.8	23.3
Field Wet Density (t/m ³)	2.08	2.02
Field Dry Density (t/m ³)	1.73	1.64
Lab Result from Test No.	S24DS-05571	S24DS-05572
Maximum Dry Density (t/m ³)	1.76	1.69
Optimum Moisture Content (%)	16.0	18.0
Compactive Effort	Standard	Standard
Moisture Ratio (%)	124.5	128.5
Moisture Variation	4.0 wet	5.0 wet
Density Ratio (%)	98.5	97.0
Compactive Effort	Standard	Standard


Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025
– Testing



K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 21/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)

Sample Details

Location: Clyde North
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 ID	S24DS-05573	S24DS-05576	S24DS-05577	S24DS-05578	S24DS-05579
Field Sample ID	1	4	5	6	7
Date Tested	15/08/2024	15/08/2024	15/08/2024	15/08/2024	15/08/2024
E:	355198	355171	355165	355201	355241
N:	5778497	5778525	5778560	5778562	5778493
EL:	19.214	19.116	18.064	19.602	18.308
Lot / Layer:	2232 / 4	2230 / 3	2222 / 1	2220 / 1	2235 / 2
Soil Description	Clay	Clay	Clay	Clay	Clay

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175
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	0
Field Moisture Content (%)	17.5	20.5	19.6	22.7	22.7
Field Moisture Content Method	AS 1289.2.1.1	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)	2.02	2.05	2.01	2.08	2.00
Field Dry Density (t/m³)	1.72	1.70	1.68	1.69	1.63
Peak Converted Wet Density (t/m³)	2.07	2.10	2.05	2.04	2.09
Optimum Moisture Content (%)	16.0	18.0	16.5	19.5	19.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	108.5	115.0	119.0	116.0	115.5
Moisture Variation (%)	1.5 wet	2.5 wet	3.0 wet	3.0 wet	3.0 wet
Hilf Density Ratio (%)	97.5	97.5	98.0	101.5	95.5

Comments



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: DDR:W24DS01343

Issue No: 1

Dry Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 21/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
Client Request ID:
Specification Requirements: Minimum Dry Density Ratio of 95% Standard Compaction
Field Test Procedures: AS 1289.5.8.1
Laboratory Test Procedures: AS 1289.2.1.1, AS 1289.5.4.1
Sampling Method: AS1289.1.2.1 Clause 6.4 (b)
Source: Onsite
Material: Clay

Sample Data

Sample ID	S24DS-05594	
Field Sample ID	2	
Date Tested	15/08/2024	
Time Tested	11:10	
E:	355254	
N:	5778499	
EL:	18.340	
Lot / Layer:	2236 / 1	
Soil Description	Clay	

Field and Laboratory Data

Sample ID	S24DS-05594	
Depth of Test (mm)	175	
Depth of Layer (mm)	200	
AS Sieve Size (mm)	19.0	
Oversize Wet (%)	0	
Oversize Dry (%)	0	
Field Moisture Content (%)	20.0	
Field Wet Density (t/m ³)	1.97	
Field Dry Density (t/m ³)	1.64	
Lab Result from Test No.	S24DS-05594	
Maximum Dry Density (t/m ³)	1.76	
Optimum Moisture Content (%)	16.0	
Compactive Effort	Standard	
Moisture Ratio (%)	125.5	
Moisture Variation	4.0 wet	
Density Ratio (%)	93.5	
Compactive Effort	Standard	

Comments



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:W24DS01352

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 21/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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 ID	S24DS-05620
Field Sample ID	1
Date Tested	16/08/2024
Time Tested	13:00
E:	355254
N:	5778497
EL:	-
Lot / Layer:	2236 / 1
	Retest of S24DS-05575
Soil Description	Clay

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/m ³)	2.03
Field Dry Density (t/m ³)	1.71
Peak Converted Wet Density (t/m ³)	2.09
Optimum Moisture Content (%)	17.0
Compactive Effort	Standard
Moisture Ratio (%)	111.5
Moisture Variation (%)	2.0 wet
Hilf Density Ratio (%)	97.0

Comments



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:W24DS01362

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 21/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)

Sample Details

Location: Clyde North
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: Imported
Material: Sandy Clay

Sample Data

Sample ID	S24DS-05670	S24DS-05671	S24DS-05672	S24DS-05673
Field Sample ID	1	2	3	4
Date Tested	19/08/2024	19/08/2024	19/08/2024	19/08/2024
Time Tested	10:03	12:05	12:58	13:36
E:	355186	355126	355212	355269
N:	5778563	5778525	5778494	5778487
EL:	19.656	19.623	18.155	-
Lot / Layer:	2221 / 4	2227 / -	2233 / -	2239 / 4

Field and Laboratory Data

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
Field Moisture Content (%)	19.6	16.5	15.4	18.8
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/m ³)	2.04	2.13	2.06	2.05
Field Dry Density (t/m ³)	1.70	1.83	1.78	1.73
Peak Converted Wet Density (t/m ³)	2.09	2.10	2.07	2.09
Optimum Moisture Content (%)	17.5	16.5	16.0	16.0
Compactive Effort	Standard	Standard	Standard	Standard
Moisture Ratio (%)	113.5	101.5	97.0	118.0
Moisture Variation (%)	2.5 wet	0.0	0.5 dry	3.0 wet
Hilf Density Ratio (%)	97.5	101.5	99.0	98.0

Comments



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:W24DS01377

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 2/09/2024
Approved Signatory: Krushik Patel
(Senior Geotechnician)
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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: Imported - Reserve Area
Material: Clay

Sample Data

Sample ID	S24DS-05724	S24DS-05725	S24DS-05726	S24DS-05727
Field Sample ID	1	2	3	4
Date Tested	21/08/2024	21/08/2024	21/08/2024	21/08/2024
Time Tested	09:00	13:15	13:30	15:10
E:	355210	355241	355231	355175
N:	5778562	5778493	5778522	5778891
E:	19.782	18.706	18.970	20.303
Lot / Layer:	2219 / 7	2235 / 8	2234 / 8	2204 / 8

Field and Laboratory Data

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
Field Moisture Content (%)	18.3	20.2	20.5	20.9
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/m ³)	2.04	2.00	2.00	2.02
Field Dry Density (t/m ³)	1.72	1.66	1.66	1.67
Peak Converted Wet Density (t/m ³)	2.07	2.07	2.08	2.06
Optimum Moisture Content (%)	18.0	17.5	17.5	18.0
Compactive Effort	Standard	Standard	Standard	Standard
Moisture Ratio (%)	103.0	116.5	117.0	115.5
Moisture Variation (%)	0.5 wet	3.0 wet	3.0 wet	2.5 wet
Hilf Density Ratio (%)	98.5	96.5	96.0	98.5

Comments



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:W24DS01387

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 2/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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 ID	S24DS-05749	S24DS-05750	S24DS-05751
Field Sample ID	1	2	3
Date Tested	22/08/2024	22/08/2024	22/08/2024
Time Tested	10:40	14:55	15:10
E:	355266	355196	355173
N:	5778466	5778550	5778571
EL:	18.651	19.810	19.810
Lot / Layer:	2251 / -	2221 / -	2223 / -

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	18.7	17.9	23.5
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.00	2.03	1.99
Field Dry Density (t/m ³)	1.68	1.72	1.61
Peak Converted Wet Density (t/m ³)	2.06	2.08	1.97
Optimum Moisture Content (%)	18.0	16.5	22.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	103.5	110.0	104.0
Moisture Variation (%)	0.5 wet	1.5 wet	1.0 wet
Hilf Density Ratio (%)	97.0	97.0	101.0

Comments



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:W24DS01395

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 2/09/2024
Approved Signatory: Krushik Patel
(Senior Geotechnician)
THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-05765	S24DS-05766	S24DS-05767	S24DS-05768	S24DS-05769	S24DS-05770
Field Sample ID	1	2	3	4	5	6
Date Tested	23/08/2024	23/08/2024	23/08/2024	23/08/2024	23/08/2024	23/08/2024
Time Tested	11:40	12:00	12:20	13:30	14:45	15:15
E:	355162	355128	355117	355202	355172	355180
N:	5778600	5778557	5778521	5778501	5778518	5778594
EL:	20.089	19.752	20.025	19.035	19.576	20.820
Lot / Layer:	2203 / 9	2225 / 2	2226 / 2	2232 / -	2230 / -	2204 / 10

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	22.6	22.6	17.8	16.7	21.7	20.2
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	1.98	1.93	2.07	2.09	1.91	1.98
Field Dry Density (t/m ³)	1.62	1.58	1.76	1.79	1.57	1.65
Peak Converted Wet Density (t/m ³)	2.05	1.93	2.00	2.10	1.92	2.08
Optimum Moisture Content (%)	19.0	25.0	19.5	16.0	24.5	17.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	118.5	90.5	92.5	102.5	88.5	118.5
Moisture Variation (%)	3.5 wet	2.5 dry	1.5 dry	0.5 wet	2.5 dry	3.0 wet
Hilf Density Ratio (%)	96.5	100.0	103.5	99.5	99.5	95.0

Comments



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:W24DS01413

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 28/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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 ID	S24DS-05831
Field Sample ID	1
Date Tested	26/08/2024
Time Tested	14:20
E:	355120
N:	5778518
EL:	20.369
Lot / Layer:	2226 / -
Soil Description	Clay

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 (%)	21.4
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	1.99
Field Dry Density (t/m ³)	1.64
Peak Converted Wet Density (t/m ³)	2.06
Optimum Moisture Content (%)	18.5
Compactive Effort	Standard
Moisture Ratio (%)	115.5
Moisture Variation (%)	3.0 wet
Hilf Density Ratio (%)	96.5

Comments



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:W24DS01422

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 4/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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 ID	S24DS-05875	S24DS-05876	S24DS-05877	S24DS-05878	S24DS-05879
Field Sample ID	1	2	3	4	5
Date Tested	27/08/2024	27/08/2024	27/08/2024	27/08/2024	27/08/2024
Time Tested	09:00	09:30	12:00	14:00	14:15
E:	355142	355162	355164	355154	355196
N:	5778568	5778595	5778524	5778552	5778506
EL:	19.588	20.04	19.872	19.519	19.615
Lot / Layer:	2224 / -	2203 / -	2229 / Final	2223 / -	2232 / -
		Retest of S24DS-05765			

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175
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	0
Field Moisture Content (%)	17.5	21.0	19.5	24.6	17.9
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.05	2.01	1.99	1.98	2.09
Field Dry Density (t/m ³)	1.74	1.66	1.66	1.59	1.77
Peak Converted Wet Density (t/m ³)	2.07	2.05	2.02	1.95	2.05
Optimum Moisture Content (%)	18.0	19.0	19.5	25.0	18.0
Compactive Effort	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	96.5	111.5	99.5	97.5	99.5
Moisture Variation (%)	0.5 dry	2.0 wet	0.0	0.5 dry	0.0
Hilf Density Ratio (%)	99.0	98.0	98.5	101.5	101.5

Comments



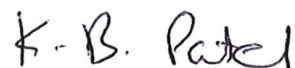
HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:

Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 4/09/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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 ID	S24DS-05934	S24DS-05935	S24DS-05936	S24DS-05937	S24DS-05938	S24DS-05939
Field Sample ID	1	2	3	4	5	6
Date Tested	28/08/2024	28/08/2024	28/08/2024	28/08/2024	28/08/2024	28/08/2024
Time Tested	09:30	10:45	11:40	12:50	14:45	15:50
E:	355177	355269	355036	355030	355030	355156
N:	5778588	5778473	5778408	5778372	5778372	5778283
EL:	20.033	19.280	19.172	20.194	19.197	19.475
Lot / Layer:	2204 / -	2249 / -	2202 / 1	2224 / -	2251 / -	2201 / 2

Field and Laboratory Data

Depth of Test (mm)	175	175	175	175	175	175
Depth of Layer (mm)	200	200	200	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Oversize Wet (%)	0	0	0	0	0	0
Field Moisture Content (%)	17.5	15.2	16.5	24.9	15.2	16.4
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	1.99	2.07	2.10	2.05	2.08	2.02
Field Dry Density (t/m ³)	1.69	1.79	1.80	1.64	1.80	1.73
Peak Converted Wet Density (t/m ³)	2.11	2.07	2.03	2.00	2.06	2.12
Optimum Moisture Content (%)	14.5	15.0	17.0	22.5	15.0	16.5
Compactive Effort	Standard	Standard	Standard	Standard	Standard	Standard
Moisture Ratio (%)	121.0	100.0	97.0	112.0	100.5	100.0
Moisture Variation (%)	3.0 wet	0.0	0.5 dry	2.5 wet	0.0	0.0
Hilf Density Ratio (%)	94.5	100.0	103.0	102.0	100.5	95.5

Comments



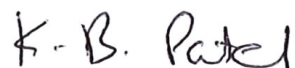
HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:

Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719
Site Number: 12712

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 4/09/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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: Imported - Stage 21
Material: Clay

Sample Data

Sample ID	S24DS-05990	S24DS-05991	S24DS-05992
Field Sample ID	1	2	3
Date Tested	29/08/2024	29/08/2024	29/08/2024
Time Tested	10:30	11:00	14:00
E:	355144	355178	355216
N:	5778603	5778587	5778500
EL:	19.931	20.962	19.100
Lot / Layer:	2202 / 3	2203 / -	2233 / -
		Retest of S24DS-05934	

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	16.8	15.7	16.4
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.11	2.01	2.06
Field Dry Density (t/m ³)	1.81	1.73	1.77
Peak Converted Wet Density (t/m ³)	2.04	2.10	2.02
Optimum Moisture Content (%)	17.5	15.5	18.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	96.5	100.5	89.5
Moisture Variation (%)	0.5 dry	0.0	2.0 dry
Hilf Density Ratio (%)	103.5	95.5	102.0

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 4/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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: Imported - Stage 21
Material: Clay

Sample Data

Sample ID	S24DS-06100
Field Sample ID	1
Date Tested	30/08/2024
Time Tested	10:18
E:	355162
N:	5778588
EL:	20.548
Lot / Layer:	2203 / -

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 (%)	15.3
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.11
Field Dry Density (t/m ³)	1.83
Peak Converted Wet Density (t/m ³)	2.10
Optimum Moisture Content (%)	15.0
Compactive Effort	Standard
Moisture Ratio (%)	101.0
Moisture Variation (%)	0.0
Hilf Density Ratio (%)	101.0

Comments



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:W24DS01472

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 10/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Location: Clyde North
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 ID	S24DS-06133
Field Sample ID	1
Date Tested	2/09/2024
Time Tested	12:30
E:	355142
N:	5778613
EL:	21.047
Lot / Layer:	2201 / -

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 (%)	20.0
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.05
Field Dry Density (t/m ³)	1.71
Peak Converted Wet Density (t/m ³)	2.00
Optimum Moisture Content (%)	20.0
Compactive Effort	Standard
Moisture Ratio (%)	100.0
Moisture Variation (%)	0.0
Hilf Density Ratio (%)	102.5

Comments



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:W24DS01544

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 17/09/2024

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 ID	S24DS-06442	S24DS-06443	
Field Sample ID	1	2	
Date Tested	10/09/2024	10/09/2024	
Time Tested	13:30	13:45	
E:	355131	355231	
N:	5778590	5778500	
EL:	18.571	18.102	
Lot / Layer:	2201 / 2	2234 / -	

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 (%)	19.0	20.9	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.04	2.07	
Field Dry Density (t/m ³)	1.71	1.71	
Peak Converted Wet Density (t/m ³)	2.05	2.07	
Optimum Moisture Content (%)	19.5	18.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	98.0	112.5	
Moisture Variation (%)	0.5 dry	2.5 wet	
Hilf Density Ratio (%)	99.5	100.0	

Comments



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:W24DS01552

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 17/09/2024

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 ID	S24DS-06479	S24DS-06480	
Field Sample ID	1	2	
Date Tested	11/09/2024	11/09/2024	
Time Tested	10:00	14:45	
E:	355203	355159	
N:	5778534	5778572	
EL:	18.656	18.961	
Lot / Layer:	Road	2223 / -	

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 (%)	18.7	18.0	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.10	2.08	
Field Dry Density (t/m ³)	1.77	1.76	
Peak Converted Wet Density (t/m ³)	2.09	2.11	
Optimum Moisture Content (%)	16.0	15.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	115.0	117.5	
Moisture Variation (%)	2.5 wet	2.5 wet	
Hilf Density Ratio (%)	100.5	98.5	


Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025
– Testing



K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 17/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-06557	S24DS-06558	
Field Sample ID	1	2	
Date Tested	12/09/2024	12/09/2024	
Time Tested	13:15	15:45	
E:	355165	355142	
N:	5778565	5778576	
EL:	19.356	19.649	
Lot / Layer:	2222 / -	22224 / -	

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	25.3	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m³)	2.02	2.02	
Field Dry Density (t/m³)	1.68	1.61	
Peak Converted Wet Density (t/m³)	2.05	2.00	
Optimum Moisture Content (%)	18.5	23.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	111.5	108.0	
Moisture Variation (%)	2.0 wet	2.0 wet	
Hilf Density Ratio (%)	98.5	101.0	

Comments



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:W24DS01574

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 19/09/2024

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 ID	S24DS-06616	S24DS-06617	
Field Sample ID	1	2	
Date Tested	13/09/2024	13/09/2024	
Time Tested	11:30	11:45	
E:	355144	355214	
N:	5778583	5778510	
EL:	20.023	-	
Lot / Layer:	2202 / -	2233 / -	

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 (%)	24.9	20.4	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.02	2.04	
Field Dry Density (t/m ³)	1.62	1.70	
Peak Converted Wet Density (t/m ³)	2.07	2.13	
Optimum Moisture Content (%)	22.0	17.5	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	113.0	117.0	
Moisture Variation (%)	3.0 wet	3.0 wet	
Hilf Density Ratio (%)	97.5	96.0	

Comments



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:W24DS01593

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 19/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-06705
Field Sample ID	1
Date Tested	16/09/2024
Time Tested	13:50
E:	355145
N:	5778590
EL:	20.671
Lot / Layer:	2202 / -

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 (%)	16.8
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.17
Field Dry Density (t/m ³)	1.85
Peak Converted Wet Density (t/m ³)	2.13
Optimum Moisture Content (%)	14.5
Compactive Effort	Standard
Moisture Ratio (%)	118.0
Moisture Variation (%)	2.5 wet
Hilf Density Ratio (%)	102.0

Comments



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:W24DS01622

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 27/09/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)

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 ID	S24DS-06798	S24DS-06799	
Field Sample ID	1	2	
Date Tested	18/09/2024	18/09/2024	
Time Tested	10:00	15:15	
E:	355130	355145	
N:	5778596	5778600	
EL:	21.457	21.626	
Lot / Layer:	2201 / -	2202 / -	

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 (%)	16.4	17.1	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.10	2.12	
Field Dry Density (t/m ³)	1.80	1.81	
Peak Converted Wet Density (t/m ³)	2.10	2.06	
Optimum Moisture Content (%)	16.5	17.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	99.0	99.5	
Moisture Variation (%)	0.0	0.0	
Hilf Density Ratio (%)	100.0	103.0	

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 1/10/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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: Sandy Clay

Sample Data

Sample ID	S24DS-06897		
Field Sample ID	1		
Date Tested	23/09/2024		
Time Tested	08:57		
E:	0355230		
N:	5778493		
EL:	19.303		
Lot / Layer:	2234 / 4		

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 (%)	13.6		
Field Moisture Content Method	AS 1289.2.1.1		
Field Wet Density (t/m ³)	2.15		
Field Dry Density (t/m ³)	1.90		
Peak Converted Wet Density (t/m ³)	2.18		
Optimum Moisture Content (%)	11.5		
Compactive Effort	Standard		
Moisture Ratio (%)	118.5		
Moisture Variation (%)	2.0 wet		
Hilf Density Ratio (%)	98.5		

Comments



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:W24DS01668

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 1/10/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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: Sandy Clay

Sample Data

Sample ID	S24DS-06927
Field Sample ID	1
Date Tested	24/09/2024
Time Tested	09:15
E:	355245
N:	5778507
EL:	19.427
Lot / Layer:	2235 / 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 (%)	18.6
Field Moisture Content Method	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.09
Field Dry Density (t/m ³)	1.76
Peak Converted Wet Density (t/m ³)	2.08
Optimum Moisture Content (%)	18.5
Compactive Effort	Standard
Moisture Ratio (%)	100.0
Moisture Variation (%)	0.0
Hilf Density Ratio (%)	100.5

Comments



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:W24DS01986

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Date of Issue: 13/11/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)

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 ID	S24DS-08226	S24DS-08227	S24DS-08228
Field Sample ID	1	2	3
Date Tested	7/11/2024	7/11/2024	7/11/2024
Time Tested	09:30	11:30	12:30
E:	355240	355250	355164
N:	5778588	5778591	5778612
RL:	18.600	18.783	19.116
Lot / Layer:	2208 / 1	2209 / 3	2204 / 5

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	14.9	12.4	15.3
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.04	2.10	2.07
Field Dry Density (t/m ³)	1.77	1.87	1.79
Peak Converted Wet Density (t/m ³)	2.07	2.07	2.02
Optimum Moisture Content (%)	16.0	15.0	17.0
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	94.0	83.5	89.5
Moisture Variation (%)	1.0 dry	2.5 dry	2.0 dry
Hilf Density Ratio (%)	98.5	101.5	102.0

Comments



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:W24DS01993

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 13/11/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-08254	S24DS-08255	
Field Sample ID	1	2	
Date Tested	8/11/2024	8/11/2024	
Time Tested	08:30	12:30	
E	355257	355202	
N	5778593	5778598	
E:	19.031	19.592	
Lot / Layer:	2210 / 7	2206 / 9	

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 (%)	15.1	13.3	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.02	2.00	
Field Dry Density (t/m ³)	1.75	1.77	
Peak Converted Wet Density (t/m ³)	2.13	2.03	
Optimum Moisture Content (%)	15.0	15.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	100.5	88.0	
Moisture Variation (%)	0.0	2.0 dry	
Hilf Density Ratio (%)	94.5	99.0	

Comments

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 13/11/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-08283	S24DS-08284	S24DS-08285
Field Sample ID	1	2	3
Date Tested	11/11/2024	11/11/2024	11/11/2024
Time Tested	11:00	11:45	15:30
E:	355258	355155	355148
N:	5778508	5778624	5778630
EL:	18.910	19.845	20.014
Lot / Layer:	2210 / 7	Road Res / 2	Road Res / 3
	Retest of S24DS-08254		

Field and Laboratory Data

Depth of Test (mm)	175	175	175
Depth of Layer (mm)	200	200	200
AS Sieve Size (mm)	19.0	19.0	19.0
Oversize Wet (%)	0	0	0
Field Moisture Content (%)	13.2	12.2	9.7
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	AS 1289.2.1.1
Field Wet Density (t/m ³)	2.02	2.08	1.89
Field Dry Density (t/m ³)	1.78	1.85	1.72
Peak Converted Wet Density (t/m ³)	1.98	1.95	1.88
Optimum Moisture Content (%)	17.0	15.5	11.5
Compactive Effort	Standard	Standard	Standard
Moisture Ratio (%)	76.5	79.5	83.5
Moisture Variation (%)	4.0 dry	3.0 dry	2.0 dry
Hilf Density Ratio (%)	102.0	106.5	100.5

Comments



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:W24DS02056

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 21/11/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED 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 ID	S24DS-08478	S24DS-08479	
Field Sample ID	1	2	
Date Tested	18/11/2024	18/11/2024	
Time Tested	14:35	14:50	
E:	35522	355256	
N:	5778504	5778598	
EL:	19.473	19.916	
Lot / Layer:	2207 / 1	2210 / 7	
		Retest of S24DS-08283	

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 (%)	13.4	14.0	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	2.00	2.01	
Field Dry Density (t/m ³)	1.76	1.76	
Peak Converted Wet Density (t/m ³)	1.97	1.93	
Optimum Moisture Content (%)	16.0	16.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	85.5	86.5	
Moisture Variation (%)	2.5 dry	2.0 dry	
Hilf Density Ratio (%)	101.5	104.0	

Comments



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:W24DS02081

Issue No: 1

HILF Density Ratio Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: Krushik Patel
(Senior Geotechnician)
Date of Issue: 25/11/2024

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 ID	S24DS-08535	S24DS-08536	
Field Sample ID	1	2	
Date Tested	20/11/2024	20/11/2024	
Time Tested	10:00	10:20	
E:	355104	355231	
N:	5778636	5778594	
EL:	20.405	20.053	
Lot / Layer:	- / 7	2208 / Final	
	Road Reserve		

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 (%)	17.5	10.9	
Field Moisture Content Method	AS 1289.2.1.1	AS 1289.2.1.1	
Field Wet Density (t/m ³)	1.90	1.99	
Field Dry Density (t/m ³)	1.61	1.79	
Peak Converted Wet Density (t/m ³)	1.99	1.98	
Optimum Moisture Content (%)	19.5	13.0	
Compactive Effort	Standard	Standard	
Moisture Ratio (%)	88.5	84.0	
Moisture Variation (%)	2.0 dry	2.0 dry	
Hilf Density Ratio (%)	95.5	100.5	


Comments

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025
– Testing



Accreditation Number: 12719
Site Number: 12712
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Approved Signatory: B. Taseski
(Ravenhall Laboratory Manager)
Date of Issue: 11/07/2024

Sample Details

Location Clyde North
Sample Location E: 355345, N: 5778564, EL: 18.872, Lot: 2249 / Lift: 2
Field Sample ID 1
Date Sampled 26/06/2024
Time Sampled 09:00
Source Onsite
Material Sandy CLAY, trace gravel, gray brown, low plasticity
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S24DS-04263

Other Test Results

Description	Method	Result	Limits
Moisture Content (%)	AS 1289.2.1.1	15.2	
Date Tested		28/06/2024	
Sample History	AS 1289.1.1	Oven-dried	
Preparation	AS 1289.1.1	Dry Sieved	
Linear Shrinkage (%)	AS 1289.3.4.1	4.5	
Mould Length (mm)		250	
Crumbling		No	
Curling		No	
Cracking		No	
Liquid Limit (%)	AS 1289.3.1.2	25	
Plastic Limit (%)	AS 1289.3.2.1	13	
Plasticity Index (%)	AS 1289.3.3.1	12	
Date Tested		2/07/2024	

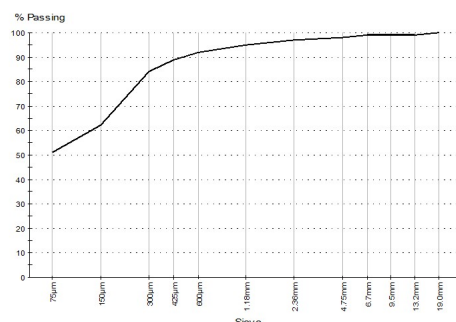
Particle Size Distribution

Method: AS 1289.3.6.1
Drying By: Oven
Date Tested: 2/07/2024

Note: Sample Washed

Sieve Size	% Passing	Limits
19.0mm	100	
13.2mm	99	
9.5mm	99	
6.7mm	99	
4.75mm	98	
2.36mm	97	
1.18mm	95	
600µm	92	
425µm	89	
300µm	84	
150µm	62	
75µm	51	

Chart



Comments



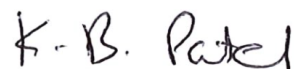
N/A

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.: **CG Request No.:**
TRN: **Lot No.:**

Accredited for compliance with ISO/IEC 17025
– Testing

Accreditation Number: 12719 Approved Signatory: Krushik Patel
(Senior Geotechnician)
Site Number: 12712 Date of Issue: 21/08/2024
THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Sample Location E: 355138, N: 5778511, EL: 19.372, Lot: 2228, Layer: 2
Field Sample ID 1
Date Sampled 13/08/2024
Time Sampled 15:00
Source Imported - Reserve Area
Material Clay
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S24DS-05468

Sample Description:

Atterberg Limit:

Liquid Limit: 38
Plastic Limit: 16
Plasticity Index: 22
Linear Shrinkage (%): 7.5

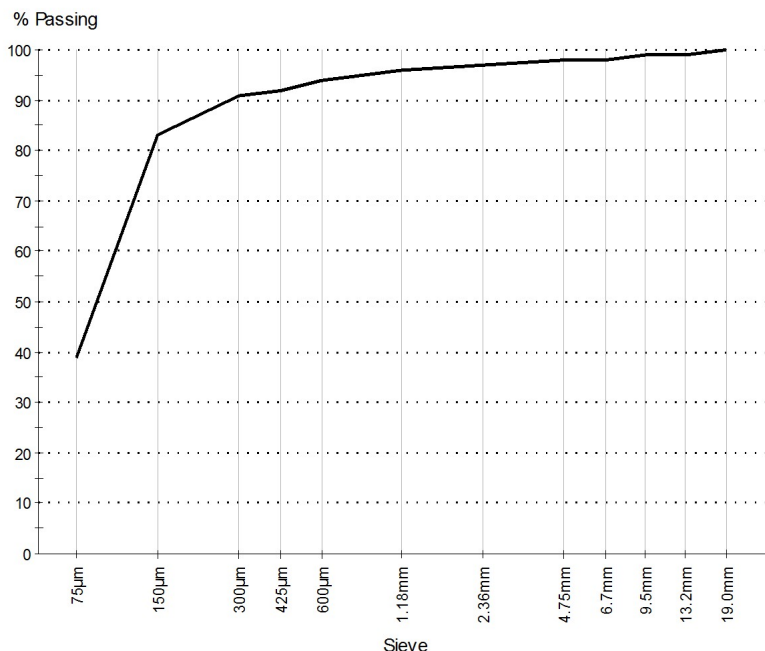
Grading: AS 1289.3.6.1

Drying By: Oven
Date Tested: 16/08/2024

Note: Sample Washed

Sieve Size	% Passing	Limits
19.0mm	100	
13.2mm	99	
9.5mm	99	
6.7mm	98	
4.75mm	98	
2.36mm	97	
1.18mm	96	
600µm	94	
425µm	92	
300µm	91	
150µm	83	
75µm	39	

Particle Size Distribution



FINES (39.1%)		SAND			GRAVEL		COBBLES
Clay	Silt	Fine (53.3%)	Medium (4.3%)	Coarse (1.1%)	Fine (2.2%)	Coarse (0.0%)	(0.0%)

D85: 0.1784 **D60:** 0.1044 **D50:** 0.0892
D30: N/A **D15:** N/A **D10:** N/A



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: MAT:S24DS-05468/1

Issue No: 1

Material Test Report

Client: Greenridge Properties Pty Ltd
Address: PO Box 3131
AUBURN VIC 3123
Project: Riverfield Square Estate, Stage 22
Project No.: 1091938.022

Order No.:
TRN:

CG Request No.:
Lot No.:



Accredited for compliance with ISO/IEC 17025
– Testing

K. B. Patel

Accreditation Number: 12719
Approved Signatory: Krushik Patel
(Senior Geotechnician)

Site Number: 12712
Date of Issue: 21/08/2024

THIS DOCUMENT SHALL NOT BE REPRODUCED EXCEPT IN FULL

Sample Details

Sample Location E: 355138, N: 5778511, EL: 19.372, Lot: 2228, Layer: 2
Field Sample ID 1
Date Sampled 13/08/2024
Time Sampled 15:00
Source Imported - Reserve Area
Material Clay
Specification AS Grading
Sampling Method AS1289.1.2.1 Clause 6.4 (b)
Sample ID S24DS-05468

Other Test Results

Description	Method	Limits	Result
Moisture Content (%)	AS 1289.2.1.1		19.1
Sample History	AS 1289.1.1		Oven-dried
Preparation	AS 1289.1.1		Dry Sieved
Linear Shrinkage (%)	AS 1289.3.4.1		7.5
Mould Length (mm)			250
Crumbling			No
Curling			No
Cracking			No
Liquid Limit (%)	AS 1289.3.1.2		38
Plastic Limit (%)	AS 1289.3.2.1		16
Plasticity Index (%)	AS 1289.3.3.1		22
Date Tested			16/08/2024

Comments

N/A

Appendix D Controlled Fill Certificate



CONTROLLED FILL CERTIFICATE - LEVEL 1 INSPECTION & TESTING

PROJECT : Riverfield Square Estate Stage 22
Lots 2201 to 2240 and 2243 to 2251

Chadwick Geotechnics REF: 1091938.022v1

CLIENT : Greenridge Properties Pty Ltd
P.O Box 4136
Dandenong South Victoria, 3164

DATE: 17 December 2024

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 (24th June 2024 and was completed on 20th November 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

Robert Barden
Project Manager

Michael DiMeglio
Project Director

© Chadwick Geotechnics Pty Ltd.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise other than in accordance with the limitations and for the purpose provided for above.

www.chadwickgeotechnics.com.au

