

# Viewpoint Estate Stage G1 Huntly

## Earthworks Supervision Report for DPJ Civil

Report 23C 0120 G1  
October, 2023

# Viewpoint Estate Stage G1 Huntly

## Earthworks Supervision Report

for  
DPJ Civil

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## **1 INTRODUCTION**

DPJ Civil commissioned Geotechnical Testing Services (GTS) to undertake Level 1 Supervision and testing (AS3798-2007) for the earthworks for the residential subdivision Viewpoint Estate Stage G1, Huntly.

Level 1 Testing was generally performed in line with AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development" and provides inspection of the construction of controlled fill and compaction testing in accordance with AS1289 "Methods of Testing Soils for Engineering Purposes". The Level 1 testing was undertaken by Geotechnicians with supervision provided by a Geotechnical Engineer from GTS.

## **2 SCOPE OF WORKS**

### **2.1 AREA OF WORK**

Geotechnical Testing Services provided Level 1 inspection and testing of the engineered fill placed in Lots 628 to 647 and 649 to 650. In addition, following consolidation of Lots 639, 640 and the southern lot of 640 for the childcare centre, a sewer trench located along the rear of 640 was not required and therefore excavated and backfilled with cement treated crushed rock.

The depth of fill across the site varied from none to around 500mm at its deepest with the approximate locations shown on the attached site plan. It is noted that sites with 300mm or less were not included in the controlled fill operations.

### **2.2 PLACEMENT SPECIFICATION**

Whilst there was no earthworks specification compiled for this project, the placement of the fill and associated works generally followed the recommendations outlined in AS3798-2007 "Guidelines for Earthworks for Commercial and Residential Developments" and the construction specification.

In summary, the earthworks comply with the following:

- The layers for residential lots are to be compacted to at least 95% of the density ratio in accordance with AS1289 5.1.1 (or 5.7.1), based on Standard compaction.

Therefore, in accordance with Table 8.1 of AS3798-2007, the filling may be considered a large scale (greater than 1500m<sup>2</sup>) and therefore a minimum of 1 test per 2500m<sup>2</sup> or 3 tests per visit are required.

It is noted that under this scale, not every lot required testing, however was conducted at 1 test per layer per lot which exceeds the minimum requirement.

### 3 INSPECTION AND TESTING

Inspection of the excavated base was conducted by a Senior Geotechnical Engineer and it was observed that the unsuitable material (vegetation, topsoil/silt) had been removed with the base consisting of a Silty Clay material of suitable strength. The disused sewer trench was excavated to a depth of approximately 1.5m with the base and sides consisting of very stiff Silty Clay. Photographs of the base and trench excavation are attached.

Level 1 inspection and testing was undertaken by a geotechnician from GTS who nominated the timing and location of the in-situ density tests. The approximate location of each test is recorded on the test reports and attached fill plan.

Laboratory compaction testing was undertaken on a one to one basis at our Bendigo laboratory. A summary of the results of the compaction control testing is presented in a table below with the full NATA endorsed test reports included in the Appendix.

### 4 SUMMARY OF TEST RESULTS

A summary of the test results is included in the following table with full NATA accredited reports included in the Appendix.

Project No.	Sample No.	Test Date	Location	Reduced Level (mm)	Moisture Variation %O.M.C	Density Ratio %
1	B23-12536A	10/02/2023	Lot 632	FSL	3.5	106.0
2	B23-12536B	10/02/2023	Lot 633	FSL	4.0	107.0
3	B23-12536C	10/02/2023	Lot 634	FSL	4.0	103.0
4	B23-12536D	10/02/2023	Lot 635	FSL	4.0	104.0
5	B23-12536E	10/02/2023	Lot 636	FSL	5.0	106.0
6	B23-12536F	10/02/2023	Lot 637	FSL	5.0	109.0
7	B23-12536G	10/02/2023	Lot 638	FSL	4.5	103.0
8	B23-12556F	14/02/2023	Lot 628	FSL	3.0	97.0
9	B23-12556G	14/02/2023	Lot 629	FSL	2.5	104.5
10	B23-12591L	17/02/2023	Lot 630	FSL	2.5	104.5
11	B23-12591M	17/02/2023	Lot 631	FSL	5.0	100.5

Project No.	Sample No.	Test Date	Location	Reduced Level (mm)	Moisture Variation %O.M.C	Density Ratio %
12	B23-12626A	23/02/2023	Lot 641	FSL	3.0	102.0
13	B23-12626B	23/02/2023	Lot 642	FSL	4.5	101.5
14	B23-12626C	23/02/2023	Lot 643	FSL	4.0	101.5
15	B23-12626D	23/02/2023	Lot 644	FSL	4.0	105.5
16	B23-12626E	23/02/2023	Lot 645	FSL	4.5	99.0
17	B23-12626F	23/02/2023	Lot 646	FSL	4.5	98.5
18	B23-12626G	23/02/2023	Lot 647	FSL	4.5	103.0
19	B23-12676A	2/03/2023	Lot 651	FSL	4.0	98.5
20	B23-12676B	2/03/2023	Lot 650	FSL	3.5	96.5
21	B23-12786A	23/03/2023	Lot 639	FSL	3.5	95.0
22	B23-12786B	23/03/2023	Lot 640	FSL	3.5	99.5
23	B23-13645A	1/08/2023	Lot 640 Childcare	-250	2.0	105.5
24	B23-13645B	1/08/2023	Lot 640 Childcare	-250	1.0	101.0
25	B23-13668A	3/08/2023	Lot 640 Childcare	FSL	2.5	101.5
26	B23-13668B	3/08/2023	Lot 640 Childcare	FSL	1.0	101.0

## 5 STATEMENT OF COMPLIANCE

GTS personnel have provided Level 1 inspection and testing services during the placement of material for the filling of Lots 628 to 647 and 649 to 650. The placement of fill and construction techniques adopted was observed throughout the project.

Based on observations made by GTS personnel and the results of field and laboratory tests, we consider that the fill has been placed and compacted and is considered to be engineered or controlled fill. It is noted that the sewer trench was backfilled with cement treated crushed rock and is also considered controlled fill. Therefore, subject to residential site classifications, the controlled fill material is deemed a suitable founding medium for future residential buildings. It is noted that topsoil material may be spread across the sites following completion of these earthworks and that this topsoil material is not considered controlled fill.



**Shane Hampton** BE (Hons), MIEAust  
**Principal Geotechnical Engineer**

# APPENDIX



P1: General view of Stage G1 (the pipe and covering soil was removed and inspected at a later date)



P2: Excavated sewer trench to be backfilled



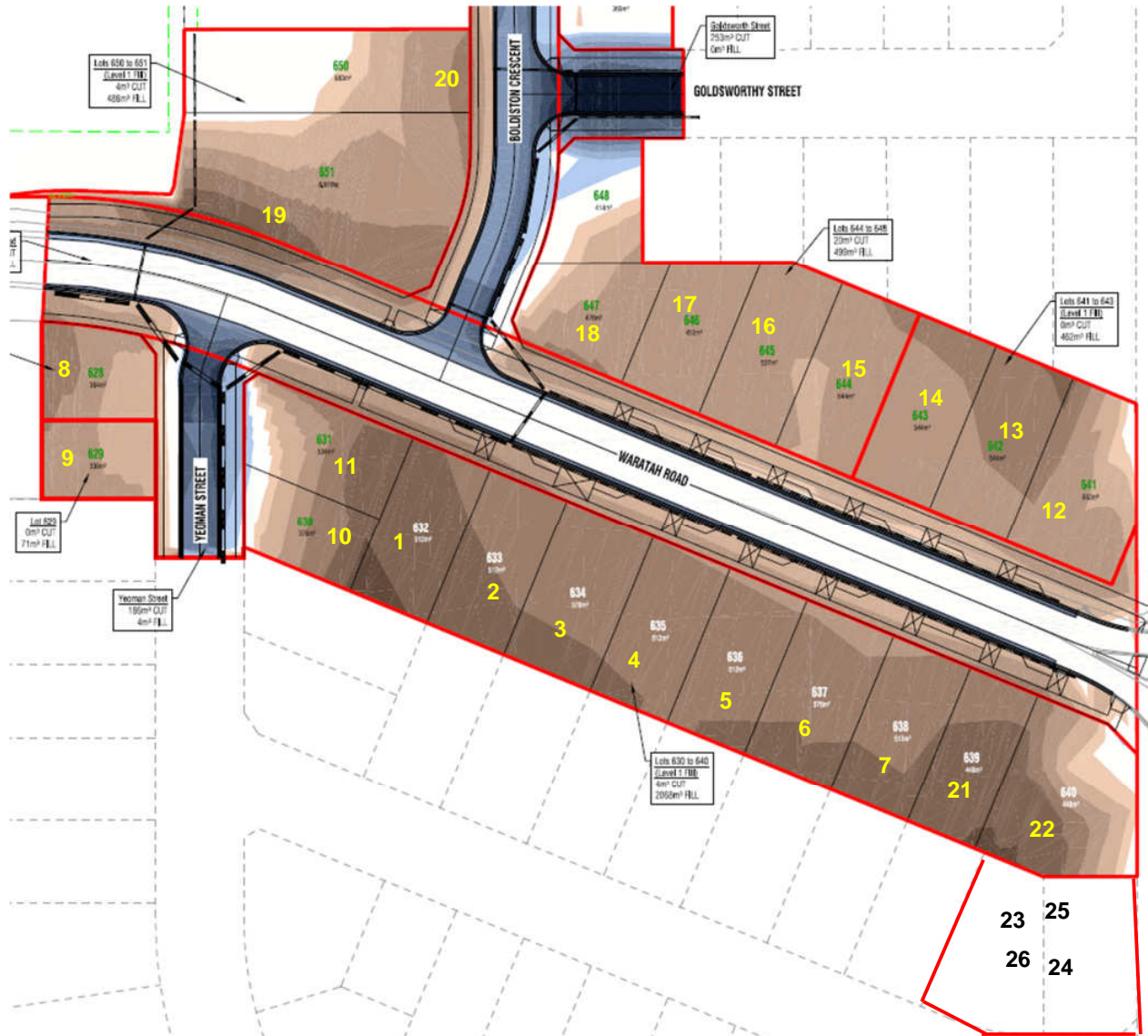


Fig 1: Site Plan

# Material Test Report



**Report Number:** P18615-96  
**Issue Number:** 1  
**Date Issued:** 11/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1  
**Work Request:** 12536  
**Date Sampled:** 10/02/2023  
**Dates Tested:** 10/02/2023 - 11/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



*Handwritten signature*

Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1				
Sample Number	B23-12536A	B23-12536B	B23-12536C	B23-12536D
Date Tested	10/02/2023	10/02/2023	10/02/2023	10/02/2023
Time Tested	11:06	11:13	11:21	11:25
Test Request #/Location	House Block Lot 632	House Block Lot 633	House Block Lot 634	House Block Lot 635
Chainage (m)	Centre	Centre	Centre	Centre
Location Offset (m)	**	**	**	**
Layer / Reduced Level	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	300	300	300	300
Soil Description	Gravelly Silty Clay	Gravelly Silty Clay	Gravelly Silty Clay	Gravelly Silty Clay
Test Depth (mm)	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	1	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.19	2.28	2.15	2.15
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	**	2.14	2.09	2.07
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.06	**	**	**
Moisture Variation (Wv) %	**	4.0	4.0	4.0
Adjusted Moisture Variation %	3.5	**	**	**
Hilf Density Ratio (%)	<b>106.0</b>	<b>107.0</b>	<b>103.0</b>	<b>104.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
Report Remarks	**	**	**	**

**Moisture Variation Note:**

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

# Material Test Report



**Report Number:** P18615-96  
**Issue Number:** 1  
**Date Issued:** 11/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1  
**Work Request:** 12536  
**Date Sampled:** 10/02/2023  
**Dates Tested:** 10/02/2023 - 11/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1				
Sample Number	B23-12536E	B23-12536F	B23-12536G	
Date Tested	10/02/2023	10/02/2023	10/02/2023	
Time Tested	11:31	11:37	11:43	
Test Request #/Location	House Block Lot 636	House Block Lot 637	House Block Lot 638	
Chainage (m)	Centre	Centre	Centre	
Location Offset (m)	**	**	**	
Layer / Reduced Level	FSL	FSL	FSL	
Thickness of Layer (mm)	300	300	300	
Soil Description	Gravelly Silty Clay	Gravelly Silty Clay	Gravelly Silty Clay	
Test Depth (mm)	275	275	275	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	1	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	2.19	2.21	2.11	
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	
Peak Converted Wet Density t/m <sup>3</sup>	**	2.03	2.05	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.07	**	**	
Moisture Variation (Wv) %	**	5.0	4.5	
Adjusted Moisture Variation %	5.0	**	**	
Hilf Density Ratio (%)	<b>106.0</b>	<b>109.0</b>	<b>103.0</b>	
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	
Report Remarks	**	**	**	

**Moisture Variation Note:**

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

# Material Test Report



**Report Number:** P18615-97  
**Issue Number:** 2 - This version supersedes all previous issues  
**Reissue Reason:** Amended Layer on test B23-12556F/G  
**Date Issued:** 16/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage F2 and G1  
**Work Request:** 12556  
**Date Sampled:** 14/02/2023  
**Dates Tested:** 14/02/2023 - 15/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
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Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1				
Sample Number	B23-12556A	B23-12556B	B23-12556C	B23-12556D
Date Tested	14/02/2023	14/02/2023	14/02/2023	14/02/2023
Time Tested	14:07	14:13	14:27	14:33
Test Request #/Location	House blocks Block 623 F2	House blocks Block 624 F2	House blocks Block 625 F2	House blocks Block 626 F2
Chainage (m)	Centre	Centre	Centre	Centre
Location Offset (m)	**	**	**	**
Layer / Reduced Level	-300	-300	Fsl	Fsl
Thickness of Layer (mm)	300	300	300	300
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel
Test Depth (mm)	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.23	2.23	2.06	2.06
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	2.06	2.00	2.07	2.04
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	3.5	5.0	4.5	4.5
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	<b>108.0</b>	<b>111.5</b>	<b>99.5</b>	<b>100.5</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
Report Remarks	**	**	**	**

**Moisture Variation Note:**

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

# Material Test Report



**Report Number:** P18615-97  
**Issue Number:** 2 - This version supersedes all previous issues  
**Reissue Reason:** Amended Layer on test B23-12556F/G  
**Date Issued:** 16/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage F2 and G1  
**Work Request:** 12556  
**Date Sampled:** 14/02/2023  
**Dates Tested:** 14/02/2023 - 15/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

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Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1			
Sample Number	B23-12556E	B23-12556F	B23-12556G
Date Tested	14/02/2023	14/02/2023	14/02/2023
Time Tested	14:41	14:44	14:51
Test Request #/Location	House blocks Block 627 F2	House blocks Block 628 G1	House blocks Block 629 G1
Chainage (m)	Centre	Centre	Rear
Location Offset (m)	**	**	**
Layer / Reduced Level	Fsl	Fsl	Fsl
Thickness of Layer (mm)	300	300	300
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel
Test Depth (mm)	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0
Percentage of Wet Oversize (%)	1	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.19	1.98	2.21
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	**	2.03	2.11
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.07	**	**
Moisture Variation (Wv) %	**	3.0	2.5
Adjusted Moisture Variation %	2.5	**	**
Hilf Density Ratio (%)	<b>105.5</b>	<b>97.0</b>	<b>104.5</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
Report Remarks	**	**	**

## Moisture Variation Note:

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

# Material Test Report

**Report Number:** P18615-98  
**Issue Number:** 1  
**Date Issued:** 21/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1 / G2 / F2  
**Work Request:** 12591  
**Date Sampled:** 17/02/2023  
**Dates Tested:** 17/02/2023 - 21/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location



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Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1						
Sample Number	B23-12591A	B23-12591B	B23-12591C	B23-12591D	B23-12591E	B23-12591F
Date Tested	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Time Tested	11:19	11:23	11:38	11:41	11:49	11:55
Test Request #/Location	House blocks Block 623 F2	House blocks Block 624 F2	House blocks Block 702 G2	House blocks Block 701 G2	House blocks Block 700 G2	House blocks Block 699 G2
Chainage (m)	Middle	Middle	Back	Back	Back	Back
Location Offset (m)	**	**	**	**	**	**
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	300	300	300	300	300	300
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel
Test Depth (mm)	275	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0	5	2
Field Wet Density (FWD) t/m <sup>3</sup>	2.10	2.01	2.03	2.07	2.14	2.08
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	2.04	2.05	2.02	2.03	**	**
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**	2.11	2.03
Moisture Variation (Wv) %	4.0	2.0	4.5	4.5	**	**
Adjusted Moisture Variation %	**	**	**	**	2.5	5.0
Hilf Density Ratio (%)	<b>103.0</b>	<b>98.0</b>	<b>100.5</b>	<b>102.0</b>	<b>101.5</b>	<b>103.0</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
Report Remarks	**	**	**	**	**	**

## Moisture Variation Note:

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

# Material Test Report

**Report Number:** P18615-98  
**Issue Number:** 1  
**Date Issued:** 21/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1 / G2 / F2  
**Work Request:** 12591  
**Date Sampled:** 17/02/2023  
**Dates Tested:** 17/02/2023 - 21/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location



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 Bendigo Soil and Concrete Testing Laboratory  
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Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1						
Sample Number	B23-12591G	B23-12591H	B23-12591I	B23-12591J	B23-12591K	B23-12591L
Date Tested	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023	17/02/2023
Time Tested	12:01	12:07	12:13	12:19	12:24	12:34
Test Request #/Location	House blocks Block 698 G2	House blocks Block 697 G2	House blocks Block 696 G2	House blocks Block 695 G2	House blocks Block 694 G2	House blocks Block 630 G1
Chainage (m)	Back	Back	Back	Back	Back	Middle
Location Offset (m)	**	**	**	**	**	**
Layer / Reduced Level	FSL	FSL	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	300	300	300	300	300	300
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel
Test Depth (mm)	275	275	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	2	1	2	0	4	4
Field Wet Density (FWD) t/m <sup>3</sup>	2.22	2.07	2.24	2.04	2.11	2.22
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	2.04	**	**
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.07	2.08	2.03	**	2.08	2.13
Moisture Variation (Wv) %	**	**	**	4.5	**	**
Adjusted Moisture Variation %	4.0	4.0	5.0	**	3.5	2.5
Hilf Density Ratio (%)	<b>107.0</b>	<b>99.5</b>	<b>110.5</b>	<b>100.0</b>	<b>101.5</b>	<b>104.5</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
Report Remarks	**	**	**	**	**	**

**Moisture Variation Note:**

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

# Material Test Report



**Report Number:** P18615-98  
**Issue Number:** 1  
**Date Issued:** 21/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1 / G2 / F2  
**Work Request:** 12591  
**Date Sampled:** 17/02/2023  
**Dates Tested:** 17/02/2023 - 21/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1						
Sample Number	B23-12591M					
Date Tested	17/02/2023					
Time Tested	12:38					
Test Request #/Location	House blocks Block 631 G1					
Chainage (m)	Middle					
Location Offset (m)	**					
Layer / Reduced Level	FSL					
Thickness of Layer (mm)	300					
Soil Description	Clayey Sandy Gravel					
Test Depth (mm)	275					
Sieve used to determine oversize (mm)	19.0					
Percentage of Wet Oversize (%)	1					
Field Wet Density (FWD) t/m <sup>3</sup>	2.04					
Field Dry Density (FDD) t/m <sup>3</sup>	**					
Peak Converted Wet Density t/m <sup>3</sup>	**					
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.04					
Moisture Variation (Wv) %	**					
Adjusted Moisture Variation %	5.0					
Hilf Density Ratio (%)	<b>100.5</b>					
Compaction Method	<b>Standard</b>					
Report Remarks	**					

**Moisture Variation Note:**

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



# Material Test Report



**Report Number:** P18615-99  
**Issue Number:** 1  
**Date Issued:** 24/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1  
**Work Request:** 12626  
**Date Sampled:** 23/02/2023  
**Dates Tested:** 23/02/2023 - 24/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

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Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1				
Sample Number	B23-12626A	B23-12626B	B23-12626C	B23-12626D
Date Tested	23/02/2023	23/02/2023	23/02/2023	23/02/2023
Time Tested	10:52	10:59	11:04	11:10
Test Request #/Location	House blocks Block 641	House blocks Block 642	House blocks Block 643	House blocks Block 644
Chainage (m)	Middle	Middle	Middle	Middle
Location Offset (m)	**	**	**	**
Layer / Reduced Level	FSL	FSL	FSL	FSL
Thickness of Layer (mm)	300	300	300	300
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel
Test Depth (mm)	275	275	275	275
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	0	0	0	0
Field Wet Density (FWD) t/m <sup>3</sup>	2.15	2.05	2.05	2.09
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	**
Peak Converted Wet Density t/m <sup>3</sup>	2.11	2.02	2.02	1.97
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	**	**
Moisture Variation (Wv) %	3.0	4.5	4.0	4.0
Adjusted Moisture Variation %	**	**	**	**
Hilf Density Ratio (%)	<b>102.0</b>	<b>101.5</b>	<b>101.5</b>	<b>105.5</b>
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>
Report Remarks	**	**	**	**

## Moisture Variation Note:

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

# Material Test Report



**Report Number:** P18615-99  
**Issue Number:** 1  
**Date Issued:** 24/02/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1  
**Work Request:** 12626  
**Date Sampled:** 23/02/2023  
**Dates Tested:** 23/02/2023 - 24/02/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

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Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1				
Sample Number	B23-12626E	B23-12626F	B23-12626G	
Date Tested	23/02/2023	23/02/2023	23/02/2023	
Time Tested	11:16	11:21	11:27	
Test Request #/Location	House blocks Block 645	House blocks Block 646	House blocks Block 647	
Chainage (m)	Middle	Middle	Middle	
Location Offset (m)	**	**	**	
Layer / Reduced Level	FSL	FSL	FSL	
Thickness of Layer (mm)	300	300	300	
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	Clayey Sandy Gravel	
Test Depth (mm)	275	275	275	
Sieve used to determine oversize (mm)	19.0	19.0	19.0	
Percentage of Wet Oversize (%)	1	2	0	
Field Wet Density (FWD) t/m <sup>3</sup>	1.95	1.94	2.06	
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	**	
Peak Converted Wet Density t/m <sup>3</sup>	**	**	2.00	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	1.97	1.97	**	
Moisture Variation (Wv) %	**	**	4.5	
Adjusted Moisture Variation %	4.5	4.5	**	
Hilf Density Ratio (%)	<b>99.0</b>	<b>98.5</b>	<b>103.0</b>	
Compaction Method	<b>Standard</b>	<b>Standard</b>	<b>Standard</b>	
Report Remarks	**	**	**	

## Moisture Variation Note:

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

# Material Test Report

**Report Number:** P18615-100  
**Issue Number:** 1  
**Date Issued:** 03/03/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1  
**Work Request:** 12676  
**Date Sampled:** 02/03/2023  
**Dates Tested:** 02/03/2023 - 03/03/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location



Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

Accredited for compliance with ISO/IEC 17025 - Testing



Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1			
Sample Number	B23-12676A	B23-12676B	
Date Tested	02/03/2023	02/03/2023	
Time Tested	11:19	11:24	
Test Request #/Location	House blocks Block 651	House blocks Block 650	
Chainage (m)	Middle	Middle	
Location Offset (m)	**	**	
Layer / Reduced Level	FSL	FSL	
Thickness of Layer (mm)	300	300	
Soil Description	Silty Gravelly Clay	Silty Gravelly Clay	
Test Depth (mm)	275	275	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	1.95	2.01	
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	
Peak Converted Wet Density t/m <sup>3</sup>	1.98	2.09	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Moisture Variation (Wv) %	4.0	3.5	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	<b>98.5</b>	<b>96.5</b>	
Compaction Method	<b>Standard</b>	<b>Standard</b>	
Report Remarks	**	**	

**Moisture Variation Note:**

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

# Material Test Report

**Report Number:** P18615-101  
**Issue Number:** 1  
**Date Issued:** 25/03/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Stage G1  
**Work Request:** 12786  
**Date Sampled:** 24/03/2023  
**Dates Tested:** 24/03/2023 - 24/03/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location



Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

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Approved Signatory: Josh Lagodzki  
CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1			
Sample Number	B23-12786A	B23-12786B	
Date Tested	23/03/2023	23/03/2023	
Time Tested	08:00	08:10	
Test Request #/Location	House blocks Block 639	House blocks Block 640	
Chainage (m)	Rear	Rear	
Location Offset (m)	Middle	Middle	
Layer / Reduced Level	FSL	FSL	
Thickness of Layer (mm)	300	300	
Soil Description	Clayey Sandy Gravel	Clayey Sandy Gravel	
Test Depth (mm)	275	275	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	3	2	
Field Wet Density (FWD) t/m <sup>3</sup>	1.94	2.00	
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	
Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	2.04	2.01	
Moisture Variation (Wv) %	**	**	
Adjusted Moisture Variation %	3.5	3.5	
Hilf Density Ratio (%)	<b>95.0</b>	<b>99.5</b>	
Compaction Method	<b>Standard</b>	<b>Standard</b>	
Report Remarks	**	**	

## Moisture Variation Note:

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

# Material Test Report



**Report Number:** P18615-121  
**Issue Number:** 1  
**Date Issued:** 02/08/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Huntly - Stage G1  
**Work Request:** 13645  
**Date Sampled:** 01/08/2023  
**Dates Tested:** 01/08/2023 - 02/08/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

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*TL*

Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1			
Sample Number	B23-13645A	B23-13645B	
Date Tested	01/08/2023	01/08/2023	
Time Tested	13:59	14:06	
Test Request #/Location	Stage G1 Lot 64 / Childcare Building	Stage G1 Lot 64 / Childcare Building	
Chainage (m)	263873	263870	
Location Offset (m)	5939110	5939119	
Layer / Reduced Level	-250	-250	
Thickness of Layer (mm)	250	250	
Soil Description	Gravelly Silty Clay	Gravelly Silty Clay	
Test Depth (mm)	225	225	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	2.17	2.18	
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	
Peak Converted Wet Density t/m <sup>3</sup>	2.06	2.17	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Moisture Variation (Wv) %	2.0	1.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	<b>105.5</b>	<b>101.0</b>	
Compaction Method	<b>Standard</b>	<b>Standard</b>	
Report Remarks	**	**	

**Moisture Variation Note:**

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

# Material Test Report



**Report Number:** P18615-122  
**Issue Number:** 1  
**Date Issued:** 04/08/2023  
**Client:** DPJ Civil Pty Ltd  
 24 Jewell Court , Bendigo VIC 3550  
**Project Number:** P18615  
**Project Name:** View Point Estate  
**Project Location:** Huntly - Stage G1  
**Work Request:** 13668  
**Date Sampled:** 03/08/2023  
**Dates Tested:** 03/08/2023 - 04/08/2023  
**Sampling Method:** AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted  
**Site Selection:** Selected by Client  
**Material Source:** Test Location

Geotechnical Testing Services (Southern)  
 Bendigo Soil and Concrete Testing Laboratory  
 13 Alstonvale Court East Bendigo VIC 3550  
 Phone: (03) 5441 4881  
 Email: joshl@gts.com.au

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*TL*

Approved Signatory: Josh Lagodzki  
 CMT Manager

NATA Accredited Laboratory Number: 19506

Compaction Control AS 1289 5.7.1 & 5.8.1			
Sample Number	B23-13668A	B23-13668B	
Date Tested	03/08/2023	03/08/2023	
Time Tested	15:15	15:20	
Test Request #/Location	Lot 640 Childcare centre	Lots 640 Childcare centre	
Easting	263874	263872	
Northing	5939115	5939121	
Layer / Reduced Level	FSL	FSL	
Thickness of Layer (mm)	250	250	
Soil Description	Sandy Silty Clay	Sandy Silty Clay	
Test Depth (mm)	225	225	
Sieve used to determine oversize (mm)	19.0	19.0	
Percentage of Wet Oversize (%)	0	0	
Field Wet Density (FWD) t/m <sup>3</sup>	2.14	2.21	
Field Dry Density (FDD) t/m <sup>3</sup>	**	**	
Peak Converted Wet Density t/m <sup>3</sup>	2.11	2.19	
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	**	**	
Moisture Variation (Wv) %	2.5	1.0	
Adjusted Moisture Variation %	**	**	
Hilf Density Ratio (%)	<b>101.5</b>	<b>101.0</b>	
Compaction Method	<b>Standard</b>	<b>Standard</b>	
Report Remarks	**	**	

**Moisture Variation Note:**

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