

# **Merrifield Estate - Stage 53, Mickleham**

## **Level 1 Inspection & Testing Report**

Reference: 1120 0370-1



### **Prepared for:**

BMD Urban

May 2023



**A&Y ASSOCIATES**  
GEOTECHNICAL ENGINEERING CONSULTANTS

# Document Control Record

Prepared by:

**A&Y Associates Pty Ltd**

ABN 92 614 244 665

5/16 Network Drive

Truganina, VIC 3029

**T:** (03) 8754 8325

**E:** info@ayassociates.com.au

**W:** www.ayassociates.com.au

## Document control

<b>Report title</b>		Level 1 Inspection & Testing			
<b>Project reference number</b>		1120 0370-1			
<b>Client</b>		BMD Urban			
<b>Contact name</b>		Alyssa Willder			
<b>Contact number</b>		0400 207 600			
<b>Contact e-mail</b>		Alyssa.Willder@bmd.com.au			
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0	12/05/2023	First Issue	Y Balkis	A Tan	A Tan

## Approver



Alvin Tan

(BE Civil and Infrastructure), MIEAust

Senior Geotechnical Engineer

E: alvin@ayassociates.com.au | M: 0449 288 338



ENGINEERS  
AUSTRALIA  
Professional Engineer  
MEMBER

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## **Disclaimer**

The findings and conclusions contained in this report are made based on site conditions that existed at the time this work was conducted. The conclusions present in this report are relevant to the conditions of the site and the state of legislation currently enacted as at the date of this report.

Findings and conclusions are made assuming that the soil, groundwater, geological and chemical conditions detailed within this report are accurate and remain applicable to the site at the time of writing. No other warranties are made or intended.

A&Y Associates (A&Y) Pty Ltd has used a degree of skill and care ordinarily exercised by reputable members of our profession practicing in the same or similar locality.

A&Y does not make any representation or warranty that the conclusions in this report will be applicable in the future as there may be changes in the condition of the site, applicable legislation or other factors that would affect the conclusions contained in this report.

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## **Applicability**

This report has been prepared for the benefit for our client with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose without our prior review and agreement.

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## Contents

<b>1</b>	<b>Introduction.....</b>	<b>3</b>
<b>2</b>	<b>Project Summary .....</b>	<b>3</b>
<b>3</b>	<b>Project Specifications.....</b>	<b>4</b>
<b>4</b>	<b>Subgrade Assessment.....</b>	<b>5</b>
<b>5</b>	<b>Earthworks .....</b>	<b>5</b>
<b>6</b>	<b>Fill Material .....</b>	<b>5</b>
<b>7</b>	<b>Testing.....</b>	<b>6</b>
<b>8</b>	<b>Finished Surface Levels .....</b>	<b>6</b>
<b>9</b>	<b>Exclusion .....</b>	<b>6</b>
<b>10</b>	<b>Conclusion .....</b>	<b>7</b>
	<b>Appendix A - Site Plan .....</b>	<b>8</b>
	<b>Appendix B – Test Locations .....</b>	<b>10</b>
	<b>Appendix C – Test Results Summary .....</b>	<b>12</b>
	<b>Appendix D – NATA Test Results .....</b>	<b>14</b>

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## 1 Introduction

This report presents the results of the Level 1 Inspection and Testing for the construction of the fill platforms located in Merrifield Estate - Stage 53, Mickleham.

## 2 Project Summary

It is understood that BMD Urban require the fill platforms within Stage 53 to be constructed under Level 1 Inspection and Testing undertaken by a Geotechnical Inspection and Testing Authority (GITA).

Level 1 Inspection and Testing, as defined in AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Development," provides for full time inspection of the construction of controlled fill and field and laboratory testing in accordance with AS1289 "Methods of Testing Soils for Engineering Purposes".

The Level 1 inspection was undertaken by a Geotechnician from A&Y Associates over a period of **5 working days** from the **4<sup>th</sup> October 2022 to 13<sup>th</sup> April 2023**.

This report is applicable for fill placed by BMD Urban in Merrifield Estate - Stage 53, Mickleham, as shown in Appendix A – Site Plan.

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### 3 Project Specifications

The supervision and inspections were performed based on AS3798, the specifications provided in the geotechnical report (ref: "Geotechnical Site Investigation, Merrifield Living – Section E&G Donnybrook Road, Mickleham"; Report No. G4719.1 REVAB, by Ground Science Pty Ltd, Dated 19/05/2022) and the drawing (ref: "Merrifield Living – Section E Bulk Earthworks – Stage 49-53"; Project No. 17040-49, Drawing No. EW101 - REV0 by Verve Projects Pty Ltd, Dated 02/03/2022) for the construction works in Merrifield Estate – Stage 53, Mickleham. A short summary of the requirements outline in AS3798 is provided below:

- Material to be used for fill construction shall satisfy the requirements of AS3798-2007 "Guidelines on Earthworks for Commercial and Residential Developments". Material used shall be free of:
  - Organic soils, such as topsoils, severely root affected subsoil and peat;
  - Contaminated soils;
  - Materials which undergo volume change or loss of strength when disturbed and exposed to moisture;
  - Silts, or materials that have deleterious engineering properties of silt;
  - Fill that contains wood, metal, plastic, boulders, or other deleterious material, in sufficient proportions to affect the required performance of fill;
  - The maximum particle size of any rocks or other lump, within the layer, has not exceeded two-thirds (2/3) of the compacted layer thickness.
- Compaction to achieve a dry density ratio of at least 95% Standard, as the project was classified as **Residential**.

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## 4 Subgrade Assessment

The subgrade was assessed by A&Y Associates following the topsoil removal and before any fill was placed. The subgrade assessment was undertaken on the **3<sup>rd</sup> of June 2022** as mentioned in report **1120 0370-1 (SSI1)**.

The exposed subgrade material was found to be comprised of silty clay. No wet or soft patches were found during the inspection. No evidence of deleterious material was found during the inspection.

## 5 Earthworks

The earthworks for this project included stripping of topsoil, removing of tree roots, proof rolling the subgrade and placement and compaction of fill to construct engineered platforms.

Based on design plans and site inspection, it appears that the fill thickness placed is approximately 200mm – 600mm. The fill layers or thickness nominated in this report are provided as a guide on the amounts of fill placed and do not necessarily reflect an accurate survey of the fill levels.

## 6 Fill Material

The fill material used for the platform consisted of imported material. The imported material was predominantly comprising of Silty Clay with gravel.

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## 7 Testing

Field density testing was undertaken on the compacted fill at a frequency of a minimum of 3 tests per lot (AS3798 Table 8.1).

Tests were performed using a Nuclear Density Gauge for field density determination as per AS 1289.5.8.1. Testing was completed at a minimum rate of 3 field density tests per day's production based on the minimum requirements of AS 3798-2007 and taken from each layer of fill placed.

A total of 15 field density tests were performed during the earthworks. All of the test results met the specified compaction requirement of 95% Standard Compaction.

The locations of the 15 field density tests are shown in Appendix B – Test Locations. A summary of the test results obtained from the field density testing is presented in Appendix C – Test Results Summary. The laboratory test reports of the field density tests are presented in Appendix D – NATA Test Results.

## 8 Finished Surface Levels

It should be noted that even though the final fill layer meets the specification requirements, over time, the material may be subject to adverse weather conditions resulting in either surface softening or drying and cracking. The top 150mm – 200mm of the fill will deteriorate with time and should be considered by the foundation engineer.

## 9 Exclusion

A&Y Associates was not involved in monitoring and testing the following works and as such are not included in the Level 1 report.

- Any trenches excavated and backfilled on site for the installation of underground services such as sewers, electrical conduits, water mains etc.
- Footpaths in front of the lots that may be excavated and filled after the Level 1 supervision conducted by A&Y Associates.
- Uncontrolled fill and topsoil that may have been placed as part of the landscaping of the site following the completion of the engineered fill construction.



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## **10 Conclusion**

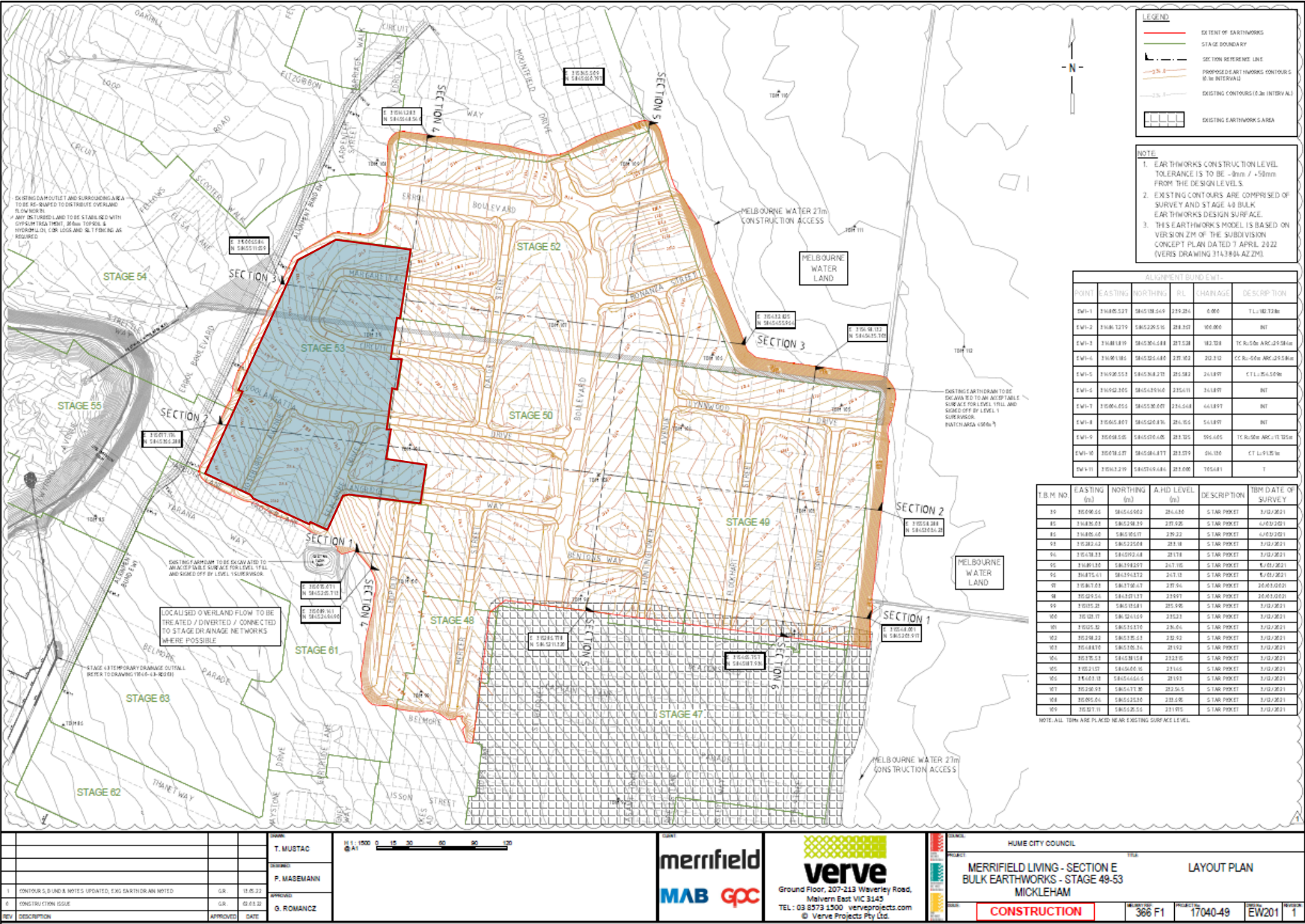
On the completion of the earthworks and after analysing the materials used, it has been concluded that the filling procedure conducted by BMD Urban appears to be consistent with the requirements of AS 3798 in regards to the placement of fill materials on a project under Level 1 Supervision and in accordance with the project specification as provided to A&Y Associates.

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## **Appendix A - Site Plan**



Area Inspected  
and Tested



**PROJECT:**  
Merrifield Estate – Stage 53 (Level 1)

**LOCATION:**  
Mickleham

**CLIENT:**  
BMD Urban

**PROJECT No:**  
1120 0370-1

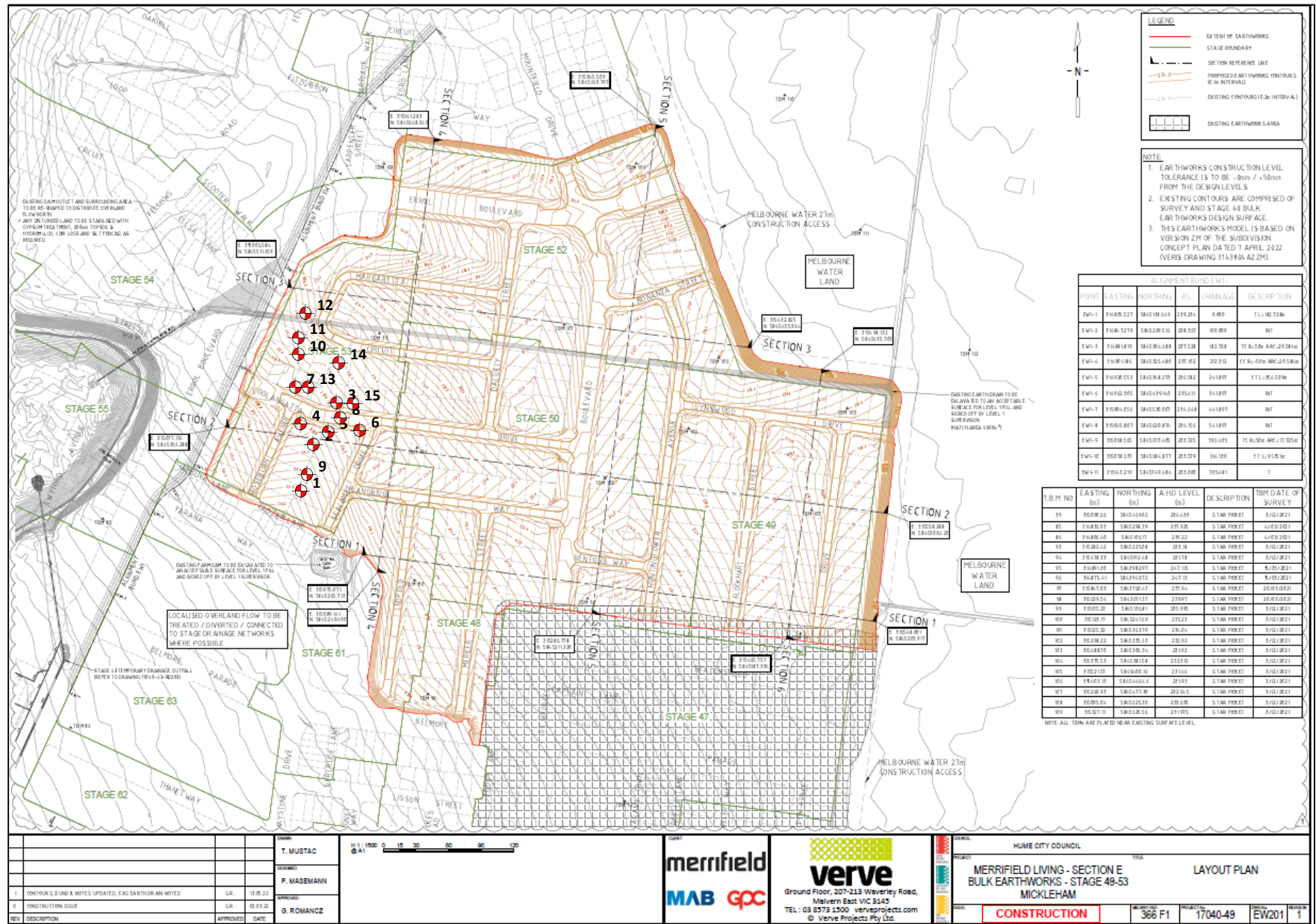
SITE PLAN SKETCH—NOT TO SCALE



**A&Y ASSOCIATES**  
GEOTECHNICAL ENGINEERING CONSULTANTS

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## **Appendix B – Test Locations**



**PROJECT:**  
Merrifield Estate - Stage 53 (Level1)

**LOCATION:**  
Mickleham

**CLIENT:**  
BMD Urban

**PROJECT No:**  
1120 0370-1

SITE PLAN SKETCH—NOT TO SCALE



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## **Appendix C – Test Results Summary**



Project No		1120 0370-1			Client	BMD Urban				
Project Name		Merrifield Estate - Stage 53 - Level 1			Specification			Density Ratio ≥ 95% of Peak Wet Density		
Location		Mickleham								
Test No	Retest of Test	Date	Location	Layer	Oversize	Density Ratio	Moisture Ratio	Moisture Variation	Pass / Fail	Retest
#	#		Lot #	#	%	%	%	%		Pass / Fail
1	-	4/10/2022	-	1	0.0	98.5	96.5	-0.5	Pass	-
2	-	4/10/2022	-	1	0.0	98.0	109.5	2.0	Pass	-
3	-	4/10/2022	-	1	0.0	98.5	99.0	-0.5	Pass	-
4	-	5/10/2022	-	2	0.0	98.5	96.5	-0.5	Pass	-
5	-	5/10/2022	-	2	0.0	98.5	99.5	-0.5	Pass	-
6	-	5/10/2022	-	2	0.0	98.0	107.0	1.5	Pass	-
7	-	10/1/2023	-	2	3.1	97.0	97.5	-0.5	Pass	-
8	-	10/1/2023	-	2	2.0	97.0	110.0	2.0	Pass	-
9	-	10/1/2023	-	2	5.5	97.5	98.0	-0.5	Pass	-
10	-	3/2/2023	-	FSL	4.0	98.0	97.5	-0.5	Pass	-
11	-	3/2/2023	-	FSL	2.9	95.5	96.5	-0.5	Pass	-
12	-	3/2/2023	-	3	0.0	96.0	107.5	2.0	Pass	-
13	-	13/04/2023	-	3	5.1	96.5	99.0	-0.5	Pass	-
14	-	13/04/2023	-	3	2.7	98.0	106.5	1.5	Pass	-
15	-	13/04/2023	-	3	4.1	95.5	105.5	1.5	Pass	-

\*\* Negative (-) value indicates that the field moisture content is drier than the optimum moisture content (OMC)

\*\* Positive (+) value indicates that the field moisture content is wetter than the optimum moisture content (OMC)

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## **Appendix D – NATA Test Results**



## Field Density Test Results AS1289.5.7.1

A & Y Associates Pty Ltd  
5/16 Network Drive  
Truganina VIC 3029  
PH: 0400 413 531  
info@ayassociates.com.au

<b>Client:</b>	BMD Urban			<b>Job No:</b>	BMD2471	
<b>Project:</b>	Merrifield Estate - Stage 53 (Level 1)			<b>Report:</b>	1	
<b>Location:</b>	Mickleham					

Sample No	1	2	3			
Date Tested	04/10/2022	04/10/2022	04/10/2022			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	1	1	1			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m <sup>3</sup> 1.86	t/m <sup>3</sup> 1.83	t/m <sup>3</sup> 1.84			
Field Moisture Content	% 23.2	% 24.6	% 24.3			
Material:	Imported Clay	Imported Clay	Imported Clay			

Oversize Material	WET, % 0.0	WET, % 0.0	WET, % 0.0			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m <sup>3</sup> 1.89	t/m <sup>3</sup> 1.87	t/m <sup>3</sup> 1.86			
Optimum Moisture Content	% 24	% 22.5	% 24.5			



  

<b>Moisture Ratio</b>	% 96.5	% 109.5	% 99			
<b>Moisture Variation</b>	% -0.5	% 2.0	% -0.5			
<b>from OMC</b>	Drier	Wetter	Drier			
<b>Density Ratio</b>	% 98.5	% 98.0	% 98.5			

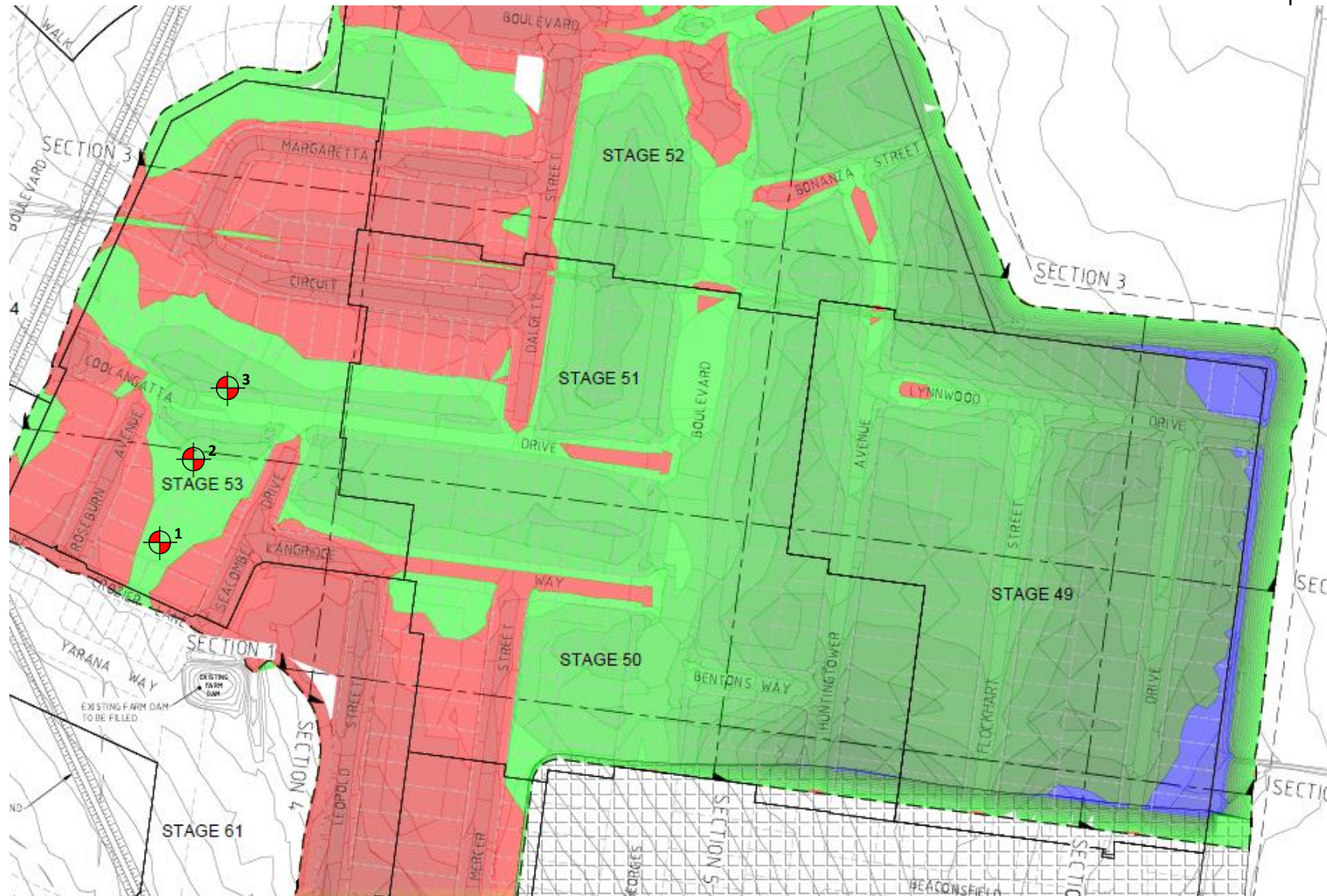
<b>Specification:</b>	95% STD	<b>Test Selection:</b>	N/A
<b>Notes:</b>	Ref : 1120 0370-1 (SI01)		
<b>Test Method</b>	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	<b>Sampling Method:</b>	AS 1289 1.2.1 6.4(b)


  

 <b>NATA</b> WORLD RECOGNISED ACCREDITATION	NATA Accredited Laboratory No. 20172	Approved Signatory:   Date: 13/10/2022
	Accreditation for compliance with ISO/IEC 17025 - Testing	
	The results of tests, calibrations and/or measurements included	
	in this document, are traceable to Australian / National Standards	



Test Location



PROJECT: Merrifield Estate – Stage 53 (Level 1)	CLIENT: BMD Urban	DATE: 04/10/2022	 <b>A&amp;Y ASSOCIATES</b> GEOTECHNICAL ENGINEERING CONSULTANTS
LOCATION: Mickleham	PROJECT No: 1120 0370-1 (SI01)	SITE PLAN SKETCH—NOT TO SCALE	

## Field Density Test Results AS1289.5.7.1

A & Y Associates Pty Ltd  
5/16 Network Drive  
Truganina VIC 3029  
PH: 0400 413 531  
info@ayassociates.com.au

<b>Client:</b>	BMD Urban			<b>Job No:</b>	BMD2471	
<b>Project:</b>	Merrifield Estate - Stage 53 (Level 1)			<b>Report:</b>	2	
<b>Location:</b>	Mickleham					

Sample No	4	5	6			
Date Tested	05/10/2022	05/10/2022	05/10/2022			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	2	2	2			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m <sup>3</sup> 1.80	t/m <sup>3</sup> 1.83	t/m <sup>3</sup> 1.86			
Field Moisture Content	% 23.1	% 23.9	% 24.6			
Material:	Imported Clay Fill	Imported Clay Fill	Imported Clay Fill			

Oversize Material	WET, % 0.0	WET, % 0.0	WET, % 0.0			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m <sup>3</sup> 1.83	t/m <sup>3</sup> 1.86	t/m <sup>3</sup> 1.90			
Optimum Moisture Content	% 24	% 24	% 23			

<b>Moisture Ratio</b>	% 96.5	% 99.5	% 107			
<b>Moisture Variation</b>	% -0.5	% -0.5	% 1.5			
<b>from OMC</b>	Drier	Drier	Wetter			
<b>Density Ratio</b>	% 98.5	% 98.5	% 98.0			

<b>Specification:</b>	95% STD	<b>Test Selection:</b>	N/A
<b>Notes:</b>	Ref : 1120 0370-1 (SI02)		
<b>Test Method</b>	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	<b>Sampling Method:</b>	AS 1289 1.2.1 6.4(b)



NATA Accredited Laboratory No. 20172  
Accreditation for compliance with ISO/IEC 17025 - Testing  
The results of tests, calibrations and/or measurements included  
in this document, are traceable to Australian / National Standards

Approved Signatory:



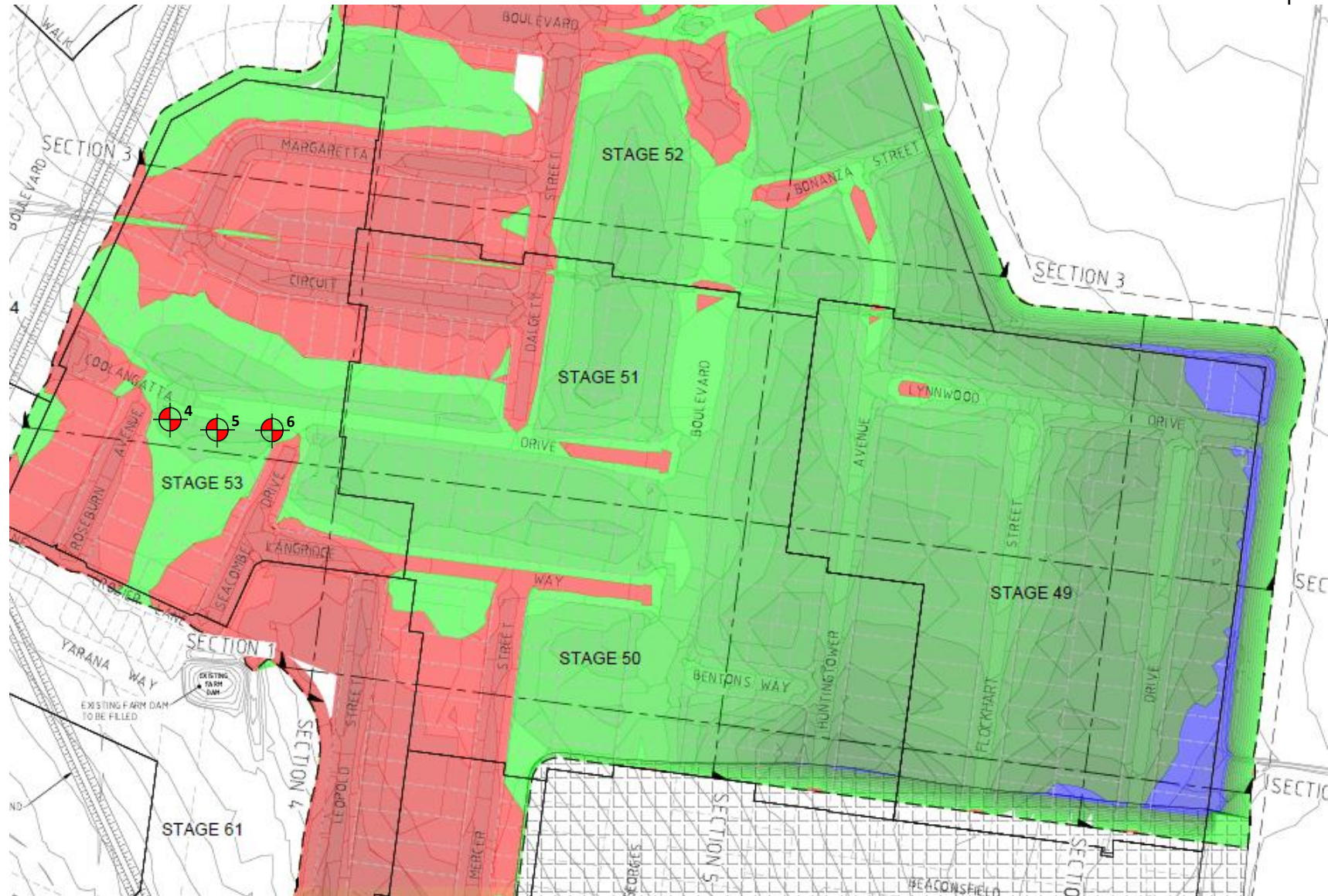
David Burns


Date: 13/10/2022





Test Location



PROJECT: Merrifield Estate – Stage 53 (Level 1)	CLIENT: BMD Urban	DATE: 05/10/2022	 <b>A&amp;Y ASSOCIATES</b> GEOTECHNICAL ENGINEERING CONSULTANTS
LOCATION: Mickleham	PROJECT No: 1120 0370-1 (SI02)	SITE PLAN SKETCH—NOT TO SCALE	

## Field Density Test Results AS1289.5.7.1

A & Y Associates Pty Ltd  
5/16 Network Drive  
Truganina VIC 3029  
PH: 0400 413 531  
info@ayassociates.com.au

<b>Client:</b>	BMD Urban			<b>Job No:</b>	BMD2471	
<b>Project:</b>	Merrifield Estate - Stage 53 (Level 1)			<b>Report:</b>	3	
<b>Location:</b>	Mickleham					

Sample No	7	8	9			
Date Tested	10/01/2023	10/01/2023	10/01/2023			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	2	2	2			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m <sup>3</sup> 1.93	t/m <sup>3</sup> 1.94	t/m <sup>3</sup> 1.97			
Field Moisture Content	% 22.5	% 22.0	% 21.1			
Material:	Imported Clay	Imported Clay	Imported Clay			

Oversize Material	WET, % 3.1	WET, % 2.0	WET, % 5.5			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m <sup>3</sup> 1.99	t/m <sup>3</sup> 1.99	t/m <sup>3</sup> 2.00			
Optimum Moisture Content	% 23	% 20	% 21.5			



  

<b>Moisture Ratio</b>	% 97.5	% 110	% 98			
<b>Moisture Variation</b>	% -0.5	% 2.0	% -0.5			
<b>from OMC</b>	Drier	Wetter	Drier			
<b>Density Ratio</b>	% 97.0	% 97.0	% 97.5			

<b>Specification:</b>	95% STD	<b>Test Selection:</b>	N/A
<b>Notes:</b>	Ref : 1120 0370-1 (SI03)		
<b>Test Method</b>	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	<b>Sampling Method:</b>	AS 1289 1.2.1 6.4(b)

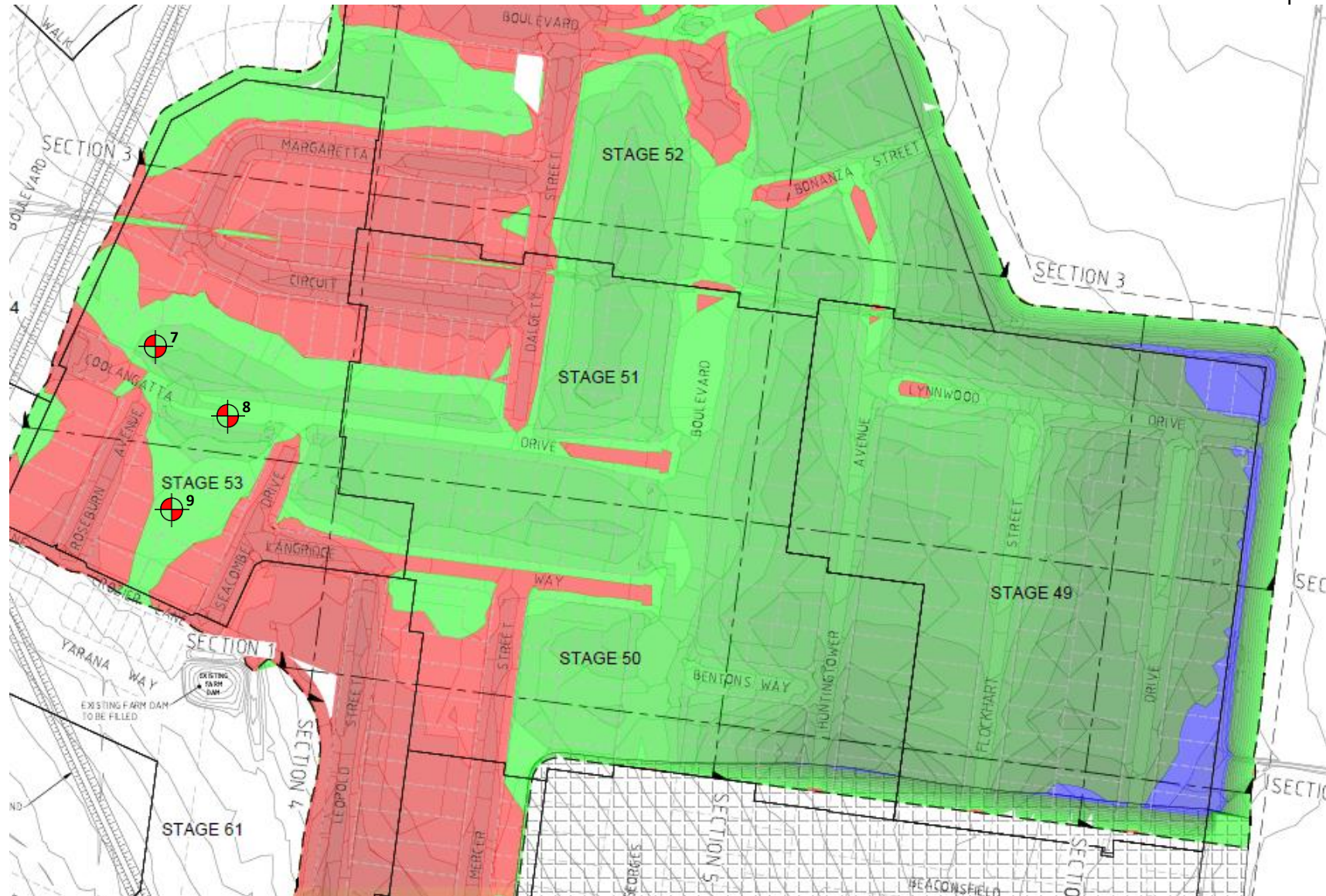
  


 <b>NATA</b> WORLD RECOGNISED ACCREDITATION	NATA Accredited Laboratory No. 20172	Approved Signatory:   David Burns
	Accreditation for compliance with ISO/IEC 17025 - Testing	





Test Location



PROJECT: Merrifield Estate – Stage 53 (Level 1)	CLIENT: BMD Urban	DATE: 10/01/2023	 <b>A&amp;Y ASSOCIATES</b> GEOTECHNICAL ENGINEERING CONSULTANTS
LOCATION: Mickleham	PROJECT No: 1120 0370-1 (SI03)	SITE PLAN SKETCH—NOT TO SCALE	

## Field Density Test Results AS1289.5.7.1

A & Y Associates Pty Ltd  
5/16 Network Drive  
Truganina VIC 3029  
PH: 0400 413 531  
info@ayassociates.com.au

<b>Client:</b>	BMD Urban			<b>Job No:</b>	BMD2471	
<b>Project:</b>	Merrifield Estate - Stage 53 (Level 1)			<b>Report:</b>	4	
<b>Location:</b>	Mickleham					

Sample No	10	11	12			
Date Tested	03/02/2023	03/02/2023	03/02/2023			
Time Tested	PM	PM	PM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	FSL	FSL	3			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m <sup>3</sup> 1.94	t/m <sup>3</sup> 1.91	t/m <sup>3</sup> 1.86			
Field Moisture Content	% 22.4	% 23.6	% 24.8			
Material:	Imported Clay	Imported Clay	Imported Clay			

Oversize Material	WET, % 4.0	WET, % 2.9	WET, % 0.0			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m <sup>3</sup> 1.97	t/m <sup>3</sup> 1.99	t/m <sup>3</sup> 1.93			
Optimum Moisture Content	% 23	% 24.5	% 23			



  

<b>Moisture Ratio</b>	% 97.5	% 96.5	% 107.5			
<b>Moisture Variation</b>	% -0.5	% -0.5	% 2.0			
<b>from OMC</b>	Drier	Drier	Wetter			
<b>Density Ratio</b>	% 98.0	% 95.5	% 96.0			

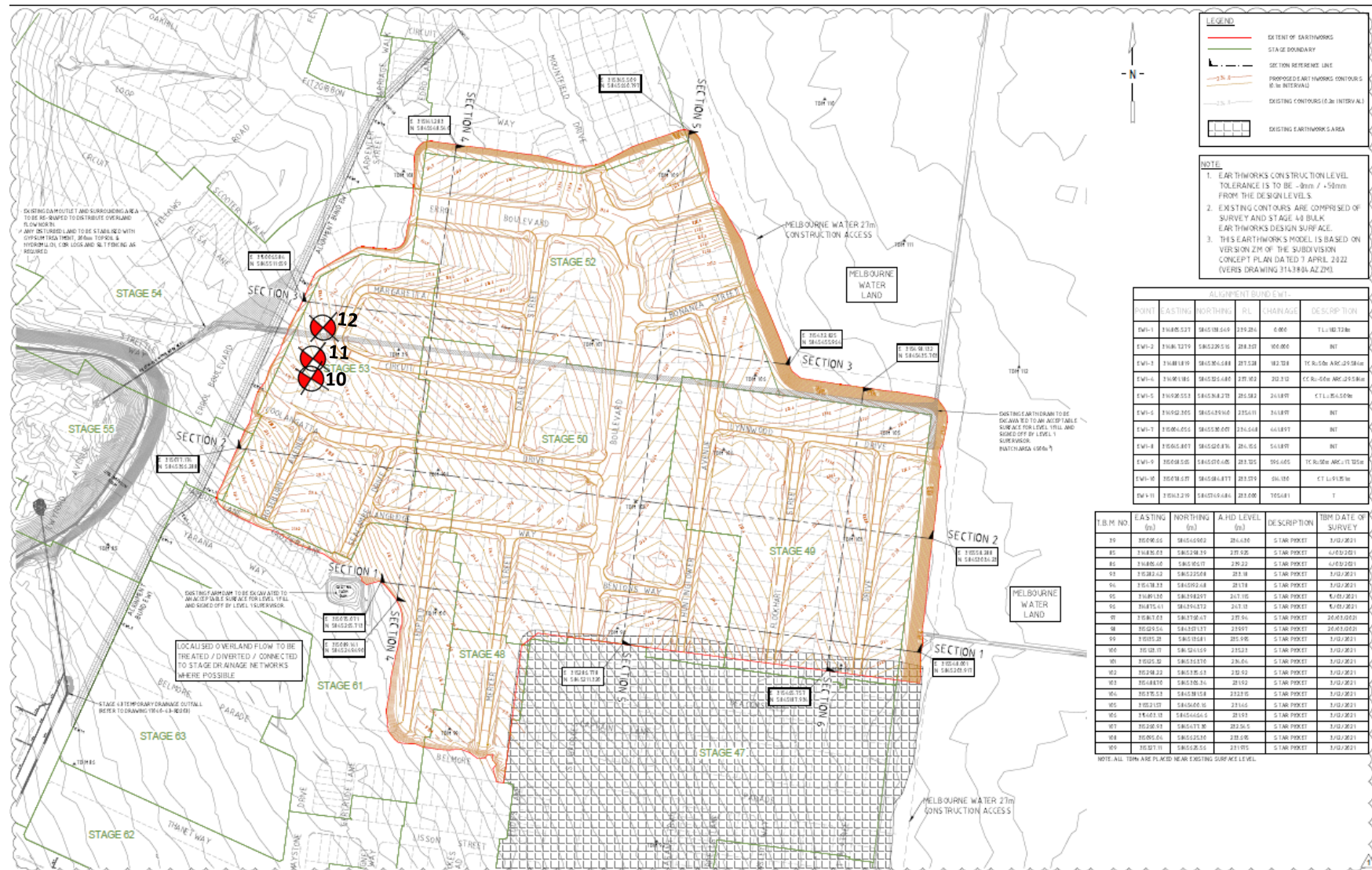
  

<b>Specification:</b>	95% STD	<b>Test Selection:</b>	N/A
<b>Notes:</b>	Ref : 1120 0370-1 (SI04)		
<b>Test Method</b>	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	<b>Sampling Method:</b>	AS 1289 1.2.1 6.4(b)

 <b>NATA</b> WORLD RECOGNISED ACCREDITATION	NATA Accredited Laboratory No. 20172 Accreditation for compliance with ISO/IEC 17025 - Testing	Approved Signatory:  Date: 20/02/2023
		David Burns





ALIGNMENT BOUND EWL				
POINT	EASTING	NORTHING	CHANGING	DESCRIPTION
EW-1	210408.527	5845108.545	219.26	TL 100.73m
EW-2	210412.779	5845205.91	219.35	INT
EW-3	210418.819	5845365.448	217.58	TC R-50m ANG. 25.58m
EW-4	210419.86	5845514.68	217.82	TC R-50m ANG. 25.58m
EW-5	210420.52	5845642.70	215.82	CT L-10.50m
EW-6	210422.305	5845755.94	215.61	INT
EW-7	210424.055	5845868.00	214.64	INT
EW-8	210425.807	5845978.00	214.65	INT
EW-9	210428.505	5846078.00	213.75	TC R-50m ANG. 11.75m
EW-10	210431.377	5846184.177	213.75	CT L-10.50m
EW-11	210432.70	5846278.68	213.68	Y

T.B.M. NO.	EASTING (m)	NORTHING (m)	A.M.D. LEVEL (m)	DESCRIPTION	DATE OF SURVEY
39	210406.65	5845445.02	216.10	STAR POINT	3/12/2021
40	210408.01	5845246.35	217.56	STAR POINT	4/12/2021
41	210408.46	5845051.07	219.22	STAR POINT	4/12/2021
42	210408.42	5845235.68	217.18	STAR POINT	3/12/2021
43	210408.77	5845092.48	217.18	STAR POINT	3/12/2021
44	210410.00	5845192.07	217.10	STAR POINT	4/12/2021
45	210415.43	5845193.72	217.11	STAR POINT	4/12/2021
46	210417.28	5845184.31	217.54	STAR POINT	20/12/2021
47	210424.55	5845101.17	215.97	STAR POINT	20/12/2021
48	210425.38	5845104.81	215.96	STAR POINT	3/12/2021
49	210428.17	5845116.00	215.23	STAR POINT	3/12/2021
50	210430.30	5845117.00	216.46	STAR POINT	3/12/2021
51	210430.22	5845115.12	215.22	STAR POINT	3/12/2021
52	210440.00	5845115.31	215.19	STAR POINT	3/12/2021
53	210450.53	5845015.58	213.76	STAR POINT	3/12/2021
54	210451.07	5845066.10	214.66	STAR POINT	3/12/2021
55	210453.13	5845066.63	214.91	STAR POINT	3/12/2021
56	210458.91	5845111.30	213.65	STAR POINT	3/12/2021
57	210458.64	5845225.10	213.68	STAR POINT	3/12/2021
58	210471.11	5845238.55	211.95	STAR POINT	3/12/2021

NOTE: ALL T.B.M. ARE PLACED NEAR EXISTING SURFACE LEVEL.

1. CONTOURS, BOUNDARY NOTES UPDATED, EXG. EARTHWORKS NOTED

2. CONSTRUCTION ISSUE

NEW DESCRIPTION

T. MUSTAC

P. MASEMANN

Q. ROMANEC

13.05.22

02.03.22

1:1000

0 10 20 30 40 50 60 70 80 90 100

merrifield

MAB gpc

verve

Ground Floor, 207-213 Waverley Road, Malvern East VIC 3145

TEL: 03 8579 1500 | www.verveprojects.com

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HUME CITY COUNCIL

MERRIFIELD LIVING - SECTION E BULK EARTHWORKS - STAGE 49-53

MICKLEHAM

CONSTRUCTION

366 F1

17040-49

EW201

1

Project : Merrifield Estate - Stage 49 (Level1)

Client : BMD Urban

Date : 03/02/2023

Location : Mickleham

Project No : 1120 0370-1 (S104)

SITE PLAN SKETCH—NOT TO SCALE





## Field Density Test Results AS1289.5.7.1

A & Y Associates Pty Ltd  
5/16 Network Drive  
Truganina VIC 3029  
PH: 0400 413 531  
info@ayassociates.com.au

<b>Client:</b>	BMD Urban			<b>Job No:</b>	BMD2471	
<b>Project:</b>	Merrifield Estate - Stage 53 (Level 1)			<b>Report:</b>	5	
<b>Location:</b>	Mickleham					

Sample No	13	14	15			
Date Tested	13/04/2023	13/04/2023	13/04/2023			
Time Tested	AM	AM	AM			

Test Location	Refer to Plan	Refer to Plan	Refer to Plan			
Level/Layer	3	3	3			
Layer Thickness	mm 200	mm 200	mm 200			
Test Depth	mm 175	mm 175	mm 175			
Field Wet Density	t/m <sup>3</sup> 1.92	t/m <sup>3</sup> 1.84	t/m <sup>3</sup> 1.86			
Field Moisture Content	% 22.7	% 24.5	% 23.8			
Material:	Imported Clay	Imported Clay	Imported Clay			

Oversize Material	WET, % 5.1	WET, % 2.7	WET, % 4.1			
Sieve Size	mm 19	mm 19	mm 19			
Peak Converted Wet Density	t/m <sup>3</sup> 1.98	t/m <sup>3</sup> 1.87	t/m <sup>3</sup> 1.93			
Optimum Moisture Content	% 23	% 23	% 22.5			



  

<b>Moisture Ratio</b>	% 99	% 106.5	% 105.5			
<b>Moisture Variation</b>	% -0.5	% 1.5	% 1.5			
<b>from OMC</b>	Drier	Wetter	Wetter			
<b>Density Ratio</b>	% 96.5	% 98.0	% 95.5			

<b>Specification:</b>	95% STD	<b>Test Selection:</b>	N/A
<b>Notes:</b>	Ref : 1120 0370-1 (SI05)		
<b>Test Method</b>	AS1289 5.8.1, 5.7.1, 2.1.1, 1.1	<b>Sampling Method:</b>	AS 1289 1.2.1 6.4(b)

 <b>NATA</b> WORLD RECOGNISED ACCREDITATION	NATA Accredited Laboratory No. 20172 Accreditation for compliance with ISO/IEC 17025 - Testing	Approved Signatory:  Date: 17/04/2023



**Date : 13/04/2023**

**SITE PLAN SKETCH—NOT TO SCALE**