

MERRIFIELD SOUTH RESIDENTIAL STAGE 7

Level One Report

Winslow Constructors Pty Ltd

P252320

7th August 2025



7th August 2025

Winslow Constructors Pty Ltd Level 1, 6 English Street Essendon Fields, VIC, 3041

Attention: Ali Al Musharafawi

Dear Ali

RE: Merrifield South Residential Stage 7

Level 1 Compaction Control

This letter presents a report by Pearce Geotech Pty Ltd (PG) on Level 1 Testing Services undertaken during the construction of fill at Merrifield South Residential Stage 7. One electronic copy provided.

Please do not hesitate to contact the undersigned should there be any queries regarding this report.

For and on behalf of Pearce Geotech Pty Ltd

Regards

Mitch Francis



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The leading provider of construction material testing in Australia

CONTENTS

1	INTRODUCTION	1
2	SCOPE OF WORK	1
2.1	Area of Work	1
2.2	Placement Specification	1
3	CONSTRUCTION PLANT	2
4	INSPECTION AND TESTING	2
4.1	Construction Materials	2
4.2	Fill Placement	2
4.2.1	Test Summary	3
5	STATEMENT OF COMPLIANCE	3

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Appendices:

Appendix A: Test Results/Site Plan

1 INTRODUCTION

This report presents the results of compaction control and laboratory testing services provided by Pearce Geotech Pty Ltd (PG) during the construction of fill at Merrifield South Residential Stage 7.

PG was engaged by Winslow Constructors Pty Ltd to provide Level 1 testing services for the duration of these works in accordance with the specification supplied. The work was commissioned by Mr Ali Al Musharafawi of Winslow Constructors.

Level 1 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 compaction testing in accordance with AS1289 "Methods of Testing Soils for Engineering Purposes". The Level 1 testing was undertaken by technicians from PG from the 6th September 2024 to 4th August 2025.

2 SCOPE OF WORK

2.1 Area of Work

PG provided Level 1 testing and supervision of the construction filling placed. Material selection and condition, as well as compaction testing, were conducted during the construction of this fill.

This report does not include fill other than where mentioned in this report or any other fill that may be placed during this period or subsequent periods at or surrounding the subject site.

2.2 Placement Specification

While no earthworks specification was supplied, the fill placement and testing requirements for the structural fill were derived from AS 3798 "Guidelines on earthworks for commercial and residential developments" – Table 5.1, with the minimum density ratio as item Two (2) below;

TABLE 5.1
MINIMUM RELATIVE COMPACTION

		Minimum relative compaction, %					
Item	Application	Minimum density ratio (at standard compactive effort) (Cohesive soils) (see Note 1)	Minimum density index (Cohesionless soils) (see Note 2)				
1	Residential—lot, fill, house, sites	95 (see Note 3)	70				
2	Commercial—fills to support minor loadings, including floor loadings of up to 20 kPa and isolated pad or strip footings to 100 kPa	98 (see Note 4)	75				
3	Fill to support pavements (see Note 5)						
	(a) General fill	95	70				
	(b) Subgrade (to a depth of 0.3 m)	98	75				

3 CONSTRUCTION PLANT

The following construction plant was used on site as required:

- 1 x Excavator
- 1 x Grader
- 1 x Pad Foot Roller
- 1 x Water Cart

4 INSPECTION AND TESTING

4.1 Construction Materials

Clay was used as fill for this project.

Fill material was sourced from:

- Onsite Cuts

All material was tested for compliance, spread and watered to achieve the specified density and moisture specification.

4.2 Fill Placement

Initial site inspection showed fill areas as per the attached site plan. These areas were consecutively stripped of all deleterious silty topsoil, organic matter and existing fill down to a Silty Clay. These areas were then compacted with a smooth drum roller and proof rolled with a loaded dump truck.

Compaction tests and a proof roll were conducted on each tested layer of compacted fill to ensure compliance with the specification and samples of the fill material were tested in PG's NATA accredited laboratory (Accreditation Number 18877) to determine the Hilf density ratio and moisture ratio of the material. In total 11 field density tests, 11 Hilf rapid compaction tests and 11 moisture contents were conducted.

Control Fill material was placed by dump truck, spread by grader, simultaneously water conditioned wherever required and compacted. Where the material appeared too wet, dry soil was mixed in and processed to a homogenous state.

4.2.1 Test Summary

Field No.	Date	Location	Layer	Min. Ratio [%]	Density Ratio [%]
24-31524A	6/9/2024	Lot 709	Lift 1	98% Std	99
24-31524B	6/9/2024	Lot 708	Lift 1	98% Std	98.5
24-31524C	6/9/2024	Lot 706	Lift 1	98% Std	99
24-31524D	6/9/2024	Lot 705	Lift 1	98% Std	98.5
24-31524E	6/9/2024	Lot 703	Lift 1	98% Std	99.5
24-31524F	6/9/2024	Lot 701	Lift 1	98% Std	99
25-34837A	4/7/2025	Lot 702	Lift 1	98% Std	98.5
25-34837B	4/7/2025	Lot 704	Lift 2	98% Std	99.5
25-34837C	4/7/2025	Lot 706	Lift 2	98% Std	99
25-34837D	4/7/2025	Lot 708	Lift 2	98% Std	99.5
25-34837E	4/7/2025	Lot 709	Lift 2	98% Std	100

5 STATEMENT OF COMPLIANCE

PG personnel have provided Level 1 inspection and testing services during construction of the fill at Merrifield South Residential Stage 7. A technician from PG was on site on a fulltime basis during fill placement and observed the construction techniques adopted.

Based on these observations made by PG personnel and the results of field and laboratory tests, we consider that the fill has been placed in accordance with the intent of the specification.

For and on behalf of Pearce Geotech Pty Ltd

Regards

Anthony Green Senior Technician



Appendix A

Test Results

Material Test Report

Report Number: P252407-2

Issue Number:

Date Issued: 07/08/2025

Client: Winslow Constructors Pty Ltd

Level 1, 6 English Street, Essendon Fields Vic 3041

Contact: Ali Al Musharafawi

Project Number: P252407

Project Name: Merrifield South Residential Stage 7

Mickleham **Project Location:** Work Request: 31524 **Date Sampled:** 06/09/2024

Dates Tested: 23/09/2024 - 23/09/2024

AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted $\,$ Sampling Method:

Remarks: TRN 16740 Specification: 98% Standard Location: TRN 16740 Material: Clay **Material Source:** Insitu



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Email: tony@pearcegeotech.com.au

WORLD RECOGNISED
ACCREDITATION

Approved Signatory: Anthony Green

Senior Technician

Accredited for compliance with ISO/IEC 17025 - Testing

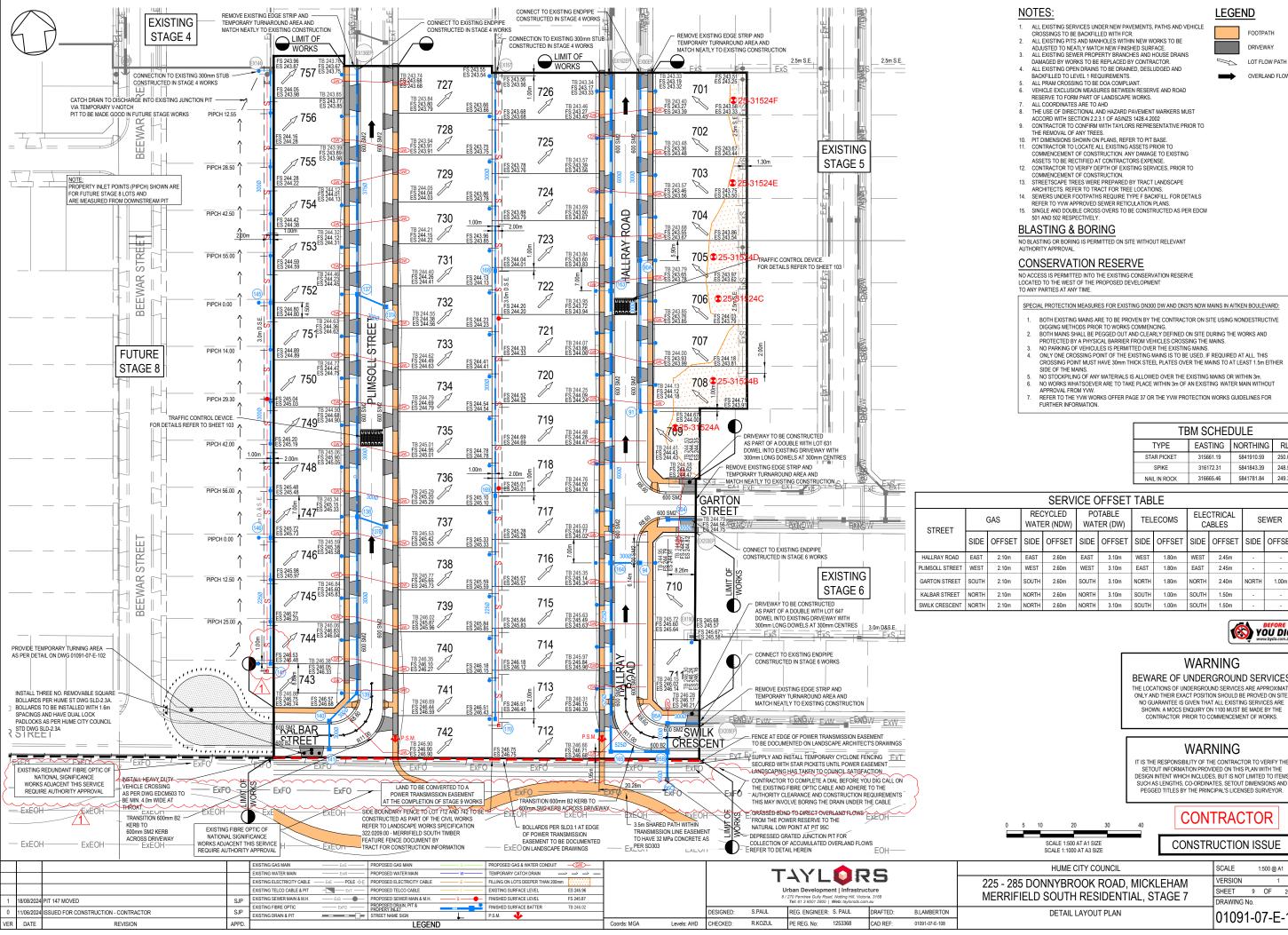
NATA Accredited Laboratory Number: 18877

Compaction Control AS 1289 5.7.1 & 5.8.1 & 2.1.1										
Sample Number	24-31524A	24-31524B	24-31524C	24-31524D	24-31524E	24-31524F				
Date Tested	06/09/2024	06/09/2024	06/09/2024	06/09/2024	06/09/2024	06/09/2024				
Time Tested	11:13	11:07	11:28	11:33	11:46	11:50				
Test Request #/Location	Lot 709	Lot 708	Lot 706	Lot 705	Lot 703	Lot 701				
Layer / Reduced Level	Lift 1									
Thickness of Layer (mm)	200	200	200	200	200	200				
Soil Description	Clay	Clay	Clay	Clay	Clay	Clay				
Test Depth (mm)	175	175	175	175	175	175				
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	0	0				
Field Wet Density (FWD) t/m ³	2.04	2.04	2.03	2.04	2.05	2.04				
Field Moisture Content %	17.3	15.6	16.2	16.9	19.7	15.0				
Field Dry Density (FDD) t/m ³	1.74	1.76	1.75	1.74	1.71	1.77				
Peak Converted Wet Density t/m ³	2.07	2.07	2.05	2.07	2.06	2.06				
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**	**				
Moisture Variation (Wv) %	1.5	2.0	2.0	2.0	2.0	2.0				
Adjusted Moisture Variation %	**	**	**	**	**	**				
Hilf Density Ratio (%)	99.0	98.5	99.0	98.5	99.5	99.0				
Compaction Method	Standard	Standard	Standard	Standard	Standard	Standard				
Report Remarks	**	**	**	**	**	**				

Moisture Variation Note:

Report Number: P252407-2

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



- ALL EXISTING SERVICES UNDER NEW PAVEMENTS, PATHS AND VEHICLE

- VEHICLE EXCLUSION MEASURES BETWEEN RESERVE AND ROAD

- 14. SEWERS UNDER FOOTPATHS REQUIRE TYPE F BACKFILL FOR DETAILS
- 15. SINGLE AND DOUBLE CROSS OVERS TO BE CONSTRUCTED AS PER EDCM

NO BLASTING OR BORING IS PERMITTED ON SITE WITHOUT RELEVANT AUTHORITY APPROVAL.

NO ACCESS IS PERMITTED INTO THE EXISTING CONSERVATION RESERVE LOCATED TO THE WEST OF THE PROPOSED DEVELOPMENT

SPECIAL PROTECTION MEASURES FOR EXISTING DN300 DW AND DN375 NDW MAINS IN AITKEN BOULEVARD:

- 1. BOTH EXISTING MAINS ARE TO BE PROVEN BY THE CONTRACTOR ON SITE USING NONDESTRUCTIVE

- CROSSING POINT MUST HAVE 30mm THICK STEEL PLATES OVER THE MAINS TO AT LEAST 1.5m EITHER
- NO STOCKPILING OF ANY MATERIALS IS ALLOWED OVER THE EXISTING MAINS OR WITHIN 3m
- NO WORKS WHATSOEVER ARE TO TAKE PLACE WITHIN 3m OF AN EXISTING WATER MAIN WITHOUT APPROVAL FROM YVW.

7.	REFER TO THE YVW WORKS OFFER PAGE 37 OR THE YVW PROTECTION WORKS GUIDELINES FOR
	FURTHER INFORMATION.

1 DIVI OOI ILDOLL										
TYPE	EASTING	NORTHING	RL							
STAR PICKET	315661.19	5841910.59	250.03							
SPIKE	316172.31	5841843.39	248.58							
NAIL IN ROCK	316665.46	5841781.84	249.33							

TRM SCHEDIII E

LEGEND

FOOTPATH

DRIVEWAY

LOT FLOW PATH

OVERLAND FLOW PATH

SERVICE OFFSET TABLE												
STREET		GAS		CYCLED ER (NDW)		TABLE ER (DW)	TEL	ECOMS		CTRICAL ABLES	. I SEWER	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
HALLRAY ROAD	EAST	2.10m	EAST	2.60m	EAST	3.10m	WEST	1.80m	WEST	2.45m	-	-
PLIMSOLL STREET	WEST	2.10m	WEST	2.60m	WEST	3.10m	EAST	1.80m	EAST	2.45m	-	-
GARTON STREET	SOUTH	2.10m	SOUTH	2.60m	SOUTH	3.10m	NORTH	1.80m	NORTH	2.40m	NORTH	1.00m
KALBAR STREET	NORTH	2.10m	NORTH	2.60m	NORTH	3.10m	SOUTH	1.00m	SOUTH	1.50m	-	-
SWILK CRESCENT	NORTH	2.10m	NORTH	2.60m	NORTH	3.10m	SOUTH	1.00m	SOUTH	1.50m	-	-



WARNING

BEWARE OF UNDERGROUND SERVICES

THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVED ON SITE NOT AND THEIR EARCH POSITION SHOULD BE PROVED ON SE NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN. A MOCS ENQUIRY ON 1100 MUST BE MADE BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF WORKS.

WARNING

SETOLIT INFORMATION PROVIDED ON THIS PLAN WITH THE SETOUT INFURMATION PROVIDED ON THIS PLAN WITH THE DESIGN INTENT WHICH INCLUDES, BUT IS NOT LIMITED TO ITEMS SUCH AS LENGTHS, CO-ORDINATES, SETOUT DIMENSIONS AND PEGGED TITLES BY THE PRINCIPAL'S LICENSED SURVEYOR.



CONTRACTOR

CONSTRUCTION ISSUE

SCALE 1:500 @ A1 VERSION SHEET 9 OF 26

DRAWING No 01091-07-E-108

Material Test Report

Report Number: P252407-1

Issue Number: 2 - This version supersedes all previous issues

Reissue Reason: wrong lift 07/08/2025 Date Issued:

Client: Winslow Constructors Pty Ltd

Level 1, 6 English Street, Essendon Fields Vic 3041

Contact: Ali Al Musharafawi

Project Number: P252407

Merrifield South Residential Stage 7 **Project Name:**

Project Location: Mickleham Work Request: 34837 **Date Sampled:** 04/07/2025

Dates Tested: 04/07/2025 - 10/07/2025

AS 1289.1.2.1 6.4 (b) - Sampling from layers in earthworks or pavement - compacted $\,$ Sampling Method:

Remarks: TRN 19066 Specification: 98% Standard Location: TRN 19066 Material: Clay **Material Source:** Insitu



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Senior Technician

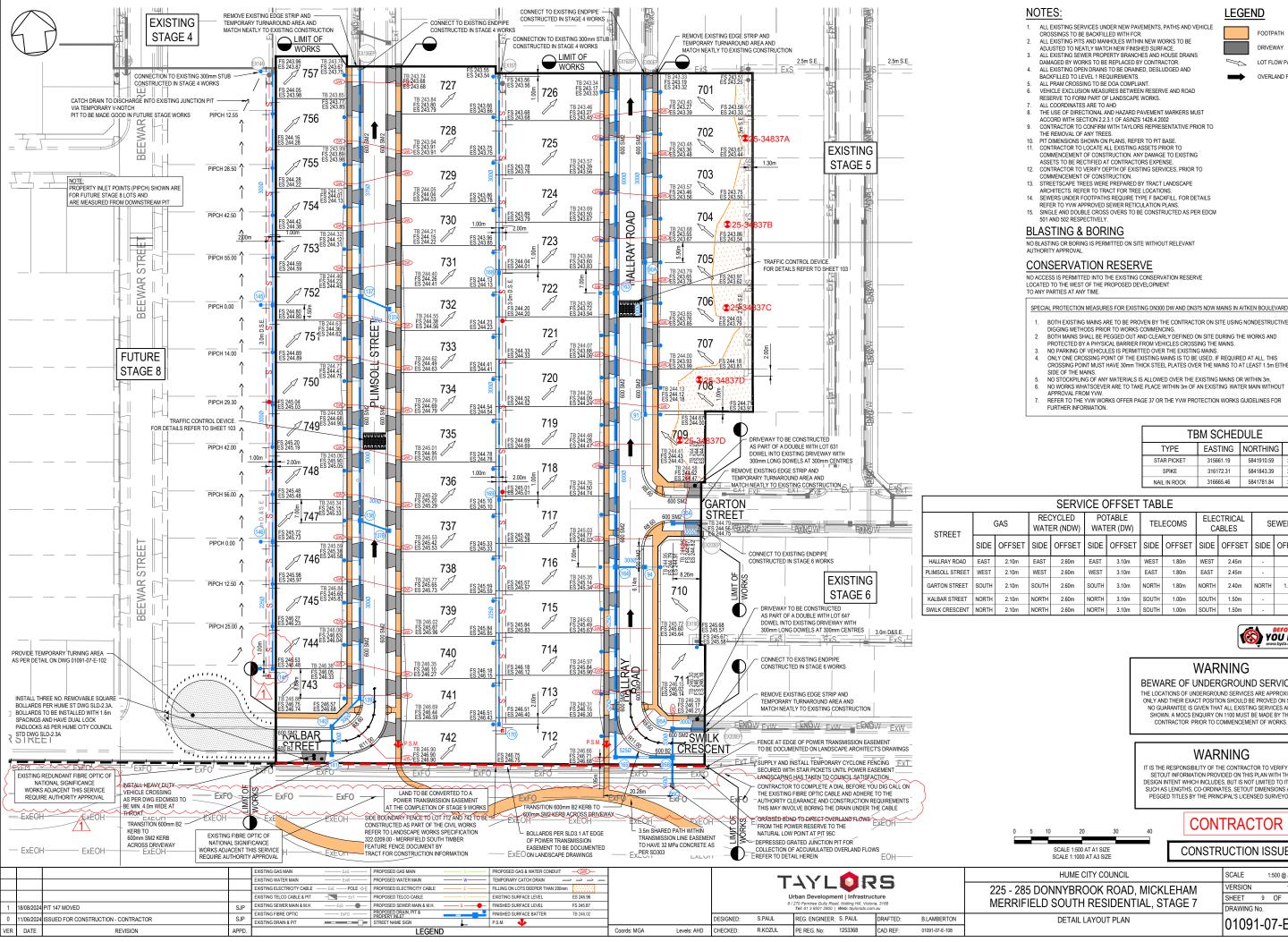
NATA Accredited Laboratory Number: 18877

Compaction Control AS 1289 5.7.1 & 5.8.	1 & 2.1.1			_	
Sample Number	25-34837A	25-34837B	25-34837C	25-34837D	25-34837E
Date Tested	04/07/2025	04/07/2025	04/07/2025	04/07/2025	04/07/2025
Time Tested	12:16	12:20	12:31	12:40	12:46
Test Request #/Location	Lot 702	Lot 704	Lot 706	Lot 708	Lot 709
Layer / Reduced Level	Lift 2				
Thickness of Layer (mm)	200	200	200	200	200
Soil Description	Clay	Clay	Clay	Clay	Clay
Test Depth (mm)	175	175	175	175	175
Sieve used to determine oversize (mm)	19.0	19.0	19.0	19.0	19.0
Percentage of Wet Oversize (%)	**	**	**	**	**
Field Wet Density (FWD) t/m ³	2.00	2.00	1.99	2.00	2.00
Field Moisture Content %	20.4	22.0	23.9	24.4	22.2
Field Dry Density (FDD) t/m ³	1.66	1.64	1.61	1.61	1.64
Peak Converted Wet Density t/m ³	2.03	2.01	2.01	2.01	2.01
Adjusted Peak Converted Wet Density t/m ³	**	**	**	**	**
Moisture Variation (Wv) %	0.0	0.0	0.0	0.0	0.0
Adjusted Moisture Variation %	**	**	**	**	**
Hilf Density Ratio (%)	98.5	99.5	99.0	99.5	100.0
Compaction Method	Standard	Standard	Standard	Standard	Standard
Remarks	**	**	**	**	**

Moisture Variation Note:

Report Number: P252407-1

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TBM SCHEDULE									
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PLIMSOLL STREET	WEST	2.10m	WEST	2.60m	WEST	3.10m	EAST	1.80m	EAST	2.45m	-	-
GARTON STREET	SOUTH	2.10m	SOUTH	2.60m	SOUTH	3.10m	NORTH	1.80m	NORTH	2.40m	NORTH	1.00m
KALBAR STREET	NORTH	2.10m	NORTH	2.60m	NORTH	3.10m	SOUTH	1.00m	SOUTH	1.50m	-	-
SWILK CRESCENT	NORTH	2.10m	NORTH	2.60m	NORTH	3.10m	SOUTH	1.00m	SOUTH	1.50m	-	-



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CONTRACTOR

CONSTRUCTION ISSUE

SCALE 1:500 @ A1 VERSION SHEET 9 OF 26 DRAWING No

01091-07-E-108