



**CIVIL GEOTECHNICAL SERVICES**  
**ABN 26 474 013 724**  
**PO Box 678 Croydon Vic 3136**  
**Telephone: 9723 0744 Facsimile: 9723 0799**

21<sup>st</sup> September 2020

Our Reference: 20042:NB811  
Montdami Pty Ltd  
2b Kirkham Road  
DANDENONG SOUTH VIC 3175

Dear Sirs / Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING  
STONEFIELDS – STAGE 1 (WOLLERT)**

Please find attached our Report No's 20042/R001 to 20042/R006 which relate to the field density testing that was conducted within the filled allotments of the above subdivision. The level 1 inspections and associated field density testing commenced in March 2020 and was completed in January 2020.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Montdami during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

We are of the view that the bulk fill materials that have been placed across the reported allotments by Montdami during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

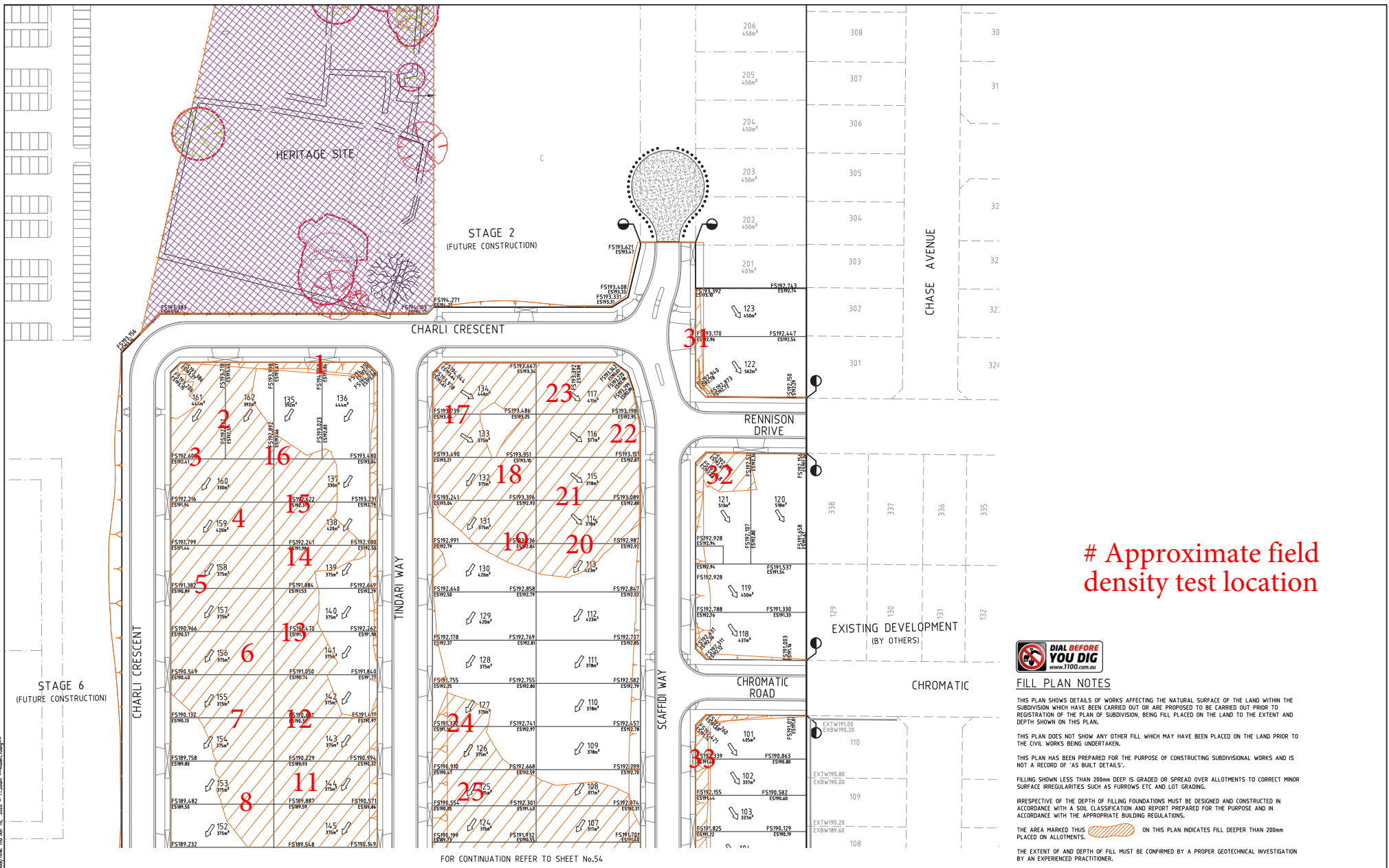
Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

A handwritten signature in blue ink, appearing to read 'Nick Brock', is written over a light blue circular stamp.

Nick Brock

# FIGURE 1 (1 of 2)



# Approximate field density test location



### FILL PLAN NOTES


THIS PLAN SHOWS DETAILS OF WORKS AFFECTING THE NATURAL SURFACE OF THE LAND WITHIN THE SUBDIVISION WHICH HAVE BEEN CARRIED OUT OR ARE PROPOSED TO BE CARRIED OUT PRIOR TO REGISTRATION OF THE PLAN OF SUBDIVISION, BEING FILL PLACED ON THE LAND TO THE EXTENT AND DEPTH SHOWN ON THIS PLAN.

THIS PLAN DOES NOT SHOW ANY OTHER FILL WHICH MAY HAVE BEEN PLACED ON THE LAND PRIOR TO THE CIVIL WORKS BEING UNDERTAKEN.

THIS PLAN HAS BEEN PREPARED FOR THE PURPOSE OF CONSTRUCTING SUBDIVISIONAL WORKS AND IS NOT A RECORD OF 'AS BUILT' DETAILS.







FILLING SHOWN LESS THAN 200mm DEEP IS GRADED OR SPREAD OVER ALLOTMENTS TO CORRECT MINOR SURFACE IRREGULARITIES SUCH AS FURROWS ETC AND LOT GRADING.

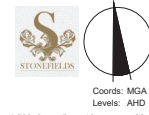
IRRESPECTIVE OF THE DEPTH OF FILLING FOUNDATIONS MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH A SOIL CLASSIFICATION AND REPORT PREPARED FOR THE PURPOSE AND IN ACCORDANCE WITH THE APPROPRIATE BUILDING REGULATIONS.

THE AREA MARKED THUS  ON THIS PLAN INDICATES FILL DEEPER THAN 200mm PLACED ON ALLOTMENTS.

THE EXTENT OF AND DEPTH OF FILL MUST BE CONFIRMED BY A PROPER GEOTECHNICAL INVESTIGATION BY AN EXPERIENCED PRACTITIONER.

FOR CONTINUATION REFER TO SHEET No.54

- LEGEND**
-  REGRADE LOT AT MIN 1 IN 150
  -  ASPHALT PAVEMENT
  -  FINISHED SURFACE LEVEL
  -  EXISTING SURFACE LEVEL
  -  FILLING OVER 200mm
  -  BATTER



**STONEFIELDS ESTATE**  
**STAGE 1**  
**260 CRAIGIEBURN ROAD, WOLLERT**  
**FILL PLAN**  
**SHEET 01 OF 02**  
**Drawing No. 18259.01FP01 Rev D**  
**Sheet No. 47 PRELIMINARY**



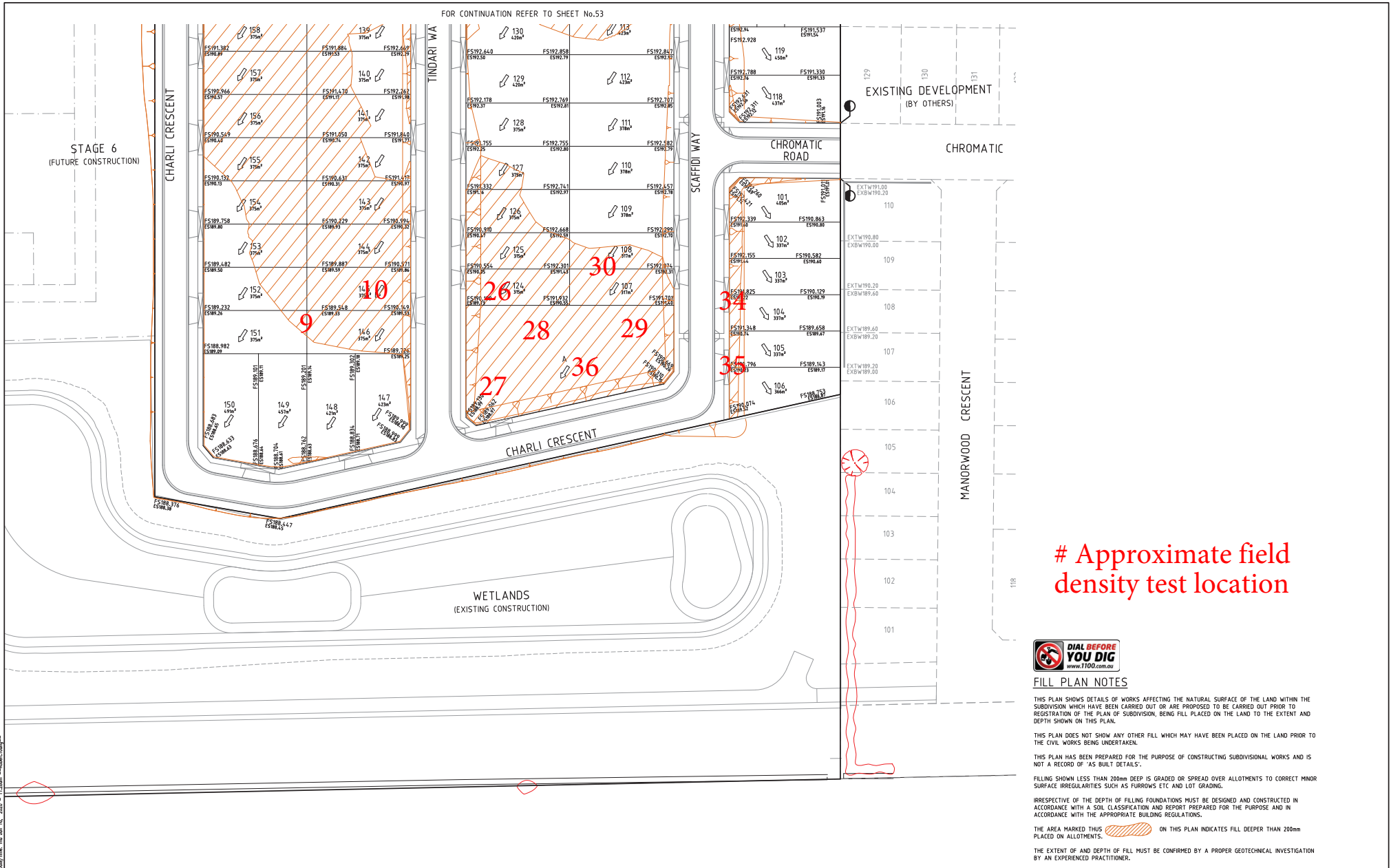
**NOT TO BE USED FOR CONSTRUCTION**

REV	AMENDMENTS	DATE	APPD.
D	COUNCIL COMMENTS (06/01/20)	15/01/20	TL
C	COUNCIL COMMENTS (04/11/19)	18/12/19	TL
B	COUNCIL ISSUE	24/09/19	TL
A	TENDER ISSUE	22/05/19	TL

Drawn BY MATHER  
 Date: 13/12/18  
 AN 3131002  
 Designed BY YOUNG  
 Date: 10/12/18  
 AN 2851002  
 Verified BY MASON  
 Date: 15/03/19  
 AN 7052031  
 Approved -  
 Date -  
 AN -

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

# FIGURE 1 (2 of 2)



### FILL PLAN NOTES

THIS PLAN SHOWS DETAILS OF WORKS AFFECTING THE NATURAL SURFACE OF THE LAND WITHIN THE SUBDIVISION WHICH HAVE BEEN CARRIED OUT OR ARE PROPOSED TO BE CARRIED OUT PRIOR TO REGISTRATION OF THE PLAN OF SUBDIVISION, BEING FILL PLACED ON THE LAND TO THE EXTENT AND DEPTH SHOWN ON THIS PLAN.

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



**NOT TO BE USED FOR CONSTRUCTION**

REV	AMENDMENTS	DATE	APPD.
D	COUNCIL COMMENTS (06/01/20)	15/01/20	TL
C	COUNCIL COMMENTS (04/11/19)	18/12/19	TL
B	COUNCIL ISSUE	24/09/19	TL
A	TENDER ISSUE	22/05/19	TL

Drawn BY MATHER  
Date: 13/12/18  
AN 3131002  
Designed BY YOUNG  
Date: 10/12/18  
AN 2851002  
Verified BY MASON  
Date: 15/03/19  
AN 7052003  
Approved -  
Date -  
AN -

Written dimensions to take precedence over scale. Contractor shall check and verify all dimensions on site. Discrepancies to be brought to the attention of the Superintendent.

### LEGEND

-  REGRADE LOT AT MIN 1 IN 150
-  ASPHALT PAVEMENT
-  FINISHED SURFACE LEVEL
-  EXISTING SURFACE LEVEL
-  FILLING OVER 200mm
-  BATTER



Coords: MGA  
Levels: AHD

Hor 1:500 0m 5m 10m 20m 30m

Scale @ A1/A3

**STONEFIELDS ESTATE**  
STAGE 1  
260 CRAIGIEBURN ROAD, WOLLERT  
FILL PLAN  
SHEET 02 OF 02  
Drawing No. 18259.01FP02 Rev D  
Sheet No. 48 PRELIMINARY



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E info@dceng.com.au

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# COMPACTION ASSESSMENT

Job No 20042  
 Report No 20042/R001  
 Date Issued 20/05/2020

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	MONTDAMI PTY LTD (DANDENONG)	Tested by	AC
Project	STONEFIELDS - STAGE 1	Date tested	31/03/20
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 13:59
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No		1	2	3	4	5	6
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.84	1.83	1.84	1.83	1.83	1.82
Field moisture content	%	25.9	27.2	26.4	26.1	26.4	25.5

Test procedure AS 1289.5.7.1

Test No		1	2	3	4	5	6
Compactive effort		Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	1.87	1.86	1.88	1.89	1.88	1.88
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	28.5	27.0	26.5	28.5	26.5	28.0

Moisture Variation From Optimum Moisture Content	2.5% dry	0.0%	0.0%	2.5% dry	0.0%	2.5% dry
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Density Ratio ( R <sub>HD</sub> )	%	98.5	98.5	98.0	97.0	97.5	97.0
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Material description

No 1 - 6 Clay Fill
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AVRLOT HILF V1.10 MAR 13



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025 - Testing

Accreditation No 9909

Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 20042  
 Report No 20042/R002  
 Date Issued 08/07/2020

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	MONTDAMI CONSTRUCTIONS PTY LTD (DANDENONG)	Tested by	AC
Project	STONEFIELDS - STAGE 1	Date tested	14/04/20
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 11:08
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No		7	8	9	10	11	12
Location		REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL							
Measurement depth	mm	175	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.82	1.87	1.81	1.81	1.82	1.82
Field moisture content	%	24.7	27.1	25.8	24.4	23.5	21.6

Test procedure AS 1289.5.7.1

Test No		7	8	9	10	11	12
Compactive effort		Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	1.89	1.94	1.87	1.85	1.89	1.83
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content	%	26.5	27.0	28.5	27.0	24.0	24.0

Moisture Variation From Optimum Moisture Content	1.5% dry	0.0%	2.5% dry	2.5% dry	0.5% dry	2.5% dry
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Density Ratio ( R <sub>HD</sub> )	%	96.5	96.5	97.0	98.0	96.5	99.5
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Material description

No 7 - 12 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 20042  
 Report No 20042/R003  
 Date Issued 11/06/2020

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	MONTDAMI PTY LTD (DANDENONG)	Tested by	AC
Project	STONEFIELDS - STAGE 1	Date tested	15/04/20
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 12:32
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	13	14	15	16	17	18
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.81	1.79	1.81	1.78	1.78
Field moisture content	%	30.3	27.7	28.0	29.9	29.4

Test procedure AS 1289.5.7.1

Test No	13	14	15	16	17	18
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	1.89	1.87	1.89	1.86	1.87
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	30.5	30.5	30.5	30.0	31.5

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	2.5% dry	0.0%	2.0% dry	2.5% dry
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Density Ratio ( R <sub>HD</sub> )	%	95.5	95.5	95.5	96.0	95.5	95.5
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Material description

No 13 - 18 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Approved Signatory : Justin Fry



# COMPACTION ASSESSMENT

Job No 20042  
 Report No 20042/R004  
 Date Issued 21/05/2020

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	MONTDAMI PTY LTD (DANDENONG)	Tested by	AC
Project	STONEFIELDS - STAGE 1	Date tested	05/05/20
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:29
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	19	20	21	22	23	24
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.89	1.87	1.88	1.90	1.93
Field moisture content	%	30.3	35.3	34.9	32.6	35.2

Test procedure AS 1289.5.7.1

Test No	19	20	21	22	23	24
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	1.91	1.90	1.90	1.93	1.93
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	28.0	33.0	32.5	30.5	33.0

Moisture Variation From Optimum Moisture Content	2.5% wet	2.5% wet	2.5% wet	2.0% wet	2.0% wet	2.0% wet
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Density Ratio ( R <sub>HD</sub> )	%	99.0	98.0	99.0	98.5	100.0	98.0
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Material description

No 19 - 24 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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# COMPACTION ASSESSMENT

Job No 20042  
 Report No 20042/R005  
 Date Issued 22/06/2020

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client MONTDAMI PTY LTD (DANDENONG)  
 Project STONEFIELDS - STAGE 1  
 Location WOLLERT

Tested by AC  
 Date tested 13/05/20  
 Checked by JHF

Feature **EARTHWORKS** Layer thickness 200 mm Time: 08:28

Test procedure AS 1289.2.1.1 & 5.8.1

Test No	25	26	27	28	29	30
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth mm	175	175	175	175	175	175
Field wet density t/m <sup>3</sup>	1.82	1.81	1.81	1.81	1.77	1.80
Field moisture content %	32.3	30.5	36.8	37.0	37.7	33.5

Test procedure AS 1289.5.7.1

Test No	25	26	27	28	29	30
Compactive effort	Standard					
Oversize rock retained on sieve mm	19.0	19.0	19.0	19.0	19.0	19.0
Percent of oversize material wet	4	0	4	5	5	3
Peak Converted Wet Density t/m <sup>3</sup>	1.82	1.81	1.79	1.79	1.76	1.78
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	1.84	-	1.81	1.81	1.78	1.80
Optimum Moisture Content %	30.0	28.5	35.5	35.0	36.0	31.5

Moisture Variation From Optimum Moisture Content	2.0% wet	2.0% wet	1.5% wet	2.0% wet	1.5% wet	2.0% wet
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Density Ratio ( R <sub>HD</sub> )	%	99.5	100.0	100.5	100.0	99.0	100.0
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Material description

No 25 - 30 Clay Fill

AVRLOT HILF V1.10 MAR 13



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Accreditation No 9909

Approved Signatory : Justin Fry





# COMPACTION ASSESSMENT

Job No 20042  
 Report No 20042/R006  
 Date Issued 21/07/2020

## CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	MONTDAMI CONSTRUCTIONS PTY LTD (DANDENONG)	Tested by	AC
Project	STONEFIELDS - STAGE 1	Date tested	16/06/20
Location	WOLLERT	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time: 10:02
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	31	32	33	34	35	36
Location	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1	REFER TO FIGURE 1
Approximate depth below FSL						
Measurement depth	mm	175	175	175	175	175
Field wet density	t/m <sup>3</sup>	1.99	1.99	2.01	1.98	1.91
Field moisture content	%	24.6	25.0	24.8	24.6	26.3

Test procedure AS 1289.5.7.1

Test No	31	32	33	34	35	36
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0
Percent of oversize material	wet	0	0	0	0	0
Peak Converted Wet Density	t/m <sup>3</sup>	2.01	2.02	2.03	2.01	1.89
Adjusted Peak Converted Wet Density	t/m <sup>3</sup>	-	-	-	-	-
Optimum Moisture Content	%	24.5	27.5	25.0	27.0	26.5

Moisture Variation From Optimum Moisture Content	0.0%	2.5% dry	0.0%	2.5% dry	0.0%	0.0%
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Density Ratio ( R <sub>HD</sub> )	%	99.0	98.5	99.0	98.5	101.0	98.0
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Material description

No 31 - 36 Clay Fill
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AVRLOT HILF V1.10 MAR 13



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Accreditation No 9909

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