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

16th May 2017

Our Reference: 17060:GB168

Australand Residential No 156 P/L
Level 9, 484 St Kilda Road
MELBOURNE VIC 3004

Dear Sirs,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
HONOUR VILLAGE ESTATE – STAGE 1, BERWICK

Please find attached our Report Nos 17060/R001 to 17060/R037 that relate to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density testing commenced in early February 2017 and was completed in mid March 2017

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.

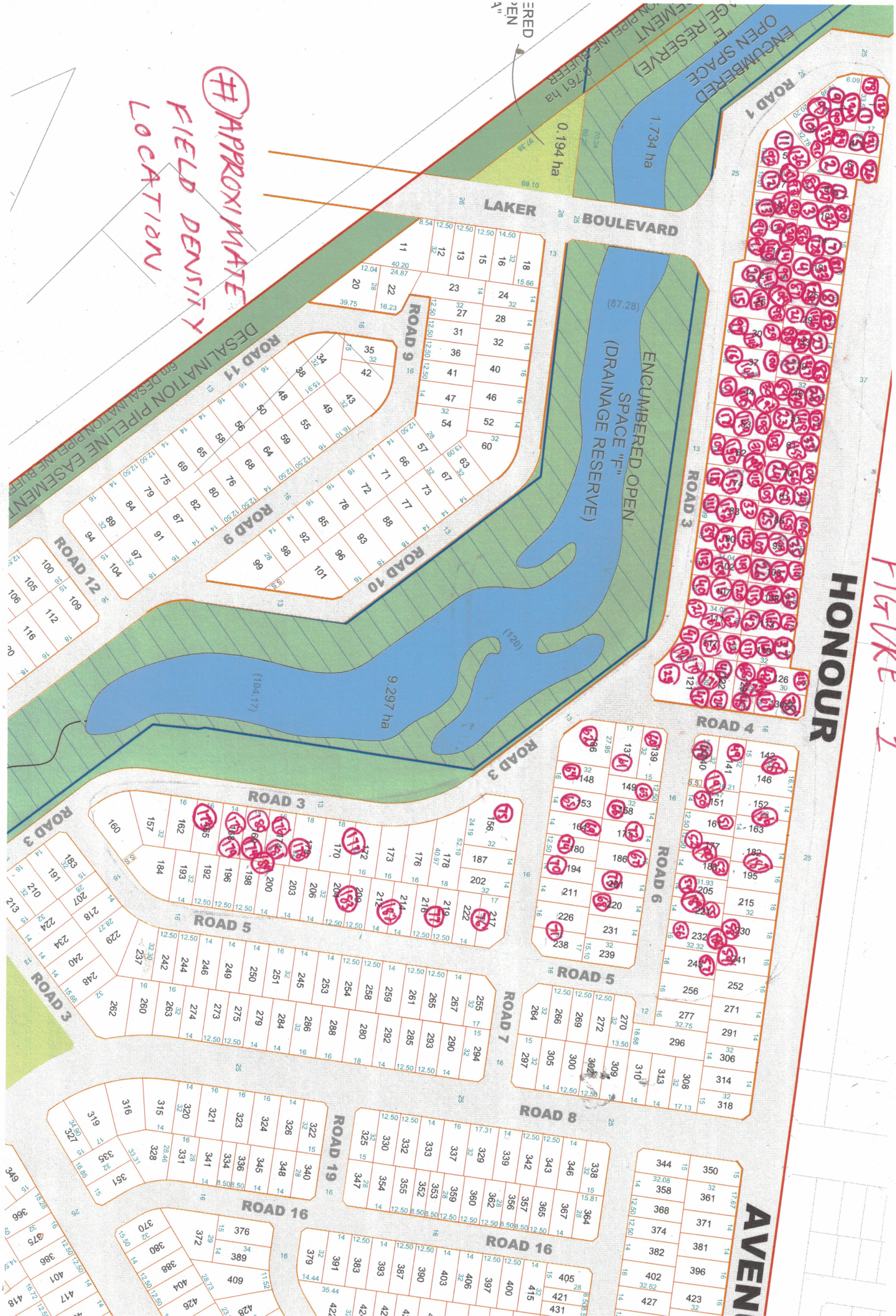
The site inspections and testing was performed by an experienced geotechnician from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. 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 filled allotments by Rokon 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 filled allotments by Rokon 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

Griffin Brown


#APPROXIMATE FIELD DENSITY LOCATION
FIGURE 2
LAKER BOULEVARD
HONOUR AVENUE
ENCUMBERED OPEN SPACE "F" (DRAINAGE RESERVE)
ENCUMBERED OPEN SPACE "E" (DRAINAGE RESERVE)
0.761 ha
0.194 ha
1.734 ha
9.297 ha
DESALINATION PIPELINE EASEMENT
ROAD 1
ROAD 3
ROAD 4
ROAD 5
ROAD 6
ROAD 7
ROAD 8
ROAD 9
ROAD 10
ROAD 11
ROAD 12
ROAD 16
ROAD 19

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R001 |
| | | *Date Issued* | 17/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 01/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 12:01

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **1** | **2** | **3** | **4** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | 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 | - | - |
| *Field wet density* | *t/m³* | 1.97 | 2.03 | 1.86 | 1.87 | - | - |
| *Field moisture content* | *%* | 18.7 | 20.1 | 16.5 | 17.5 | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 1 | 2 | 3 | 4 | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | 19.0 | 19.0 | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | 0 | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.02 | 1.98 | 1.92 | 1.95 | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 20.0 | 19.0 | 19.5 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.5% dry | 0.0% | 2.5% dry | 1.5% dry | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **98.0** | **102.5** | **97.0** | **96.0** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 1 - 4 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R002 |
| | | *Date Issued* | 20/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 02/02/17 |
| *Location* | PAKENHAM | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:40

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **5** | **6** | **7** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | REFER TO FIGURE 1 | REFER TO FIGURE 1 | REFER TO FIGURE 1 | | | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | 175 | - | - | - |
| *Field wet density* | *t/m³* | 1.95 | 1.97 | 1.88 | - | - | - |
| *Field moisture content* | *%* | 20.5 | 19.8 | 12.8 | - | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 5 | 6 | 7 | - | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | 19.0 | - | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | - | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.02 | 2.00 | 1.98 | - | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.5 | 20.0 | 13.0 | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.0% | 0.0% | 0.5% dry | - | - | - |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **96.5** | **98.5** | **95.0** | **-** | **-** | **-** |

*Material description*

No 5 - 7 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R003 |
| | | *Date Issued* | 22/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 03/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 06:59 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **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 | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | 175 | 175 | 175 | - |
| *Field wet density* | *t/m³* | 1.85 | 2.04 | 2.01 | 1.94 | 2.04 | - |
| *Field moisture content* | *%* | 22.6 | 21.5 | 19.6 | 24.8 | 23.2 | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 8 | 9 | 10 | 11 | 12 | - |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.94 | 1.95 | 2.00 | 1.96 | 2.07 | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 24.5 | 22.0 | 20.0 | 21.5 | 21.0 | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.0% dry | 0.5% dry | 0.0% | 3.0% wet | 2.0% wet | - |

| ***Density Ratio ( $R_{HD}$ )*** | ***%*** | **95.5** | **104.5** | **101.0** | **98.5** | **98.5** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 8 - 12 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R004 |
| | | *Date Issued* | 20/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 04/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:39

*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 | 175 |
| *Field wet density* | *t/m³* | 2.00 | 1.95 | 2.01 | 1.95 | 1.97 | 1.97 |
| *Field moisture content* | *%* | 20.9 | 19.0 | 20.1 | 23.1 | 22.2 | 23.5 |

*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 | 19.0 |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | 0 | 0 | 0 |
| *Peak Converted Wet Density* | *t/m³* | 2.01 | 1.97 | 1.95 | 1.98 | 2.01 | 2.00 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.5 | 21.0 | 22.0 | 21.5 | 21.0 | 21.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 0.0% | 1.5% dry | 1.5% dry | 1.5% wet | 1.5% wet | 2.0% wet |

| ***Density Ratio ( $R_{HD}$ )*** | ***%*** | **99.5** | **99.5** | **103.0** | **98.5** | **97.5** | **98.5** |
|---|---|---|---|---|---|---|---|

*Material description*

No 13 - 18 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R005 |
| | | *Date Issued* | 20/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 04/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:27

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **19** | **20** | **-** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | REFER TO FIGURE 1 | REFER TO FIGURE 1 | | | | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | - | - | - | - |
| *Field wet density* | *t/m³* | 1.98 | 2.01 | - | - | - | - |
| *Field moisture content* | *%* | 22.6 | 23.3 | - | - | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 19 | 20 | - | - | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | - | - | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | - | - | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.05 | 2.02 | - | - | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.5 | 22.5 | - | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 1.0% wet | - | - | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **97.0** | **99.5** | **-** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 19 - 20 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R006 |
| | | *Date Issued* | 24/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 04/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:39

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **21** | **22** | **23** | **24** | **25** | **26** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.94 | 2.01 | 1.99 | 1.98 | 1.97 | 2.02 |
| *Field moisture content* | *%* | 21.8 | 21.5 | 20.4 | 21.8 | 23.1 | 22.5 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 21 | 22 | 23 | 24 | 25 | 26 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 2.00 | 1.99 | 2.01 | 2.00 | 2.00 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 21.5 | 20.5 | 20.0 | 20.5 | 21.0 | 21.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.5% wet | 1.0% wet | 0.0% | 1.0% wet | 2.0% wet | 1.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **96.5** | **100.5** | **99.5** | **98.5** | **98.0** | **101.0** |

*Material description*

No 21 - 26 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R007 |
| | | *Date Issued* | 23/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 08/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:12

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **27** | **28** | **-** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | REFER TO FIGURE 1 | REFER TO FIGURE 1 | | | | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | - | - | - | - |
| *Field wet density* | *t/m³* | 2.00 | 1.95 | - | - | - | - |
| *Field moisture content* | *%* | 19.3 | 22.0 | - | - | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 27 | 28 | - | - | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | - | - | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | - | - | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.03 | 2.02 | - | - | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.5 | 20.5 | - | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.0% | 1.5% wet | - | - | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **98.5** | **97.0** | **-** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 27 - 28 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT

**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136

| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R008 |
| | | *Date Issued* | 23/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 08/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:37

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **29** | **30** | **31** | **32** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | 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 | - | - |
| *Field wet density* | *t/m³* | 1.89 | 1.92 | 1.91 | 1.91 | - | - |
| *Field moisture content* | *%* | 27.9 | 24.3 | 25.3 | 27.5 | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 29 | 30 | 31 | 32 | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | 19.0 | 19.0 | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | 0 | - | - |
| *Peak Converted Wet Density* | *t/m³* | 1.98 | 1.96 | 1.99 | 1.98 | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 29.5 | 25.0 | 25.0 | 27.0 | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 1.5% dry | 1.0% dry | 0.0% | 0.5% wet | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.5** | **98.0** | **96.0** | **96.5** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 29 - 32 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R009 |
| | | *Date Issued* | 28/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 09/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:53

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **33** | **34** | **35** | **36** | **37** | **38** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.99 | 1.96 | 2.01 | 2.04 | 2.04 | 2.05 |
| *Field moisture content* | *%* | 21.7 | 19.8 | 21.9 | 18.8 | 17.3 | 18.4 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 33 | 34 | 35 | 36 | 37 | 38 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.03 | 2.04 | 2.05 | 2.08 | 2.09 | 2.07 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 19.5 | 19.5 | 18.0 | 17.0 | 17.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.5% wet | 0.0% | 2.0% wet | 0.5% wet | 0.0% | 1.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **98.5** | **96.5** | **98.0** | **98.5** | **98.0** | **99.0** |

*Material description*

No 33 - 38 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R010 |
| | | *Date Issued* | 16/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 09/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 11:00 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **39** | **40** | **41** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | REFER TO FIGURE 1 | REFER TO FIGURE 1 | REFER TO FIGURE 1 | | | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | 175 | - | - | - |
| *Field wet density* | *t/m³* | 1.92 | 1.95 | 1.93 | - | - | - |
| *Field moisture content* | *%* | 22.5 | 21.4 | 27.7 | - | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 39 | 40 | 41 | - | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | 19.0 | - | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | - | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.03 | 2.05 | 1.98 | - | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.5 | 19.0 | 28.0 | - | - | - |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.0% wet | 2.5% wet | 0.0% | - | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.0** | **95.0** | **97.5** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 39 - 41 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R011 |
| | | *Date Issued* | 21/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 10/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:34

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **42** | **43** | **44** | **45** | **46** | **47** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.00 | 2.06 | 2.01 | 1.95 | 2.00 | 1.97 |
| *Field moisture content* | *%* | 22.0 | 21.9 | 22.4 | 24.4 | 23.3 | 22.4 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 42 | 43 | 44 | 45 | 46 | 47 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.06 | 2.00 | 2.01 | 2.05 | 2.05 | 2.02 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.0 | 20.5 | 20.0 | 20.5 | 21.0 | 21.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 1.5% wet | 2.0% wet | 2.0% wet | 2.0% wet | 1.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **97.5** | **103.0** | **100.0** | **95.0** | **97.5** | **97.5** |

*Material description*

No 42 - 47 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R012 |
| | | *Date Issued* | 22/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 10/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:08

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **48** | **49** | **50** | **51** | **52** | **53** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.90 | 1.97 | 1.90 | 1.96 | 1.92 | 1.92 |
| *Field moisture content* | *%* | 26.6 | 28.4 | 29.0 | 24.7 | 22.4 | 22.4 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 48 | 49 | 50 | 51 | 52 | 53 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.99 | 2.01 | 1.99 | 2.02 | 2.01 | 2.02 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 27.0 | 27.0 | 28.0 | 22.0 | 20.5 | 20.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.5% dry | 1.5% wet | 1.0% wet | 2.5% wet | 2.0% wet | 2.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.5** | **98.0** | **95.5** | **97.0** | **95.5** | **95.0** |

*Material description*

No 48 - 53 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R013 |
| | | *Date Issued* | 03/03/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 11/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 07:47 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **54** | **55** | **56** | **57** | **58** | **59** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.94 | 1.89 | 1.93 | 1.93 | 1.91 | 1.91 |
| *Field moisture content* | *%* | 23.6 | 27.0 | 23.9 | 22.1 | 21.2 | 20.0 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 54 | 55 | 56 | 57 | 58 | 59 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.02 | 1.97 | 2.01 | 2.03 | 2.00 | 1.96 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 23.5 | 28.5 | 25.0 | 21.5 | 20.0 | 21.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 0.0% | 1.5% dry | 1.5% dry | 0.5% wet | 1.5% wet | 1.0% dry |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **96.0** | **96.0** | **95.5** | **95.5** | **95.5** | **97.0** |

*Material description*

No 54 - 59 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R014 |
| | | *Date Issued* | 03/03/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 11/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 11:06

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **60** | **61** | **62** | **63** | **64** | **65** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.98 | 1.98 | 1.97 | 1.99 | 2.03 | 1.99 |
| *Field moisture content* | *%* | 16.9 | 18.4 | 18.7 | 13.8 | 18.6 | 17.9 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 60 | 61 | 62 | 63 | 64 | 65 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.97 | 2.02 | 2.04 | 2.03 | 2.07 | 2.09 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 19.0 | 18.5 | 16.5 | 18.0 | 17.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% dry | 0.5% dry | 0.5% wet | 2.5% dry | 0.5% wet | 0.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **100.0** | **98.0** | **97.0** | **98.0** | **98.0** | **95.0** |

*Material description*

No 60 - 65 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R015 |
| | | *Date Issued* | 21/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 13/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 13:13

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **66** | **67** | **68** | **69** | **70** | **71** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 2.05 | 1.98 | 2.05 | 2.00 | 2.04 |
| *Field moisture content* | *%* | 17.3 | 18.9 | 22.6 | 16.3 | 15.8 | 30.8 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 66 | 67 | 68 | 69 | 70 | 71 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.06 | 2.08 | 2.05 | 2.05 | 2.04 | 2.03 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 17.5 | 18.0 | 20.5 | 17.0 | 17.0 | 28.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 0.0% | 1.0% wet | 2.0% wet | 1.0% dry | 1.0% dry | 2.0% wet |

| ***Density Ratio ( $R_{HD}$ )*** | ***%*** | **98.0** | **99.0** | **96.5** | **100.0** | **98.0** | **100.5** |
|---|---|---|---|---|---|---|---|

*Material description*

No 66 - 71 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R016 |
| | | *Date Issued* | 03/03/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 13/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 14:04

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **72** | **73** | **74** | **75** | **76** | **77** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.90 | 1.94 | 1.97 | 1.89 | 1.88 | 1.92 |
| *Field moisture content* | *%* | 19.6 | 21.1 | 15.7 | 20.3 | 27.6 | 28.9 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 72 | 73 | 74 | 75 | 76 | 77 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.97 | 2.03 | 2.02 | 1.94 | 1.96 | 1.97 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.5 | 20.5 | 17.5 | 20.0 | 28.5 | 28.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.5% dry | 0.5% wet | 1.5% dry | 0.0% | 0.5% dry | 1.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **96.5** | **95.5** | **97.5** | **97.5** | **96.0** | **97.5** |

*Material description*

No 72 - 77 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R017 |
| | | *Date Issued* | 21/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 14/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 09:20 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **78** | **79** | **80** | **81** | **82** | **83** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.92 | 1.94 | 1.96 | 2.01 | 1.90 | 1.92 |
| *Field moisture content* | *%* | 32.2 | 32.1 | 29.8 | 27.7 | 31.2 | 29.6 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 78 | 79 | 80 | 81 | 82 | 83 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.02 | 1.98 | 1.99 | 1.99 | 1.97 | 2.00 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 30.0 | 31.0 | 27.0 | 26.0 | 28.5 | 27.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 1.0% wet | 2.5% wet | 1.5% wet | 2.5% wet | 2.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.0** | **98.0** | **98.5** | **101.0** | **96.5** | **96.0** |

*Material description*

No 78 - 83 Clay Fill

*AVRLOT HILF V1.10 MAR 13*



Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R018 |
| | | *Date Issued* | 20/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 14/02/17 |
| *Location* | PAKENHAM | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 12:29 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **84** | **85** | **86** | **87** | **88** | **89** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.91 | 1.93 | 1.93 | 1.97 | 1.95 | 1.96 |
| *Field moisture content* | *%* | 31.0 | 32.3 | 32.6 | 23.8 | 29.7 | 29.7 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 84 | 85 | 86 | 87 | 88 | 89 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.97 | 1.98 | 1.95 | 1.92 | 1.98 | 1.98 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 29.0 | 29.5 | 30.5 | 22.0 | 28.0 | 27.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 2.5% wet | 1.5% wet | 1.5% wet | 1.5% wet | 2.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **97.0** | **97.5** | **99.0** | **102.5** | **98.0** | **99.5** |

*Material description*

No 84 - 89 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R019 |
| | | *Date Issued* | 28/02/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 15/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:01

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **90** | **91** | **92** | **93** | **94** | **95** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.99 | 1.95 | 1.92 | 1.91 | 1.91 | 1.90 |
| *Field moisture content* | *%* | 26.4 | 30.6 | 31.7 | 32.1 | 32.7 | 31.5 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 90 | 91 | 92 | 93 | 94 | 95 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.00 | 1.98 | 1.94 | 1.91 | 1.96 | 1.95 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 24.0 | 28.0 | 31.0 | 31.5 | 32.0 | 30.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.5% wet | 2.5% wet | 0.5% wet | 0.5% wet | 1.0% wet | 1.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **99.5** | **98.5** | **98.5** | **100.0** | **98.0** | **97.5** |

*Material description*

No 90 - 95 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


**CIVIL GEOTECHNICAL SERVICES**
6 - 8 Rose Avenue, Croydon 3136


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R020 |
| | | *Date Issued* | 28/03/2017 |
| *Client* | AUSTRALAND RESIDENTIAL, No 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 15/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 10:57 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **96** | **97** | **98** | **99** | **100** | **101** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 1.96 | 1.96 | 1.93 | 2.02 | 2.00 |
| *Field moisture content* | *%* | 20.8 | 27.5 | 22.3 | 25.1 | 23.5 | 27.5 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 96 | 97 | 98 | 99 | 100 | 101 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.10 | 2.06 | 2.06 | 2.04 | 2.10 | 2.09 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 24.5 | 19.5 | 22.5 | 21.0 | 25.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 2.5% wet | 2.0% wet | 2.5% wet | 2.5% wet | 2.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **96.0** | **95.0** | **95.5** | **95.0** | **96.0** | **95.5** |

*Material description*

No 96 - 10 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R021 |
| | | *Date Issued* | 15/03/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 16/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 08:49 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **102** | **103** | **104** | **105** | **106** | **107** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.96 | 1.90 | 1.94 | 1.91 | 1.90 | 1.88 |
| *Field moisture content* | *%* | 28.8 | 33.3 | 31.4 | 34.2 | 31.8 | 33.9 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 102 | 103 | 104 | 105 | 106 | 107 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.98 | 1.97 | 1.94 | 1.94 | 1.90 | 1.95 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 27.0 | 32.0 | 30.0 | 32.5 | 30.5 | 32.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 1.5% wet | 1.0% wet | 1.0% wet | 1.5% wet | 1.0% wet | 1.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **99.0** | **96.5** | **99.5** | **98.5** | **100.5** | **96.5** |

*Material description*

No 102 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R022 |
| | | *Date Issued* | 13/04/2017 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 16/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:43

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **108** | **109** | **110** | **111** | **112** | **113** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.00 | 1.95 | 1.91 | 1.94 | 1.91 | 1.92 |
| *Field moisture content* | *%* | 24.1 | 26.4 | 30.0 | 29.3 | 31.5 | 32.3 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 108 | 109 | 110 | 111 | 112 | 113 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.04 | 2.03 | 1.99 | 1.99 | 2.00 | 1.95 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 22.0 | 24.5 | 27.0 | 27.0 | 28.5 | 30.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 2.0% wet | 2.5% wet | 2.0% wet | 2.5% wet | 1.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **98.0** | **96.0** | **96.0** | **97.5** | **95.5** | **98.5** |

*Material description*

No 108 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R023 |
| | | *Date Issued* | 13/04/2017 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 17/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:13

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **114** | **115** | **116** | **117** | **118** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | 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/m³* | 1.88 | 1.88 | 1.89 | 1.92 | 1.85 | - |
| *Field moisture content* | *%* | 26.2 | 31.4 | 29.9 | 31.7 | 32.1 | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 114 | 115 | 116 | 117 | 118 | - |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.98 | 1.97 | 1.95 | 2.00 | 1.93 | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 25.0 | 29.0 | 27.5 | 29.0 | 30.0 | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 1.5% wet | 2.0% wet | 2.5% wet | 2.5% wet | 2.0% wet | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.0** | **95.5** | **96.5** | **96.0** | **96.0** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 114 - 1 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R024 |
| | | *Date Issued* | 12/04/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 18/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 11:57 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **119** | **120** | **121** | **122** | **123** | **124** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.92 | 1.95 | 1.95 | 1.98 | 1.93 | 1.97 |
| *Field moisture content* | *%* | 28.1 | 26.9 | 24.4 | 27.1 | 26.5 | 24.9 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 119 | 120 | 121 | 122 | 123 | 124 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 2.05 | 2.05 | 2.06 | 2.03 | 2.06 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 25.5 | 24.5 | 23.0 | 25.0 | 25.0 | 22.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.0% wet | 2.0% wet | 1.0% wet | 2.0% wet | 1.0% wet | 2.0% wet |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.5** | **95.0** | **95.0** | **96.0** | **95.0** | **96.0** |
|---|---|---|---|---|---|---|---|

*Material description*

No 119 - 1 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R025 |
| | | *Date Issued* | 12/04/2017 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 24/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:22

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **125** | **126** | **127** | **128** | **129** | **130** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.02 | 1.98 | 1.93 | 1.96 | 1.98 | 2.00 |
| *Field moisture content* | *%* | 21.4 | 25.6 | 28.2 | 25.0 | 27.3 | 22.8 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 125 | 126 | 127 | 128 | 129 | 130 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.04 | 2.00 | 2.02 | 2.00 | 1.98 | 2.05 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 21.5 | 24.5 | 25.5 | 23.5 | 26.5 | 22.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 0.0% | 1.0% wet | 2.5% wet | 1.5% wet | 0.5% wet | 1.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **99.0** | **99.0** | **96.0** | **98.5** | **100.0** | **98.0** |

*Material description*

No 125 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R026 |
| | | *Date Issued* | 15/03/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 27/02/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 12:00 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **131** | **132** | **133** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | REFER TO FIGURE 1 | REFER TO FIGURE 1 | REFER TO FIGURE 1 | | | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | 175 | - | - | - |
| *Field wet density* | *t/m³* | 2.00 | 1.92 | 1.97 | - | - | - |
| *Field moisture content* | *%* | 27.2 | 27.6 | 28.6 | - | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 131 | 132 | 133 | - | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | 19.0 | - | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | - | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.03 | 1.99 | 1.98 | - | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 25.5 | 26.0 | 27.0 | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 1.5% wet | 1.5% wet | 1.5% wet | - | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | ***%*** | **98.5** | **96.5** | **99.5** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 131 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R027 |
| | | *Date Issued* | 05/05/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 01/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 09:04 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **134** | **135** | **136** | **137** | **138** | **139** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.04 | 2.00 | 1.99 | 1.94 | 1.98 | 1.95 |
| *Field moisture content* | *%* | 20.5 | 15.1 | 23.3 | 26.4 | 24.1 | 22.7 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 134 | 135 | 136 | 137 | 138 | 139 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.13 | 2.12 | 2.09 | 2.01 | 2.06 | 2.03 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.5 | 15.5 | 21.0 | 24.0 | 21.5 | 22.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 1.0% wet | 0.5% dry | 2.0% wet | 2.5% wet | 2.5% wet | 0.0% |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.5** | **95.0** | **95.5** | **96.5** | **96.0** | **96.0** |
|---|---|---|---|---|---|---|---|

*Material description*

No 134 - 1 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R028 |
| | | *Date Issued* | 19/04/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 02/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:47

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **140** | **141** | **142** | **143** | **144** | **145** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.99 | 2.02 | 2.05 | 2.07 | 1.95 | 1.98 |
| *Field moisture content* | *%* | 21.8 | 20.8 | 21.9 | 14.1 | 22.3 | 23.6 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 140 | 141 | 142 | 143 | 144 | 145 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.08 | 2.12 | 2.14 | 2.12 | 2.05 | 2.06 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 18.5 | 19.5 | 14.5 | 20.0 | 21.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.5% wet | 2.0% wet | 2.5% wet | 0.5% dry | 2.5% wet | 2.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.5** | **95.5** | **96.0** | **97.5** | **95.0** | **96.0** |

*Material description*

No 140 - 1 Clay Fill



Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R029 |
| | | *Date Issued* | 19/04/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 03/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:02

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **146** | **147** | **148** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|
| *Location* | | REFER TO FIGURE 1 | REFER TO FIGURE 1 | REFER TO FIGURE 1 | | | |
| *Approximate depth below FSL* | | | | | | | |
| *Measurement depth* | *mm* | 175 | 175 | 175 | - | - | - |
| *Field wet density* | *t/m³* | 2.01 | 2.04 | 2.06 | - | - | - |
| *Field moisture content* | *%* | 24.3 | 21.6 | 25.0 | - | - | - |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 146 | 147 | 148 | - | - | - |
|---|---|---|---|---|---|---|---|
| *Compactive effort* | | Standard | | | | | |
| *Oversize rock retained on sieve* | *mm* | 19.0 | 19.0 | 19.0 | - | - | - |
| *Percent of oversize material* | *wet* | 0 | 0 | 0 | - | - | - |
| *Peak Converted Wet Density* | *t/m³* | 2.12 | 2.14 | 2.08 | - | - | - |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 21.5 | 19.0 | 22.5 | - | - | - |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.5% wet | 2.5% wet | 2.5% wet | - | - | - |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.0** | **95.0** | **99.0** | **-** | **-** | **-** |
|---|---|---|---|---|---|---|---|

*Material description*

No 146 - 1 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R030 |
| | | *Date Issued* | 13/04/2017 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | AG |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 04/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:02

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **149** | **150** | **151** | **152** | **153** | **154** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.90 | 1.84 | 1.94 | 1.83 | 1.91 | 1.89 |
| *Field moisture content* | *%* | 15.4 | 19.2 | 15.5 | 20.7 | 15.8 | 19.3 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 149 | 150 | 151 | 152 | 153 | 154 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.88 | 1.93 | 2.03 | 1.91 | 1.89 | 1.96 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 17.5 | 22.0 | 18.5 | 23.5 | 18.0 | 22.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% dry | 2.5% dry | 2.5% dry | 2.5% dry | 2.0% dry | 2.5% dry |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **101.0** | **95.5** | **95.5** | **96.0** | **101.0** | **96.0** |

*Material description*

No 149 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R031 |
| | | *Date Issued* | 12/04/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 06/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 07:57 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **155** | **156** | **157** | **158** | **159** | **160** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.96 | 2.04 | 2.08 | 2.04 | 2.01 | 2.01 |
| *Field moisture content* | *%* | 25.0 | 20.0 | 17.8 | 23.1 | 22.1 | 18.6 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 155 | 156 | 157 | 158 | 159 | 160 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.05 | 2.12 | 2.14 | 2.12 | 2.09 | 2.03 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 22.5 | 18.0 | 16.0 | 20.5 | 20.5 | 17.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.5% wet | 2.0% wet | 2.0% wet | 2.5% wet | 1.5% wet | 1.0% wet |

| ***Density Ratio ( $R_{HD}$ )*** | *%* | **95.5** | **96.0** | **97.5** | **96.0** | **96.0** | **99.0** |
|---|---|---|---|---|---|---|---|

*Material description*

No 155 - 1 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R032 |
| | | *Date Issued* | 19/04/17 |
| *Client* | AUSTRLAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 07/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 08:10

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **161** | **162** | **163** | **164** | **165** | **166** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.96 | 1.95 | 1.99 | 2.02 | 2.00 | 1.95 |
| *Field moisture content* | *%* | 24.4 | 22.0 | 23.5 | 23.5 | 20.7 | 22.5 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 161 | 162 | 163 | 164 | 165 | 166 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.03 | 2.03 | 2.07 | 2.11 | 2.06 | 2.05 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 22.0 | 21.0 | 21.5 | 21.0 | 18.0 | 21.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 1.0% wet | 2.0% wet | 2.5% wet | 2.5% wet | 1.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **97.0** | **96.0** | **96.5** | **96.0** | **97.0** | **95.0** |

*Material description*

No 161 - 1 Clay Fill



Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R033 |
| | | *Date Issued* | 31/03/2017 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 08/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 07:52

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **167** | **168** | **169** | **170** | **171** | **172** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.98 | 1.94 | 1.94 | 1.94 | 1.96 | 1.93 |
| *Field moisture content* | *%* | 24.6 | 27.3 | 27.1 | 27.5 | 23.8 | 24.5 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 167 | 168 | 169 | 170 | 171 | 172 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 2.00 | 2.00 | 2.01 | 2.04 | 2.02 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 23.5 | 25.5 | 25.0 | 26.5 | 21.0 | 24.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 1.0% wet | 2.0% wet | 2.0% wet | 1.0% wet | 2.5% wet | 0.5% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **99.0** | **96.5** | **97.5** | **97.0** | **96.0** | **95.5** |

*Material description*

No 167 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R034 |
| | | *Date Issued* | 21/04/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 09/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 09:41 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **173** | **174** | **175** | **176** | **177** | **178** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.99 | 1.97 | 2.00 | 2.01 | 2.05 | 2.04 |
| *Field moisture content* | *%* | 22.5 | 23.6 | 24.6 | 25.0 | 19.1 | 19.7 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 173 | 174 | 175 | 176 | 177 | 178 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.08 | 2.03 | 2.08 | 2.08 | 2.13 | 2.13 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.5 | 21.0 | 22.0 | 22.5 | 16.5 | 17.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | | 2.0% wet | 2.5% wet | 2.0% wet | 2.0% wet | 2.5% wet | 2.0% wet |
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **96.0** | **96.5** | **96.0** | **96.5** | **96.0** | **95.5** |

*Material description*

No 173 - 1 Clay Fill

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R035 |
| | | *Date Issued* | 03/04/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 14/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 09:20

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **179** | **180** | **181** | **182** | **183** | **184** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.95 | 2.00 | 2.02 | 1.97 | 2.00 | 1.92 |
| *Field moisture content* | *%* | 19.6 | 21.2 | 20.5 | 24.0 | 19.9 | 25.7 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 179 | 180 | 181 | 182 | 183 | 184 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.06 | 2.07 | 2.06 | 2.03 | 2.09 | 2.02 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 20.0 | 20.0 | 19.5 | 22.5 | 17.5 | 24.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 0.5% dry | 1.0% wet | 1.0% wet | 1.5% wet | 2.5% wet | 1.5% wet |

| ***Density Ratio ( $R_{HD}$ )*** | ***%*** | **95.0** | **96.5** | **98.0** | **97.5** | **96.0** | **95.0** |
|---|---|---|---|---|---|---|---|

*Material description*

No 179 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R036 |
| | | *Date Issued* | 12/04/2017 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 15/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

***Feature*** **EARTHWORKS** *Layer thickness* 200 mm *Time:* 10:27

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **185** | **186** | **187** | **188** | **189** | **190** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 1.94 | 1.93 | 1.95 | 1.95 | 1.93 | 1.95 |
| *Field moisture content* | *%* | 29.7 | 28.3 | 26.1 | 26.8 | 27.0 | 25.2 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 185 | 186 | 187 | 188 | 189 | 190 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.01 | 2.01 | 2.03 | 2.03 | 2.01 | 2.05 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 27.5 | 25.5 | 26.0 | 25.0 | 26.5 | 23.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 2.0% wet | 2.5% wet | 0.0% | 1.5% wet | 0.5% wet | 1.5% wet |

| ***Density Ratio ( $R_{HD}$ )*** | ***%*** | **96.5** | **96.0** | **96.0** | **96.0** | **96.0** | **95.0** |
|---|---|---|---|---|---|---|---|

*Material description*

No 185 - 1 Clay Fill





Approved Signatory : Justin Fry

# COMPACTION ASSESSMENT


***CIVIL GEOTECHNICAL SERVICES***

*6 - 8 Rose Avenue, Croydon 3136*


| | | | |
|---|---|---|---|
| | | *Job No* | 17060 |
| | | *Report No* | 17060/R037 |
| | | *Date Issued* | 05/05/17 |
| *Client* | AUSTRALAND RESIDENTIAL NO 156 P/L | *Tested by* | JWM |
| *Project* | HONOUR VILLAGE ESTATE | *Date tested* | 16/03/17 |
| *Location* | BERWICK | *Checked by* | JHF |

| | | | | | |
|---|---|---|---|---|---|
| ***Feature*** | **EARTHWORKS** | *Layer thickness* | 200 mm | *Time:* | 09:28 |

*Test procedure AS 1289.2.1.1 & 5.8.1*

| ***Test No*** | | **191** | **192** | **193** | **194** | **195** | **196** |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.03 | 2.03 | 2.00 | 2.00 | 2.02 | 2.02 |
| *Field moisture content* | *%* | 20.7 | 21.2 | 22.8 | 22.0 | 23.2 | 19.5 |

*Test procedure AS 1289.5.7.1*

| *Test No* | | 191 | 192 | 193 | 194 | 195 | 196 |
|---|---|---|---|---|---|---|---|
| *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/m³* | 2.07 | 2.09 | 2.09 | 2.08 | 2.12 | 2.13 |
| *Adjusted Peak Converted Wet Density* | *t/m³* | - | - | - | - | - | - |
| *Optimum Moisture Content* | *%* | 19.0 | 18.5 | 20.0 | 21.0 | 21.5 | 19.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| *Moisture Variation From Optimum Moisture Content* | 1.5% wet | 2.5% wet | 2.5% wet | 1.0% wet | 2.5% wet | 0.0% |

| | | | | | | |
|---|---|---|---|---|---|---|
| ***Density Ratio ( $R_{HD}$ )*** | *%* | **98.5** | **97.0** | **95.5** | **96.5** | **95.0** | **95.0** |

*Material description*

No 191 - 1 Clay Fill





Approved Signatory : Justin Fry