



**CIVIL GEOTECHNICAL SERVICES**  
**ABN 26 474 013 724**  
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13<sup>th</sup> September 2017

Our Reference: 17509:NB029

Winslow Constructors Pty Ltd  
50 Barry Road  
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING  
ASPECT – STAGE 9, GREENVALE**

Please find attached our Report No 17509/R001 which relates to the field density testing that was conducted at the filled allotments of the above subdivision. The level 1 inspections and associated field density testing was performed in early September 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 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 Winslow Constructors 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 Winslow Constructors 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





## COMPACTION ASSESSMENT

Job No 17509  
 Report No 17509/R001  
 Date Issued 13/09/2017

**CIVIL GEOTECHNICAL SERVICES**

6 - 8 Rose Avenue, Croydon 3136

|          |  |             |          |
|----------|--|-------------|----------|
| Client   | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | Tested by   | SB       |
| Project  | ASPECT - STAGE 9                             | Date tested | 08/09/17 |
| Location | GREENVALE                                    | Checked by  | JHF      |

|                |            |                 |        |             |
|----------------|------------|-----------------|--------|-------------|
| <b>Feature</b> | EARTHWORKS | Layer thickness | 300 mm | Time: 09:00 |
|----------------|------------|-----------------|--------|-------------|

*Test procedure AS 1289.2.1.1 & 5.8.1*

| Test No                                  | 1                       | 2                       | - | - | - | - |
|--|-------------------------|-------------------------|---|---|---|---|
| Location                                 | REFER<br>TO<br>FIGURE 1 | REFER<br>TO<br>FIGURE 1 |   |   |   |   |
| Approximate depth below FSL              |                         |                         |   |   |   |   |
| Measurement depth <i>mm</i>              | 175                     | 175                     | - | - | - | - |
| Field wet density <i>t/m<sup>3</sup></i> | 1.78                    | 2.02                    | - | - | - | - |
| Field moisture content <i>%</i>          | 34.4                    | 21.2                    | - | - | - | - |

*Test procedure AS 1289.5.7.1*

| Test No  | 1        | 2    | - | - | - | - |
|--|----------|------|---|---|---|---|
| Compactive effort  | Standard |      |   |   |   |   |
| Oversize rock retained on sieve <i>mm</i>                  | 19.0     | 19.0 | - | - | - | - |
| Percent of oversize material <i>wet</i>                    | 0        | 0    | - | - | - | - |
| Peak Converted Wet Density <i>t/m<sup>3</sup></i>          | 1.86     | 1.98 | - | - | - | - |
| Adjusted Peak Converted Wet Density <i>t/m<sup>3</sup></i> | -        | -    | - | - | - | - |
| Optimum Moisture Content <i>%</i>                          | 33.5     | 21.0 | - | - | - | - |

|  |             |             |   |   |   |   |
|--|-------------|-------------|---|---|---|---|
| Moisture Variation From Optimum Moisture Content | 1.0%<br>wet | 0.5%<br>wet | - | - | - | - |
|--|-------------|-------------|---|---|---|---|

|  |             |              |   |   |   |   |
|--|-------------|--------------|---|---|---|---|
| <b>Density Ratio ( R<sub>HD</sub> )</b> <i>%</i> | <b>96.0</b> | <b>102.0</b> | - | - | - | - |
|--|-------------|--------------|---|---|---|---|

*Material description*

|                    |
|--------------------|
| No 1 - 2 Clay Fill |
|--------------------|



The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/National standards. Accredited for compliance to ISO/IEC 17025. Accreditation No 9909

Approved Signatory : Justin Fry