



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

14<sup>th</sup> July 2017

Our Reference: 17375:GB217

Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

Dear Sirs,

**RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING**  
**ROTHWELL ESTATE – STAGE 8**

Please find attached our Report No 17375/R001 which relates to the field density testing that was conducted at the filled allotment of the above subdivision. The level 1 inspections and associated field density testing was performed in early July 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).

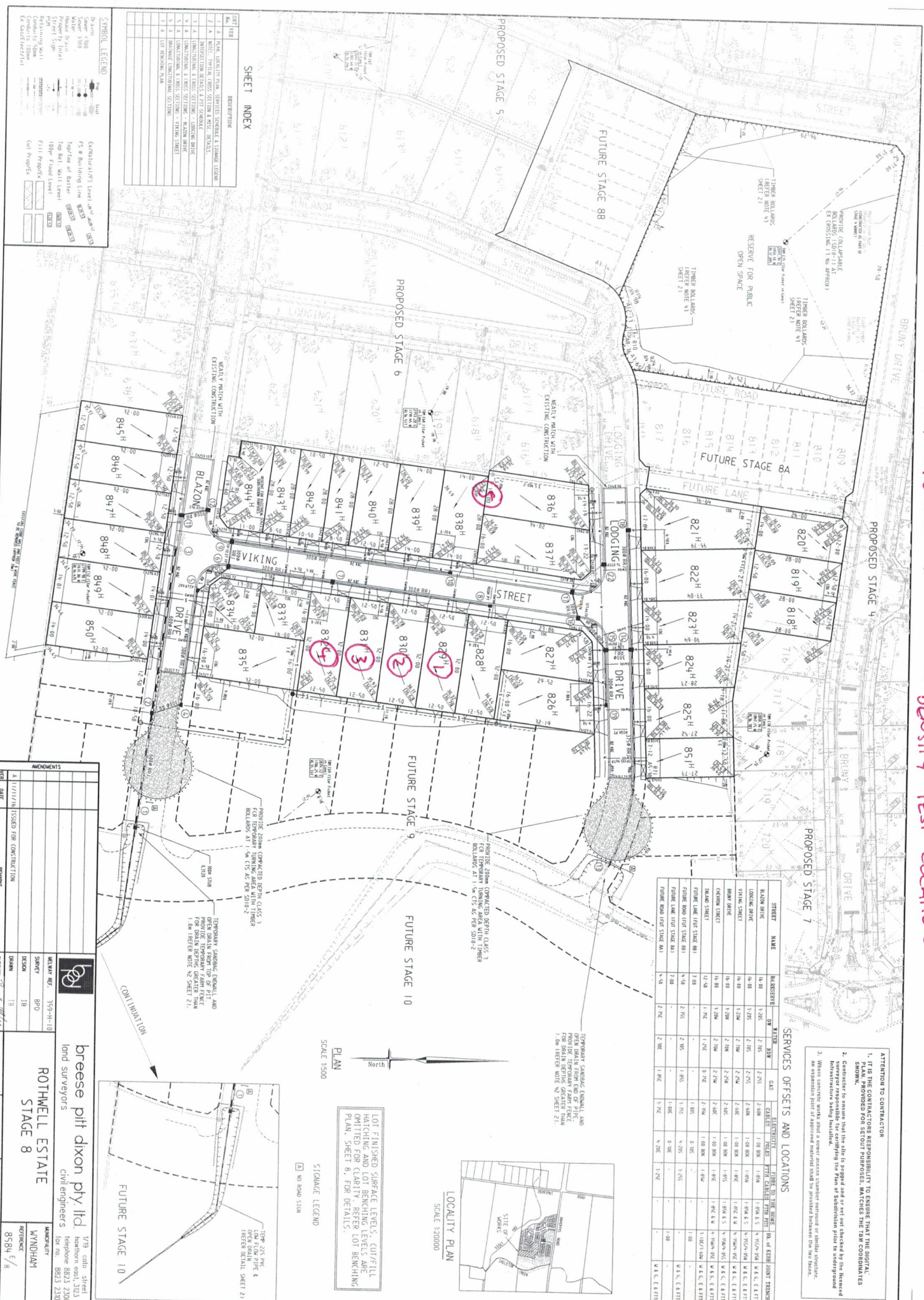
We are of the view that the bulk fill materials that have been placed across the filled allotments by Rokon during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Griffin Brown

# APPROXIMATE FIELD





## COMPACTION ASSESSMENT

### CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client ROKON (RICHMOND)  
Project ROTHWELL - STAGE 8  
Location TRUGANINA

Job No 17375  
Report No 17375/R001  
Date Issued 14/07/2017

Tested by JB  
Date tested 12/07/17  
Checked by JHF

Feature EARTHWORKS Layer thickness 200 mm Time: 10:32

#### Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	4	5	-
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/m <sup>3</sup>	1.78	1.80	1.84	1.74	1.70	-
Field moisture content %	25.9	30.2	30.8	33.8	35.1	-

#### Test procedure AS 1289.5.7.1

Test No	1	2	3	4	5	-
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>	1.82	1.83	1.86	1.76	1.74	-
Adjusted Peak Converted Wet Density t/m <sup>3</sup>	-	-	-	-	-	-
Optimum Moisture Content %	28.5	32.0	31.5	36.5	37.0	-

Moisture Variation From Optimum Moisture Content	2.5% dry	1.5% dry	1.0% dry	2.5% dry	1.5% dry	-
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Density Ratio ( $R_{HD}$ )	%	98.0	98.5	98.5	99.0	98.0	-
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#### Material description

No 1 - 5 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

*Justin Fry*

Approved Signatory : Justin Fry

AVRLOT HILF V1.10 MAR 13



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## FILL CERTIFICATE

PROJECT: Lot No 818 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_818

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 818, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





## FILL CERTIFICATE

PROJECT: Lot No 819 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_819

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 819, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 820 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_820

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 820, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 821 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_821

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 821, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 822 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_822

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 822, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





## FILL CERTIFICATE

PROJECT: Lot No 823 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_823

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 823, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 824 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_824

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 824, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 825 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_825

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 825, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 826 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_826

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 826, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 827 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_827

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 827, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





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## FILL CERTIFICATE

PROJECT: Lot No 828 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_828

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 828, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

A handwritten signature in black ink, appearing to read 'Griffin Brown'.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 829 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_829

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with Lot 829 of Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the Lot. On the completion of earthworks and after examining the test results and the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

Accordingly, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 830 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_830

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with Lot 830 of Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the Lot. On the completion of earthworks and after examining the test results and the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

Accordingly, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 831 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_831

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with Lot 831 of Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the Lot. On the completion of earthworks and after examining the test results and the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

Accordingly, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 832 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_832

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with Lot 832 of Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the Lot. On the completion of earthworks and after examining the test results and the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

Accordingly, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





## FILL CERTIFICATE

PROJECT: Lot No 833 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_833

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 833, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 834 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_834

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 834, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 835 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_835

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 835, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 836 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_836

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with Lot 836 of Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the Lot. On the completion of earthworks and after examining the test results and the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

Accordingly, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 837 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_837

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 837, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





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## FILL CERTIFICATE

PROJECT: Lot No 838 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_838

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with Lot 838 of Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the Lot. On the completion of earthworks and after examining the test results and the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

Accordingly, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 839 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_839

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 839, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 840 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_840

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 840, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 841 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_841

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 841, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 842 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_842

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 842, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





## FILL CERTIFICATE

PROJECT: Lot No 843 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_843

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 843, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 844 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_844

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 844, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 845 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_845

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 845, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 846 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_846

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 846, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

A handwritten signature in black ink, appearing to read 'Griffin Brown'.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 847 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_847

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 847, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



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## FILL CERTIFICATE

PROJECT: Lot No 848 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_848

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 848, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown





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## FILL CERTIFICATE

PROJECT: Lot No 849 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_849

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 849, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 850 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_850

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

A site inspection was conducted prior to any fill being placed on the allotments. On the completion of the earthworks and after examining the materials used, we are of the opinion that the filling procedure conducted by Rokon Pty Ltd during the construction of the estate satisfied the requirements of AS 3798 in regard to the placement of fill on a Type 1/2 Project under Level 1 Supervision.

With respect to Lot 850, the depth of fill materials that were placed during the current construction phase (excluding top soiling activities) was less than 0.3 metres. As a consequence of the limited depth of fill materials, field density testing was not considered warranted. However, when classifying the site in accordance with the procedures presented in Section 2 of AS 2870 – Residential Slabs and Footings – Construction (2011), we are of the view that the bulk fill materials that were placed on this Lot by Rokon Pty Ltd can be considered as being placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

### LIMITATIONS

The use of this Certificate is only appropriate for the field conditions present up to 12<sup>th</sup> July 2017.

Griffin Brown



## FILL CERTIFICATE

PROJECT: Lot No 850 (as per Drawing No 8584 E / 8)  
Rothwell Estate – Stage 8, Truganina

CLIENT: Rokon Pty Ltd  
1 / 75 River Street  
RICHMOND VIC 3121

REPORT NO: 17375\_850

DATE: 14/07/17

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### SUMMARY

Civil Geotechnical Services were engaged by Rokon Pty Ltd to provide inspection and testing services on the earthworks associated with the construction of the Rothwell Estate (Stage 8), Truganina in a manner which would satisfy the criteria for Level 1 Supervision as specified in Section 8.2 of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments - 2007. The project was classified as Type 1/2 requiring a minimum density ratio of 95.0% (standard compactive effort) within the area of fill placement.

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Griffin Brown