



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

29th April 2015

Our Reference: 15199:DK024

Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
ASTON STAGE 9A - CRAIGIEBURN

Please find attached our Report Nos 15199/R001 to 15199/R002 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 mid April 2015 and was completed in late April 2015.

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 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 filled 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

Dino Kondzic

HOUSE DRAINS FOR LOTS 929-932, 946-964 TO BE CONSTRUCTED WITH GOOD CONNECTION MADE TO EXISTING DRAINAGE

FOR ALL NEW DRIVEWAYS ON EXISTING ROADS, EXISTING FOOTPATHS, KERB CHANNEL AND PAVEMENT AROUND ARDOUR DRIVE TO BE DEMOLISHED AND DISPOSED OFF SITE. NEATLY MATCH NEW DRIVEWAY & CROSSOVER TO EXISTING LEVELS.

EXISTING FOOTPATH TO BE BROKEN OUT, REMOVED & DISPOSED OFF SITE TO ALLOW FOR CONSTRUCTION OF NEW SEWER. FOOTPATH TO BE REINSTATED AT COMPLETION OF SEWER WORKS

100 YEAR FLOOD LEVEL
FIGURE 1

CONTRACTOR TO CONSTRUCT NEW PIT OVER EXISTING LINE & MAKE GOOD CONNECTION

PSM
R.L. 214.01 AHD
E 314579.11
N 5836939.27

FOR DETAILS SEE INSET

PASSIVE OPEN SPACE

CONTRACTOR TO CONSTRUCT NEW PIT OVER EXISTING LINE & MAKE GOOD CONNECTION.

CONTRACTOR TO ENSURE EXISTING LIGHTING POLE IS STABLE AND PROTECTED DURING PIT CONSTRUCTION

CONTRACTOR TO DEMOLISH AND REMOVE FROM SITE EXISTING CGEP & CAP EXISTING PIPE. SAW CUT STING PAVEMENT & INSTALL NEW PITS, PIPE & MAKE GOOD CONNECTION TO EXISTING. REINSTATE PAVEMENT AS PER DETAIL ON C200. FOR RAINAGE ILS REFER TO C701.

CONTRACTOR TO DEMOLISH AND REMOVE FROM SITE EXISTING CGEP & CAP EXISTING PIPE. SAW CUT STING PAVEMENT & INSTALL NEW PITS, PIPE & MAKE GOOD CONNECTION TO EXISTING. REINSTATE PAVEMENT AS PER DETAIL ON C200. FOR RAINAGE ILS REFER TO C701.

CONTRACTOR TO DEMOLISH AND REMOVE FROM SITE EXISTING CGEP & CAP EXISTING PIPE. SAW CUT STING PAVEMENT & INSTALL NEW PITS, PIPE & MAKE GOOD CONNECTION TO EXISTING. REINSTATE PAVEMENT AS PER DETAIL ON C200. FOR RAINAGE ILS REFER TO C701.

TBM - RIVET IN SURROUND
R.L. 214.29 AHD
E 314681.09
N 5836930.23

CONVERT EXISTING CGEP TO NEW DRIVEWAY CROSSOVER HEAVY DUTY COVER

NEW DRAINAGE PIPE TO BE CONNECTED TO EXISTING PIT & MADE GOOD.

RECONSTRUCT EXISTING PITS TO NEW LEVELS AS PER DETAIL ON LONGITUDINAL SECTIONS OF SHEET C700 & C701

EXISTING KERB, CHANNEL & AG. DR. TO BE SAWCUT, BROKEN OUT, REMOVED & DISPOSED OFF SITE. LAYER OF EXISTING ASPHALT TO BE SCARIFIED. ASPHALT OVERLAY & AG DRAIN TO BE CONSTRUCTED AS PER DETAIL ON DRAWING C200. NEATLY MATCH NEW KERB, CHANNEL, FOOTPATH & PAVEMENT TO EXISTING LEVELS.

TBM - STAR PICKET
R.L. 216.605 AHD
E 314631.62
N 5836847.02

CONVERT EXISTING JUNCTION PIT TO GRATED SIDE ENTRY PIT AS PER GAA FIGURE 12.

EXISTING STAGE 9

CONVERT EXISTING CGEP TO SUIT NEW CROSSOVER & HEAVY DUTY COVER

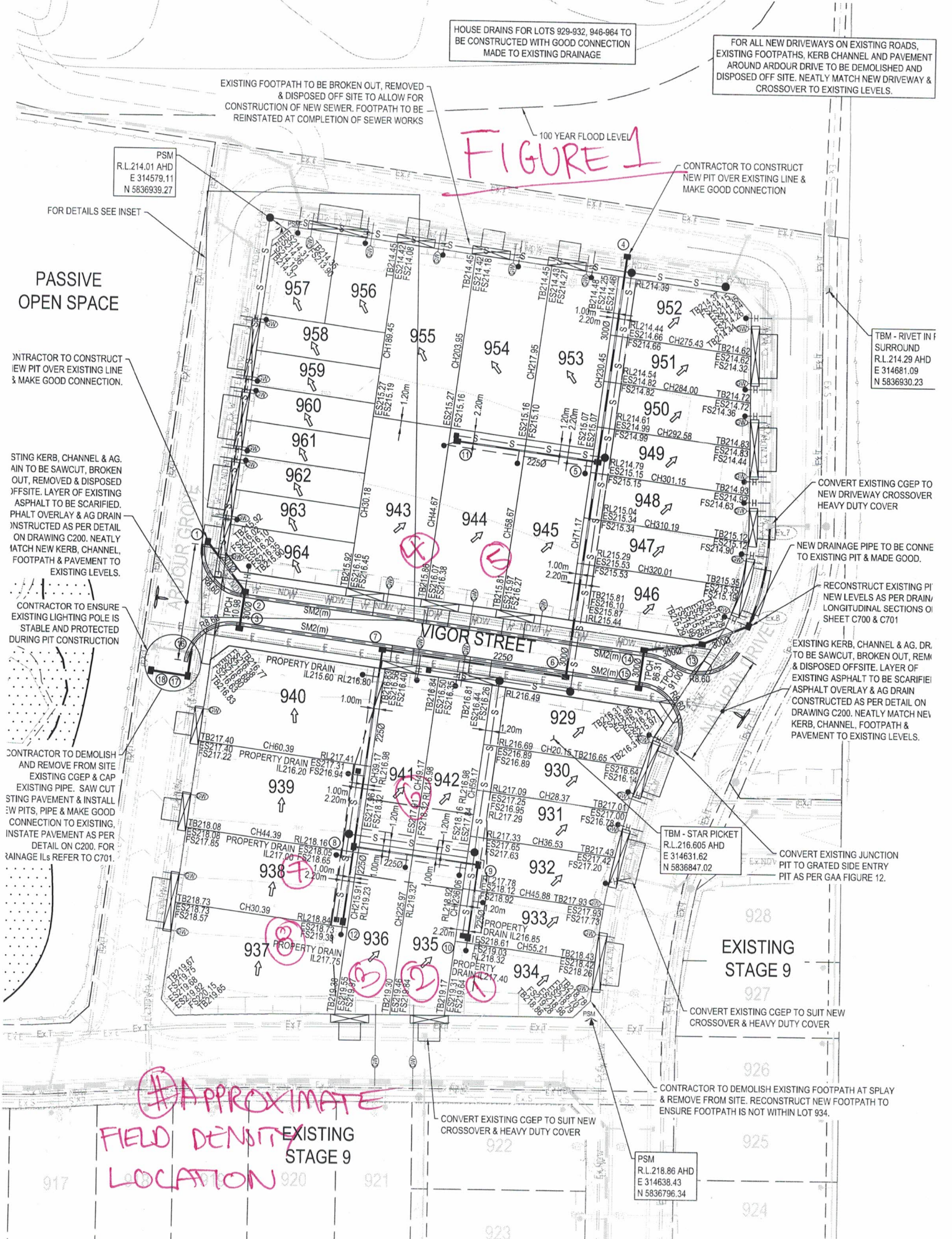
CONTRACTOR TO DEMOLISH EXISTING FOOTPATH AT SPALL & REMOVE FROM SITE. RECONSTRUCT NEW FOOTPATH TO ENSURE FOOTPATH IS NOT WITHIN LOT 934.

CONVERT EXISTING CGEP TO SUIT NEW CROSSOVER & HEAVY DUTY COVER

PSM
R.L. 218.86 AHD
E 314638.43
N 5836796.34

APPROXIMATE FIELD DENSITY LOCATION

EXISTING STAGE 9





COMPACTION ASSESSMENT

Job No 15199
 Report No 15199/R001
 Date Issued 23/04/15

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 9A	Date tested	17/04/15
Location	CRAIGIEBURN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	09:05
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	1	2	3	-	-	-
	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/m ³	1.98	1.92	1.92	-	-
Field moisture content	%	12.9	12.2	14.0	-	-

Test procedure AS 1289.5.7.1

Test No	1	2	3	-	-	-
Compactive effort	Standard					
Oversize rock retained on sieve	mm	19.0	19.0	19.0	-	-
Percent of oversize material	wet	2	0	0	-	-
Peak Converted Wet Density	t/m ³	2.03	2.01	2.01	-	-
Adjusted Peak Converted Wet Density	t/m ³	2.06	-	-	-	-
Optimum Moisture Content	%	13.5	12.0	14.5	-	-

Moisture Variation From Optimum Moisture Content	0.5% dry	0.5% wet	0.5% dry	-	-	-
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Density Ratio (R _{HD})	%	96.0	95.5	95.5	-	-
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Material description

No 1 - 3 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



COMPACTION ASSESSMENT

Job No 15199
 Report No 15199/R002
 Date Issued 29/04/15

CIVIL GEOTECHNICAL SERVICES

6 - 8 Rose Avenue, Croydon 3136

Client	WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD)	Tested by	JWM
Project	ASTON - STAGE 9A	Date tested	24/04/15
Location	CRAIGIEBURN	Checked by	JHF

Feature	EARTHWORKS	Layer thickness	200 mm	Time:	08:45
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Test procedure AS 1289.2.1.1 & 5.8.1

Test No	4	5	6	7	8	-	
	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	-	
Field wet density	t/m ³	1.99	2.01	1.91	1.97	1.92	-
Field moisture content	%	19.3	22.1	16.6	14.7	15.1	-

Test procedure AS 1289.5.7.1

Test No	4	5	6	7	8	-	
Compactive effort	Standard						
Oversize rock retained on sieve	mm	19.0	19.0	19.0	19.0	19.0	-
Percent of oversize material	wet	1	4	0	2	0	-
Peak Converted Wet Density	t/m ³	2.08	2.08	1.99	2.04	2.01	-
Adjusted Peak Converted Wet Density	t/m ³	2.09	2.09	-	2.08	-	-
Optimum Moisture Content	%	20.0	21.5	19.0	16.5	17.5	-

Moisture Variation From Optimum Moisture Content	0.5% dry	0.5% wet	2.5% dry	2.0% dry	2.5% dry	-
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Density Ratio (R _{HD})	%	95.5	96.0	96.0	95.0	96.0	-
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Material description

No 4 - 8 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