CIVIL GEOTECHNICAL SERVICES
ABN 26 474 013 724
PO Box 678 Croydon Vic 3136
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24th September 2014

Our Reference: 14172:JHF830

Georgiou Pty Ltd
420 St Kilda Road
MELBOURNE VIC 3004

Dear Sirs,

RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING
LIVINGSTON ESTATE (STAGE 10) – CRANBOURNE

Please find attached our Report No 14172/R001 that relates 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 was performed in late May 2014.

The inspection 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 supervision 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 reported allotments by Georgiou during the aforementioned period.

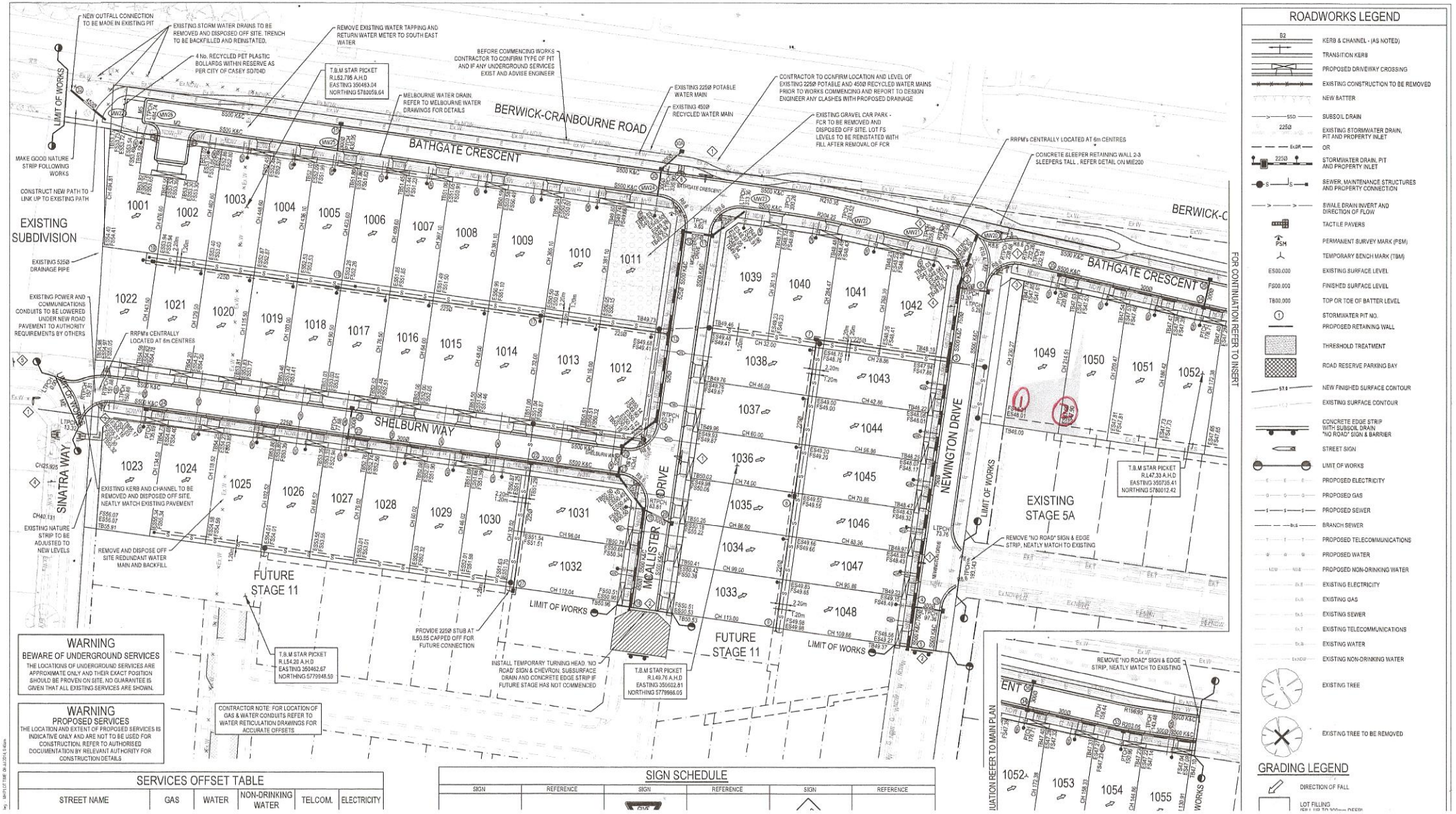
When interpreting the requirements of AS 2870 - Residential Slabs and Footings (2011), we are of the view that the bulk fill materials that have been placed across the filled allotments by Georgiou can be considered as having been placed in a controlled manner to a minimum density ratio of 95% (standard compactive effort).

Please contact the undersigned if you require any additional information.

Civil Geotechnical Services

Justin Fry

FIGURE 1



(#) APPROXIMATE FIELD DENSITY LOCATION

COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES
6 - 8 Rose Avenue, Croydon 3136

		Job No	14172
		Report No	14172/R001
		Date Issued	23/07/14
Client	GEORGIOU PTY LTD (SOUTH MELBOURNE)	Tested by	KC
Project	LIVINGSTON ESTATE - STAGE 10	Date tested	20/05/14
Location	CRANBOURNE	Checked by	JHF

Feature	**EARTHWORKS**	*Layer thickness*	200 mm	*Time:*	10:07

Test procedure AS 1289.2.1.1 & 5.8.1

Test No		**1**	**2**	**-**	**-**	**-**	**-**
Location		REFER TO FIGURE 1	REFER TO FIGURE 1				
Approximate depth below FSL							
Measurement depth	*mm*	175	175	-	-	-	-
Field wet density	*t/m³*	1.83	1.81	-	-	-	-
Field moisture content	*%*	25.9	25.7	-	-	-	-

Test procedure AS 1289.5.7.1

Test No		1	2	-	-	-	-
Compactive effort		Standard					
Oversize rock retained on sieve	*mm*	19.0	19.0	-	-	-	-
Percent of oversize material	*wet*	0	1	-	-	-	-
Peak Converted Wet Density	*t/m³*	1.78	1.77	-	-	-	-
Adjusted Peak Converted Wet Density	*t/m³*	-	1.77	-	-	-	-
Optimum Moisture Content	*%*	27.0	27.0	-	-	-	-

Moisture Variation From Optimum Moisture Content	1.5% dry	1.5% dry	-	-	-	-

Density Ratio (R_{HD})	**%**	**103.0**	**102.5**	**-**	**-**	**-**	**-**

Material description

No 1 - 2 Clay Fill

Approved Signatory : Justin Fry