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11 June, 2010
Ref: 23692ZW Let

Commercial and Industrial Property Pty Ltd
Lvel 32
60 Margaret Street
SYDNEY NSW 2000

ATTENTION: Mr Andrzej Masztak

Dear Sirs

Proposed Industrial Development
24 Muir Road CHULLORA
GEOTECHNICAL ASSESSMENT OF IMPACT ON RAIL CORRIDOR

Further to your request by email dated 1 June 2010, we have prepared this letter report to provide our geotechnical assessment of the impact of the proposed development on the adjacent rail corridor. The request has arisen form the RailCorp response to Blacktown City Council by letter dated 17 May 2010. RailCorp advised than in the absence of "depth measurements for the footings", they had "to assume the depth will be greater than 2 metres unless proven otherwise".

The proposed earthworks for the development are shown on the following drawings:

1. Recently completed survey sections at 25m spacing along the rail corridor, as presented on drawing numbers RC01 to RC04 inclusive, all rev1, all dated 10 June 2010 by Northrop (job No. 10315)
2. Bulk earthworks plans and sections, as presented on drawing numbers DA70 to DA75 inclusive, all rev 1 dated 10 June 2010 by Northrop (Job No 10315)

The Survey Plan (Drawing No RC01) shows the position of the surveyed section lines. We have summarised the survey and design proposals shown on survey sections in the attached Table A.

From Ch0 to about Ch175 the Rail formation is lower than the site boundary reaching a maximum at about Ch25 of about 1.3m over an offset of 17m, though typically the offset is about 10m to 11m. The adjacent Bulk Earthworks incorporates fill with a maximum depth of about 1.4m at the fill crest (which is further offset from the site boundary). The maximum difference in design bulk earthworks level above the rail

formation is about 2.7m at Ch25. The resulting slope over the 20m offset is about 8°, or 1V in 7.4H.

From about Ch175 to Ch425, the rail formation is on an embankment above the existing ground level at the site boundary. The difference in level reaches a maximum of about 1.2m at about Ch300.

Site bulk earthworks are in cut relative to the site boundary from about Ch225 to the eastern extremity at Ch425. The maximum cut depth relative to the Site boundary is about 0.5m from about Ch375 Ch425. This cut depth includes the local ditch drain excavation. The maximum difference in level between the Rail formation and Bulk Earthworks Level is about 1.5m at about Ch300. The offset is about 12m resulting in a slope of about 7° or 1V in 8H.

Our geotechnical report dated 24 February 2010 (Reference 23692Zrpt2) indicates the bulk earthworks will be carried out in stiff clays. Therefore we consider by inspection and relative to experience of excavation and fill performance in similar clays, the above proposed depths and slopes will not have any observable effect on the rail formation.

Should you require any further information regarding the above please do not hesitate to contact the undersigned.

Yours faithfully
For and on behalf of
JEFFERY AND KATAUSKAS PTY LTD

Bruce F Walker

B F WALKER
Principal.

Encls: Table A

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23692ZW 24 Muir Road CHULLORA

TABLE A SUMMARY OF PROPOSED BULK EARTHWORKS RELATIVE TO RAIL FORMATION

Source drawings Northrop Job No 10315, Drawing Nos RC01 to RC04

A	B	C	D	E	F	G	H
SECTION CHAINAGE (m)	RL RAIL FORMATION (m)	Approximate Offset to site Boundary (m)	Approximate RL at Site Boundary (m)	Approximate difference Site Boundary to Rail Formation +ve Rail higher -ve Rail lower (m)	Approximate RL adjacent crest Bulk Eartthworks (m)	Approximate depth FILL(+ve) CUT(-ve) for Bulk Earthworks relative to boundary RL (m)	Difference Bulk Earthworks to Rail Formation +ve Rail higher -ve Rail Lower (m)
0	39.178	NA	NA	NA	NA	NA	NA
25	39.547	17	40.83	-1.283	42.269	1.4	2.7
50	39.916	11	40.7	-0.784	42.1	1.4	2.2
75	40.115	11	41.1	-0.985	41.9	0.8	1.8
100	40.182	11	41.1	-0.918	41.85	0.8	1.7
125	40.057	10	40.81	-0.753	41.75	0.9	1.7
150	39.838	11	40.2	-0.362	41.3	1.1	1.5
175	39.662	11	39.6	0.062	na		
200	39.422	8	39.1	0.322	39.85	0.8	0.4
225	39.14	10	38.54	0.6	38.4	-0.1	-0.7
250	38.897	10	37.98	0.917	37.8	-0.2	-1.1
275	38.707	10	37.56	1.147	37.3	-0.3	-1.4
300	38.396	10	37.16	1.236	36.9	-0.3	-1.5
325	38.034	10	37.15	0.884	36.8	-0.4	-1.2
350	37.765	10	36.98	0.785	36.6	-0.4	-1.2
375	37.542	10	36.86	0.682	36.4	-0.5	-1.1
400	37.317	10	36.62	0.697	36.1	-0.5	-1.2
425	37.072	10	36.16	0.912	35.7	-0.5	-1.4