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Sutherland & Associates Planning Pty Ltd
PO Box 6332
BAULKHAM HILLS DC NSW 2153

traffix
traffic & transport planners

suite 3.08
level 3 46a macleay street
potts point nsw 2011
po box 1061
potts point nsw 1335
t: +61 2 8324 8700
f: +61 2 9380 4481
w: www.traffix.com.au
director graham pindar
acn: 065132961
abn: 66065132961

Attention: Aaron Sutherland,

Re: Kirrawee Brick Pit - Concept Plan modification (MP 10_0076 MOD 3)
Response to DPI regarding Traffic Impact Assessment

Dear Aaron,

TRAFFIX has been instructed by South Village Pty Ltd to provide traffic, transport and parking advice with regard to the proposed mixed-development at Kirrawee Brick Pit, Kirrawee, Sutherland. In this regard, TRAFFIX submitted a Traffic Impact Assessment, dated 22nd November 2013 (TRAFFIX 2013 TIA) in support of a Section 75W application to modify the Concept Plan Approval MP10-0076 for the Kirrawee Brick Pit site.

The objective of this letter is to respond to the comments received by NSW Department of Planning & Infrastructure (DPI). These comments can be summarised as follows:

- 2010 surveyed traffic flows of the intersection of Princes Highway (Acacia Road) with President Avenue are missing from the Halcrow traffic flow diagrams appended to the TRAFFIX 2013 TIA; and
- The TRAFFIX 2013 TIA assessment does not show any level of service assessment of intersections nor any diagrams of proposed intersection layouts.

We provide our response to these comments herewith:

2010 Surveyed Traffic Flows

The approved concept plan was supported by an original Halcrow Traffic Management & Accessibility Plan dated October 2010 (Halcrow 2010 TMAP) and a subsequent Updated TMAP dated October 2011 (Halcrow 2011 Updated TMAP).

In preparing the TRAFFIX 2013 TIA, information was extracted from both reports. With regard to the 2010 surveyed traffic flows; these were extracted from the original Halcrow 2010 TMAP. However, it is now noted that these traffic flow diagrams do omit the traffic flows for the intersection of Princes Highway with President Avenue.

Both reports have been reviewed again and it is noteworthy that the Halcrow 2011 Updated TMAP also presents 2010 surveyed traffic flows and that the flow diagrams in that report include surveyed



movements of the subject intersection. The relevant traffic flow diagrams have been extracted from the Halcrow 2011 Updated TMAP report and are appended to this letter at **Attachment 1**.

Intersection Analysis and Layout Diagrams

Firstly, the original concept plan was approved on the basis of network performance testing and intersection upgrades presented in the Halcrow 2011 Updated TMAP, both of which were based upon the following peak hour traffic generation volumes:

- 1,117 trips during the Thursday evening peak hour; and
- 1,213 trips during the Saturday peak hour.

The initial phase of the TRAFFIX 2013 TIA study focussed on determining the likely traffic generation of the modified development, recognising that:

1. The modified scheme proposed reducing the gross floor area of high-order traffic generating non-residential land uses (particularly retail land uses) proposed by the approved concept plan in favour of low-order traffic generating residential floor area; and
2. In 2013 (by way of Technical Direction TDT 2013/04a), the NSW Roads & Maritime Services (RMS) updated its recommended high-density residential trip rates based on current survey data. By direction of RMS, these new trip rates supersede the former trip rates that were based on pre-2001 survey data. It is noteworthy that these now superseded trip rates were adopted in the Halcrow 2011 Updated TMAP study.

Based on the modified development schedule and the current trip rate assumptions, the TRAFFIX 2013 TIA forecasted the following peak hour traffic generation volumes for the modified concept plan:

- 1,018 trips during the Thursday evening peak hour; and
- 1,113 trips during the Saturday peak hour.

For clarity, **Table 2** compares the 'approved' traffic generation volumes of the approved concept plan with the forecasted traffic generation volumes of the proposed S75W modified concept plan.

Table 2: Council Parking Rates and Provision

| Peak Hour | Approved Concept Plan (Halcrow 2011 Updated TMAP) | S75W Modified Concept Plan (TRAFFIX 2013 TIA) | Net Change |
|------------------|--|--|------------|
| Thursday Evening | 1,117 | 1,018 | - 99 |
| Saturday | 1,213 | 1,113 | - 102 |

It can be seen that the TRAFFIX 2013 TIA study demonstrated that based largely on up-to-date trip rate data, the modified development would generate approximately 10% fewer trips than the volume of traffic that was assessed by the Halcrow 2011 Updated TMAP.



The S75W modification maintains the 'approved' intersection improvements attached to the approved concept plan. Accordingly, in combination with the reduced traffic generation forecasts, there was no justification for the TRAFFIX 2013 TIA to revisit the Halcrow 2011 Updated TMAP traffic modelling upon which these improvements were developed.

If the modelling was revisited, then the results would show that the future operating performance of the intersections would improve from that anticipated for the approved concept plan. In doing so the analysis would confirm that retaining the approved intersection improvements is a robust response to the traffic demands anticipated for the S75W modified development.

In light of the above, reference should be made to the two Halcrow TMAP reports for all detailed information regarding level of service intersection assessments and diagrams of proposed intersection layouts, as these remain generally consistent with the approved concept plan.

I trust the above adequately responds to DPI's comments. Should you have any queries, please contact the undersigned.

Yours faithfully,

traffix

Piran Trethewey
Associate Engineer

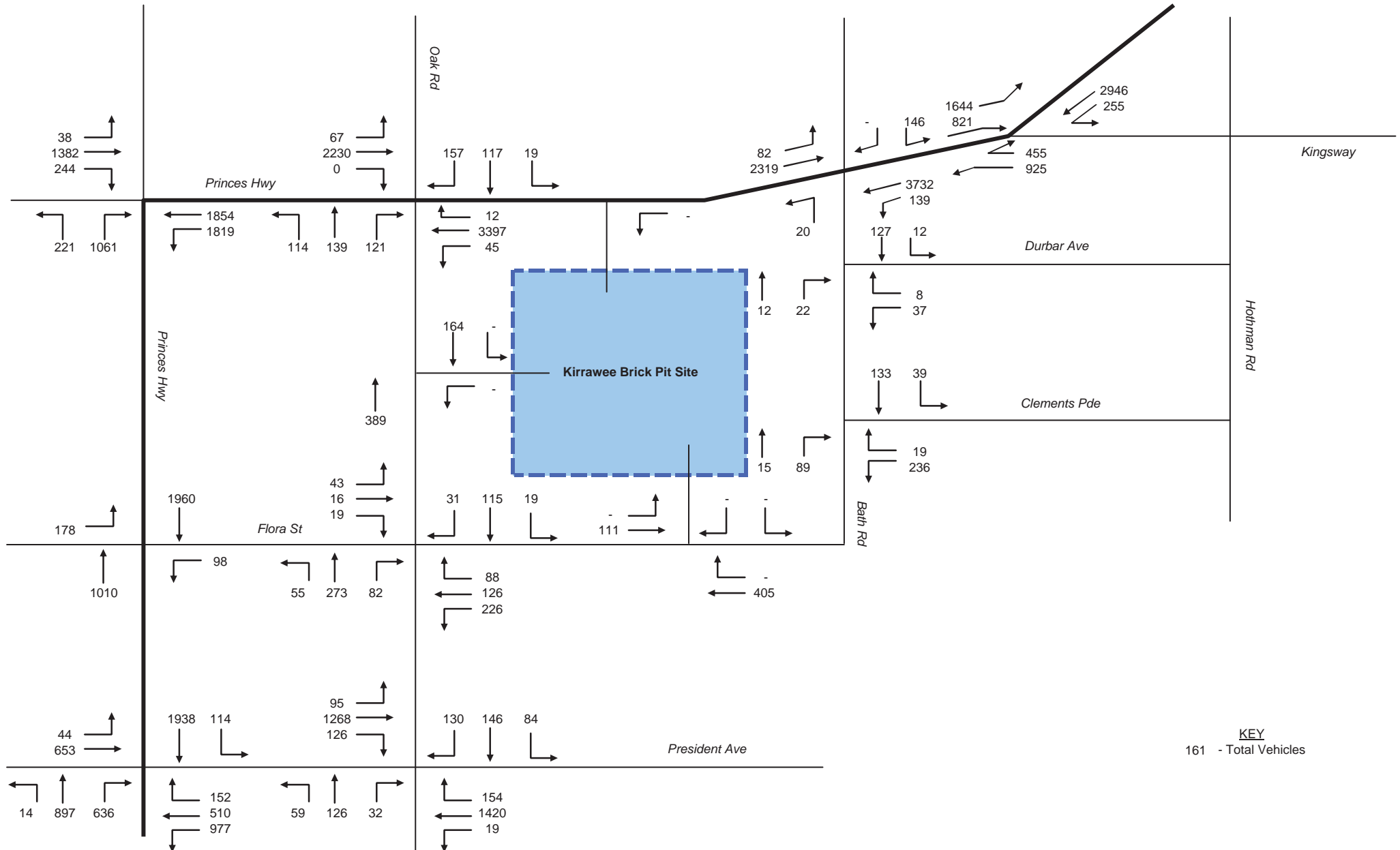
Email: piran.trethewey@traffix.com.au



Attachment 1

2010 Surveyed, Existing Network Traffic Flows, Evening Peak

MP 10_0076 - MIXED USE DEVELOPMENT, KIRRAWEE BRICK PIT



2010 Surveyed, Existing Network Traffic Flows, Saturday Peak

MP 10_0076 - MIXED USE DEVELOPMENT, KIRRAWEE BRICK PIT

