20 January 2012



EG Funds Management C/- SJB Planning Att: Scott Barwick

Dear Sir,

RE: RESPONSE TO SUBMISSIONS FORMER ALLIED MILLS SITE REDEVELOPMENT (MP10-0155)

This letter addresses responses to the Concept Plan application from Sydney Water (SWC), Ashfield Council and Marrickville Council with regard to the stormwater and flooding issues.

1. SWC

Following receipt of the SWC response (letter dated 9 November 2011), the sequence of events has been as follows:

- Meeting with SWC on 13 October 2011 in response to SWC submission obtained from DoPI;
- Letter dated 17 October 2011 providing our report which had not been received from DoPI (SWC submission addressed a superseded report);
- SWC letter dated 9 November 2011 and received on 14 November 2011;
- Meeting with SWC on 2 December 2011 to discuss issues raised in the SWC letter;
- EG Funds provided canal coverage plan to SWC for the proposed development;
- SWC/Council undertook 2D flood modelling of the existing site; and
- Meeting with SWC on 23 December 2011 to discuss issues raised in the SWC letter and agreed a revised canal plan.

The important outcomes from these discussions and review have been:

- SWC's initial response was based on a superseded flooding report the correct report included the Concept Plan application was provided directly to SWC;
- The proposed development has been revised to reduce the extent of coverage of the canal to a level acceptable to the SWC;
- The 2D flood modelling by SWC/Council of the existing site confirmed our understanding based on the 1D flood modelling; and
- SWC will remove objections to the proposed Concept Plan development.

2. Ashfield Council

The response from Ashfield Council raised the issues of safety of the Mungo Scott building and access to the light rail station in flood events.

These issues are addressed in Sections 5.5, 5.7 and 6.5 of our report entitled Drainage/Water Management/Flooding/Utilities, March 2011.

In Section 5.5 it is noted that the Mungo Scott building (Building 2A) would be retained, refurbished and reused for ground floor retail and upper floor for commercial uses. The ground floor would be flood proofed to minimise flood damages and internal stairs would be provided for people to

> APP Corporation Pty Ltd ABN 29 003 764 770 Level 7, 116 Miller Street North Sydney NSW 2060

Telephone +61 2 9957 6211 Facsimile +61 2 9954 1951 Direct +61 2 9963 9931

Mark.tooker@app.com.au www.app.com.au evacuate to higher levels above any flooding on the site. Building 2A would be six storeys high providing adequate refuge during floods. In Section 5.7, the emergency flood response plan is outlined for the site. All residential buildings provide vertical evacuation above Probable Maximum Flood levels on the site.

In Section 6.5, it is proposed that overland flows in the pedestrian area to be used for access to light rail station would be minimised in combination with elevated access structures to achieve an acceptable level of hazard for pedestrians.

3. Marrickville Council

The Marrickville Council response raised issues of underestimated blockage of culverts and its impact on flood levels and flood hazard classification.

These issues are addressed in Sections 5.5, 5.6.2, 5.7 and 6.5 of our report.

The effect of blockage of the Longport Street culvert on flood levels has to be considered with an understanding of the physical features which control flooding on the site and its relationships to the adopted minimum residential floor levels.

The flood behaviour and the physical features controlling this behaviour are:

- As the capacity of the Longport culvert is exceeded, floodwaters pond up to a level of RL 9.23m AHD at the culvert for a 100 year ARI flood being about 7m above the invert of the culvert;
- Above this level, floodwaters then bypass the Longport culvert and flow through the 7.5m wide rail underpass which has ample capacity;
- The minimum adopted residential floor level is RL 11.5m AHD which provides at least a 2m freeboard to this bypass level;
- Vertical evacuation is available in all the buildings to above PMF levels.

In this way, blockage would not impact on inundation of residential floors for the 100 year ARI flood or the ability to find floors above an extreme flood level. As such, it is considered that adequate consideration has been given to the consequences of blockage on this site.

The flood hazard assessment for the site is addressed in Sections 5.5, 5.5, 5.7, 6.5 and Appendix B. The high flood hazard areas have been identified as the canal, overflow from the rail corridor into the canal downstream of the Mungo Scot building and the overflow from Smith Street onto the site. These flood hazards have been addressed as follows;

- The open canal will be fenced sensitively in association with landscaping to control pedestrian access;
- The hazard from the rail corridor overflow has been addressed with SWC by removing planned coverage of the canal and bridging this area with elevated pedestrian accesses to the light rail station;
- Incorporating onsite drainage structures to reduce the extent of overflow from Smith Street onto the proposed pedestrian area on the site;
- Any overflow from the rail corridor onto the site upstream of the Mungo Scott building is limited due to higher levels on the site and hazard from this minor overflow would be managed with the levels in the development.

The assessment of flooding on the site has been appropriate and has been examined in detail to the extent that SWC are satisfied that the development is feasible from a flooding viewpoint. Furthermore, detailed review of flooding issues can be undertaken in the subsequent project design and approval phases.

Yours sincerely **APP CORPORATION PTY LIMITED**

1006 W

MARK TOOKER Project Director