

STORMWATER AND FLOOD MANAGEMENT STATEMENT TOWN CORE SITES

GREEN SQUARE TOWN CENTRE - GSC/LANDCOM SCHEME

Impact on Regional Flooding - APRIL 2010

Background

The City of Sydney (CoS) deferred Commencement Development Consent No. D/2008/1195 was issued on 24th November 2008 for the Green Square Town Centre (GSTC) essential infrastructure. This provides for the construction of new roads, footpaths and services within the town centre.

The proposed GSTC is bounded by Joynton Avenue and Botany Road and is located within the Sheas Creek – Victoria Branch regional stormwater catchment. The Victoria Branch stormwater main spine channel crosses through the proposed town centre site.

In accordance with NSW Government Flood Policy the CoS established flood-related planning requirements and commissioned broad scale flood assessments for the region.

A Floodplain Management Committee for the Green Square and Kensington floodplain was established in 2005.

The *Green Square and West Kensington Flood Study* was prepared for council by Webb McKeown and Associates in 2008.

A *Green Square Town Centre Flood Study* (Connell Wagner 2007) and *Draft Flood Mitigation Options Report* (Connell Wagner and Cardno 2008) were then prepared.

The CoS and Landcom then commissioned a *Flood Risk Management Plan for the GSTC* (in draft Cardno Lawson Treloar 2008).

The studies note *"that Flooding in the GSTC, although rare, can be expected to affect the area in some circumstances and can therefore pose a hazard to future retailers, employees, visitors and residents in the GSTC that needs to be managed"*.

The Draft Flood Risk Management Plan was prepared for

- *The long term management of flood risk in the area*
- *To accompany the Public Domain and Essential Infrastructure Development Application – now approved*

It was noted by Council in a letter of 2nd September 2009 to Landcom that



- *"It is accepted that redevelopment is reasonably likely to change the behaviour of floodwaters. However, the extent of change should be minimised, and kept within a range which does not cause untoward or adverse impacts on other landowners."*

In the same letter Council identified an acceptable cumulative tolerance of the order of 50-70mm measured at the downstream limit of the Town Square area ... *"that would need to be modelled and demonstrated as part of an appropriate development application in due course."* The letter then states *"However the work done to date does give a level of confidence that a tolerance of this order can be accommodated."*

The Proposed GSC/Landcom Scheme – Regional Flood Impacts

The proposal provides an alternative street and building layout for the proposed Town Core Sites with GSTC area. The proposal is shown on the Mirvac Design Plan GSC/Landcom Scheme Masterplan 00_SK0001.

In reviewing the proposal against the approved plan it is noted that the general east west road permeability to the cross site regional flow is generally consistent with the approved layout and no change is proposed to the alignment of the regional stormwater channel. Similarly the proposed overall site grading for the Town Core Sites within GSTC area east west road system is generally consistent with the approved scheme.

The position and grading of the major overland flowpaths – East/West Boulevard, Dunning Avenue South and New Cross Street remain unchanged in the proposed scheme and impacts due to the regional flooding shall be similar to the approved scheme.

The Proposed GSC/Landcom Scheme – Local Flood Impacts

Local stormwater management measures will be addressed for each proposed road in accordance with council requirements and building floor levels shall be similarly addressed.

Flood Planning Levels

To achieve the cities 2030 plan objectives for an active retail interface with the verge, the urban design shall be integrated with the engineering to achieve the floodplain management objectives. It is proposed to adopt Floodplain Planning Levels (FPL's) in accordance with the NSW Floodplain Development Manual 2005 sections - K3.1, F4.4.1 & K5, which is also reflected in Table 7.1 Part H of the GSTC Development Control Plan 97 Rev April 06. These documents provide for the discretionary determination of Flood Planning Levels to be set at or above the 1 in 100 year flood level. It is proposed to adopt a 150-300mm freeboard for commercial and retail developments and associated carparks. A freeboard greater than 300mm will preclude an urban outcome to provide an active frontage in accordance with the cities 2030 plan objectives.

Yours faithfully

**HUGHES TRUEMAN
PHIL MCBRIDE
MANAGING DIRECTOR**