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Our Ref: S17002611-RPT1.03-W&MA-2017-12-18.docx

Contact: Carlo Bartolome

18 December 2017

Welsh & Major Architects Level 4, 69 Reservoir Street Surry Hills NSW 2010

**Attention: Dean William** 

Dear Dean.

The Mercantile Hotel - 25-27 George Street, The Rocks, NSW Soil and Water Management Plan

In support of the proposed alterations and additions to the Mercantile Hotel at 25-27 George Street, The Rocks, we have prepared below a summary of our concept stormwater management plan accompanied by concept drawings for the proposed development.

## **Existing Site Conditions**

The Mercantile Hotel is an existing building currently bounded by George Street along the eastern boundary, Gloucester Walk along the western boundary and commercial properties at the southern boundary.

The hotel has its main street frontage on George Street. Gloucester Walk at the rear has a steep fall of approximately 5m from South to North adjacent to the hotel. Gloucester Walk consists of a mix of brick and concrete pavements. There are currently no drainage pits in Gloucester Walk along the boundary of the site. Overland flows in Gloucester Walk are collected by a dished drain running along the western side of the footpath that then discharges downstream into George Street.

A Council drainage pipe runs along the western gutter line in George Street with stormwater drainage from the hotel currently draining to an existing kerb inlet pit in front of the hotel.

## **Concept Stormwater Management Plan**

The existing building drainage system will be retained and continue to discharge into the existing Council drainage pit in George Street. New stormwater pit will be installed in the new south-western courtyard and the new roof garden will be drained through drainage cells, connecting to the existing building drainage system. Externally, a new grated drain is to be installed at the northern courtyard to intercept runoff flowing across the external seating areas.

The site is currently completely built up and covered by impervious surfaces. The proposed development will mostly maintain the site's imperviousness with a slight improvement with the introduction of the roof garden. There will therefore be no increase in surface runoff post-development.

An inquiry was made to Sydney Water to check if an On-site Stormwater Detention (OSD) system would be required. Sydney Water's email response (enclosed) confirms that OSD is not required for the proposed development.

Due to site constraints and the nature of works proposed, it is not feasible to install stormwater treatment devices. Nonetheless, it is expected that the new roof garden will intercept and contain some pollutants and reduce the overall stormwater pollutant load from the development.

All construction phase erosion and sediment control measures will be provided and installed in accordance with Council's guidelines and Landcom's "Managing Urban Stormwater - Soils and Construction".

Yours Sincerely **Calibre Consulting** 

Carlo Bartolome Manager - Civil

## ATTACHMENTS

Email from Jeya Jeyadevan, Sydney Water, 21/11/2017.
 Civil Works Drawings, Calibre Consulting C2-00

## **Nietharshan Eapen**

**From:** Stormwater < Stormwater@sydneywater.com.au>

Sent: Tuesday, 21 November, 2017 1:52 PM

To: Nietharshan Eapen

**Subject:** RE: OSD Requirement - 25-27 George Street, The Rocks, NSW, 2000

Neitharshan,

On Site Detention is not required for any development at 25-27 George Street, The Rocks.

**Best Regards** 



Jeya Jeyadevan | Senior Capability Assessor

Customer Delivery | Sydney Water
Level 7, 1 Smith St Parramatta NSW 2150
PO Box 399 Parramatta NSW 2124
T 8849 6118 | Mobile 0409 318 827 | Email jeya.jeyadevan@sydneywater.com.au
sydneywater.com.au

From: Nietharshan Eapen [mailto:Nietharshan.Eapen@calibregroup.com]

Sent: Thursday, 2 November 2017 4:33 PM

**To:** Stormwater < Stormwater@sydneywater.com.au>

Subject: OSD Requirement - 25-27 George Street, The Rocks, NSW, 2000

To the officer, Land and Waterways,

Could you please let us know if we would require OSD tank and if so, the PSD and SSR of the OSD tank for the development situated at 25-27 George Street, The Rocks, NSW, 2000?

The total site area = 508 m<sup>2</sup>
Pre-development impervious area = 508m<sup>2</sup>
Post-development impervious area = 501m<sup>2</sup>

Please let me know if you require any additional information.

Thank you.

Regards,



Nietharshan Eapen Engineer - Civil T +61 2 9004 8855 D +61 2 8405 1509

E Nietharshan.Eapen@calibregroup.com

Level 7, 601 Pacific Highway, St Leonards, NSW, 2065

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