

ATTACHMENT E

STORMWATER DOCUMENTATION

Prepared by

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10 March 2008

Attention : Mr. Mark Collison

AVJennings Ltd

By e-mail mcollison@avjennings.com.au

Dear Sir,

Re. Proposed Commercial Development at Development Site 13, Cnr Sarah Durack Avenue & Olympic Boulevard, Olympic Park – Concept Stormwater Management Report

Our Ref. 2890

1.0 Introduction

This concept stormwater management report outlines the proposed measures to address the management runoff during both the construction period and during the post development phase.

2.0 Background

2.1 Site Description

The subject site is located at the corner of Sarah Durack Avenue & Olympic Boulevard (southwest side), Olympic Park. The total site area is approximately 0.5 ha.

2.2 Existing Development

Presently the site is used as a turning bay for buses and some carparking. The rest of the site consists of a landscaped area with trees up to about 12m in height. The site slopes gently to the southeast.

Currently about 75% of the site is paved and impervious.

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Associate: Andrew Poles, BE, CPEng, NPER



2.3 Proposed development

The proposed development is shown on the DA Architectural drawings by Bates Smart, drawing No's: AR-EA.2.01 - .09, 6.01 & .02, and consists of two office towers of 4 & 5 stories high over a two-story basement carpark below grade.

About 90% of the proposed development will be impervious.

3.0 Soil And Water Management – Construction Phase

3.1 Overall approach to soil and water management

The proposed concept sediment and erosion control plan is detailed our drawing No: 2890-C02 (attached) and shows the proposed erosion & sediment control measures for the proposed development during the construction phase.

Water will be prevented from entering the permanent drainage system unless it is relatively sediment free.

3.2 Sediment and erosion control measures

Temporary construction vehicle exit – A temporary construction vehicle exit would be provided to allow all construction vehicles leaving the site to be fully cleaned.

Sediment fences – Sediment Fences would be constructed to assist in filtering the sediment from the runoff prior to leaving the site.

Filters around stormwater entry pits – Filters would be provided around stormwater inlet pits to assist in filtering the sediment from the runoff prior to leaving the site.

Discharge of pumped runoff from site – The runoff from the site that is collected in the base of the excavation would be treated with a suitable flocculant and then would be pumped into the stormwater system after confirmation that it met the requirements of the EPA and other relevant Authorities.

3.3 Maintenance of soil and water management devices

The soil and water management devices would be regularly maintained. Accumulated sediment would be removed before 50% of the capacity is reached. All accumulated sediment would be respread or disposed off site in an approved manner.

Sediment fences would be checked regularly for tears, excessive build up of sediment behind the fence. Damaged to the fences would be repaired immediately on detection.

Any sediment that bypasses the stabilised site and deposited into the public streets would be promptly cleaned up by means other than washing into the drainage system.

Soil and water management would be maintained until the disturbed areas have been adequately reinstated and new vegetation is sufficiently established.

4.0 Stormwater Drainage System – Post Construction Phase

4.1 Piped drainage and overland flow

The proposed drainage system for the development has been designed on the basis of a major and minor system as described in Australian Rainfall and Runoff. The minor system would consist of a piped drainage network sized to accommodate minor flows in accordance with Sydney Olympic Control Authority (SOPA) requirements. This system would be designed for a 20 year ARI event. The major system would consist of overland flow paths designed to accommodate flows in excess of the piped system capacity up to the 100 year ARI event.

The minor pit/pipe drainage system would collect all roof water, runoff from paved areas.

The proposed concept stormwater drainage plan is detailed our drawing No: 2890-C03 (attached).

4.2 On-site detention (OSD)

We have been advised by Mr Andrezej Listowcski of SOPA that no OSD is required for the site.

4.3 Connection to existing stormwater drainage system

The minor piped drainage system would be connected to the existing truck drainage system which runs down Olympic Boulevard to the south.

A gross pollutant trap (GPT) would be installed at the south east boundary of the site prior to the connection with the existing stormwater drainage system.

Our preliminary assessment the impact of the proposed drainage system on the existing stormwater drainage system was found to have no significant effect on the hydraulic grade line of the existing system due to the relative steepness of this drainage line (approx 2.5%)

The proposed lowest basement level (RL 107.0) is below the invert level of the existing stormwater drainage system. Consequently, all subsoil drainage from the basement levels would be pumped to the stormwater drainage system.

An existing stormwater drainage line exists in the development site, this drainage line can be removed up to the boundary of Olympic Boulevard.

4.4 Recycled Water

SOPA requires that the proposed development is connect to the recycled water mains. Both Sarah Durack Avenue and Olympic Boulevard have recycled water mains available to the proposed development.

Some of the roof water may be collected and stored in tanks and reused for irrigation of the landscaped areas or similar.

Prepared By



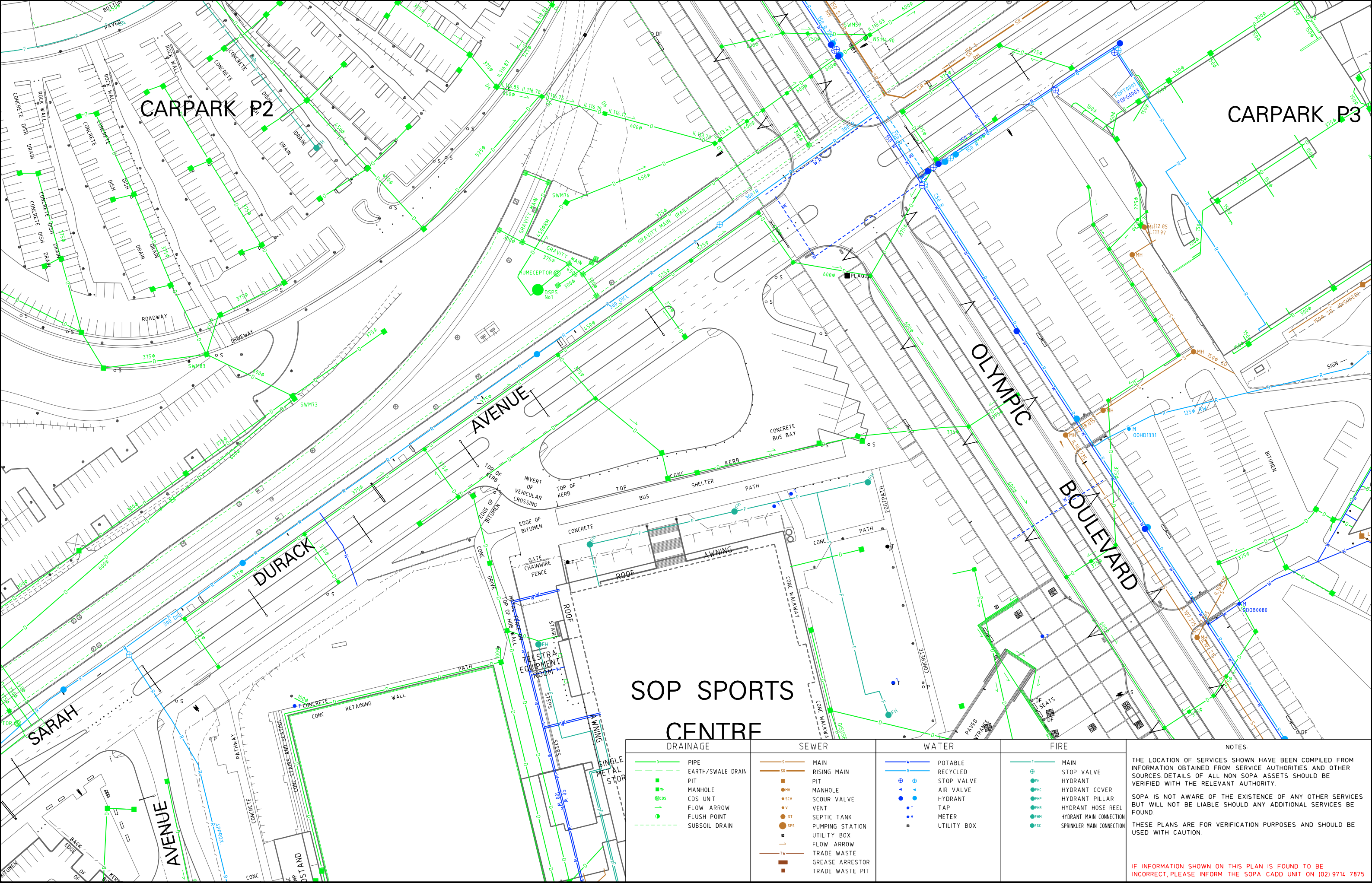
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Reviewed by



Andrew Poles
M+G Consulting

Attached



SOP SPORTS CENTRE

DRAINAGE	SEWER	WATER	FIRE
<ul style="list-style-type: none">PIPEEARTH/SWALE DRAINPITMANHOLECDS UNITFLOW ARROWFLUSH POINTSUBSOIL DRAIN	<ul style="list-style-type: none">MAINRISING MAINPITMANHOLESCOUR VALVEVENTSEPTIC TANKPUMPING STATIONUTILITY BOXFLOW ARROWTRADE WASTEGREASE ARRESTORTRADE WASTE PIT	<ul style="list-style-type: none">POTABLERECYCLEDSTOP VALVEAIR VALVEHYDRANTTAPMETERUTILITY BOX	<ul style="list-style-type: none">MAINSTOP VALVEHYDRANTHYDRANT COVERHYDRANT PILLARHYDRANT HOSE REELHYDRANT MAIN CONNECTIONSPRINKLER MAIN CONNECTION

NOTES:

THE LOCATION OF SERVICES SHOWN HAVE BEEN COMPILED FROM INFORMATION OBTAINED FROM SERVICE AUTHORITIES AND OTHER SOURCES. DETAILS OF ALL NON SOPA ASSETS SHOULD BE VERIFIED WITH THE RELEVANT AUTHORITY.

SOPA IS NOT AWARE OF THE EXISTENCE OF ANY OTHER SERVICES BUT WILL NOT BE LIABLE SHOULD ANY ADDITIONAL SERVICES BE FOUND.

THESE PLANS ARE FOR VERIFICATION PURPOSES AND SHOULD BE USED WITH CAUTION.

IF INFORMATION SHOWN ON THIS PLAN IS FOUND TO BE INCORRECT, PLEASE INFORM THE SOPA CADD UNIT ON (02) 9714 7875