



# Kensington Street Precinct Block 3B, 3C and 10

PA Stormwater Report

April 2012

Frasers Broadway Pty Ltd



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# Issue and revision record

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# Executive Summary

Frasers are currently redeveloping the former Carlton United Brewery site, Central Park into a mixed use precinct. Mott MacDonald Hughes Trueman has been engaged by Frasers to undertake the detailed design of the roads and stormwater for Central Park. This report relates specifically to the proposed Block 3B, 3C and 10 within the precinct, as indicated on the General Arrangement Plan (Drg. MMD-300830-S-DR-CD-0002).

Mott MacDonald Hughes Trueman has previously undertaken a stormwater quantity management study for the whole site. This report has been submitted and approved by the local council and DoPI. The site stormwater reticulation system has been designed as part of this study and has been designed to accommodate flows resulting from the development of all Blocks on the site.

Measures related to sediment and erosion control are also addressed within this report.



# 1. Introduction

## 1.1 Existing Site

The Frasers Broadway site is bounded by Broadway, Abercrombie Street, O'Connor Street, Wellington Street and Kensington Street in Chippendale. The site is situated within the Blackwattle Bay (SWC 17) catchment. Blocks 3B and 3C are located on the eastern edge of the site, and are bounded by Kensington street to the east, Kent Road to the west, Block 3A to the north and Outram street to the south. Block 10 is located on the eastern edge of the site, and is bounded by Kensington Street to the west, Goold Street to the east, Block 7 to the north and Outram Street to the south.

## 1.2 Data

A surface and underground services survey of the site and road reserves surrounding the site was undertaken by surveyors Degotardi, Smith and Partners as part of the project investigation. This survey includes details of the trunk lines and local street drainage.

The following surveys have been referenced or used to form the base survey:

- Blackwattle Bay SWC 17 Asset Survey by AWT – 1997
- Detail and Levels Survey of the Carlton & United Brewery Site by Degotardi, Smith & Partners – 6th July 2006
- Underground Services Survey of the Frasers Broadway Site by Degotardi, Smith & Partners – 12th February 2008
- Detail and Levels Survey of the Catchment Area South of Frasers Broadway Site by Degotardi, Smith & Partners – 25th February 2008

## 1.3 Existing Stormwater

An infrastructure package lodged as a separate PA (Main Park and Associated Infrastructure, Reference number MP08\_0210) will be constructed prior to Blocks 3B, 3C and 10. Stormwater mains will run along O'Connor Street to the detention tank under the main park.

## 2. Proposed Development

### 2.1 Site Grading

Filling and grading of the site has been carefully considered and optimised respecting the following constraints:

- Proposed buildings and carpark entrances are above the 100 year ARI flood level including freeboard (where applicable);
- Flood depths on internal roads are safe for vehicles and pedestrians;
- Internal stormwater and kerb and gutter has sufficient grade to achieve self cleansing velocities; and
- Overland flow can be conveyed through the site without trapped low points.

### 2.2 Site Stormwater Reticulation

The site stormwater system has been designed to accept the 20 year and 100 year design flows (piped and overland respectively) from Blocks 3B 3C and 10 and will be detained in a detention tank beneath the main park prior to being discharged to Sydney Water's stormwater mains.

The proposed Stormwater Reticulation for the site is indicated on HT Stormwater and Sediment & Erosion Control Concept Plan Drg. MMD-300830-S-DR-CD-0003.

### 2.3 Water Quality

Water quality management, water storage and harvesting issues for the site are being addressed by WSP Lincolne Scott.

An erosion and sediment control plan has been developed for works associated with Blocks 3B 3C and 10. Refer drawing MMD-300830-S-DR-CD-0001.

### 3. Conclusion

The site stormwater system has been designed to accommodate flows resulting from the development of all blocks within the site. Stormwater from Block 3B, 3C and 10 will reticulate to the site detention tank via a piped system along O'Connor Street.

Measures relating to erosion and sediment control will be implemented as part of the development works.

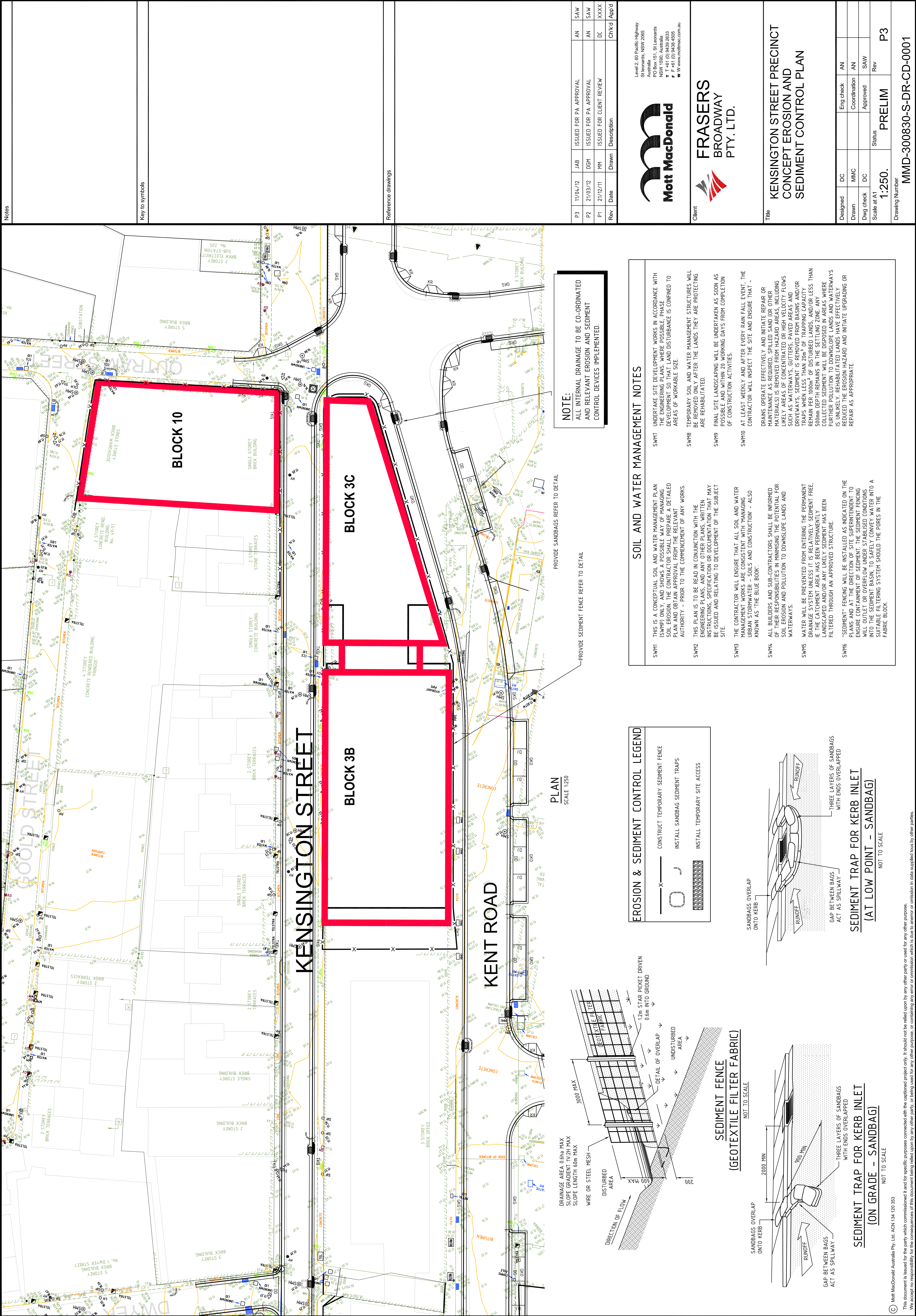
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## Appendix A. Drawings

- MMD-300830-C-DR-CD-0001 – Erosion and Sedimentation Control Plan for Blocks 3B, 3C and 10
- MMD-300830-S-DR-CD-0002 – General Arrangement Plan
- MMD-300830-S-DR-CD-0003 – Stormwater and Sediment & Erosion Control Concept Plan
- MMD-300830-S-DR-CD-0004 – Sediment and Erosion Control Notes





Notes

Key to symbols

Reference drawings

P3	11/04/12	JAB	ISSUED FOR PA APPROVAL	AN	SAW
P2	21/03/12	DGM	ISSUED FOR PA APPROVAL	AN	SAW
P1	21/12/11	MM	ISSUED FOR CLIENT REVIEW	DC	XXXX
Rev	Date	Drawn	Description	CHK'd	App'd

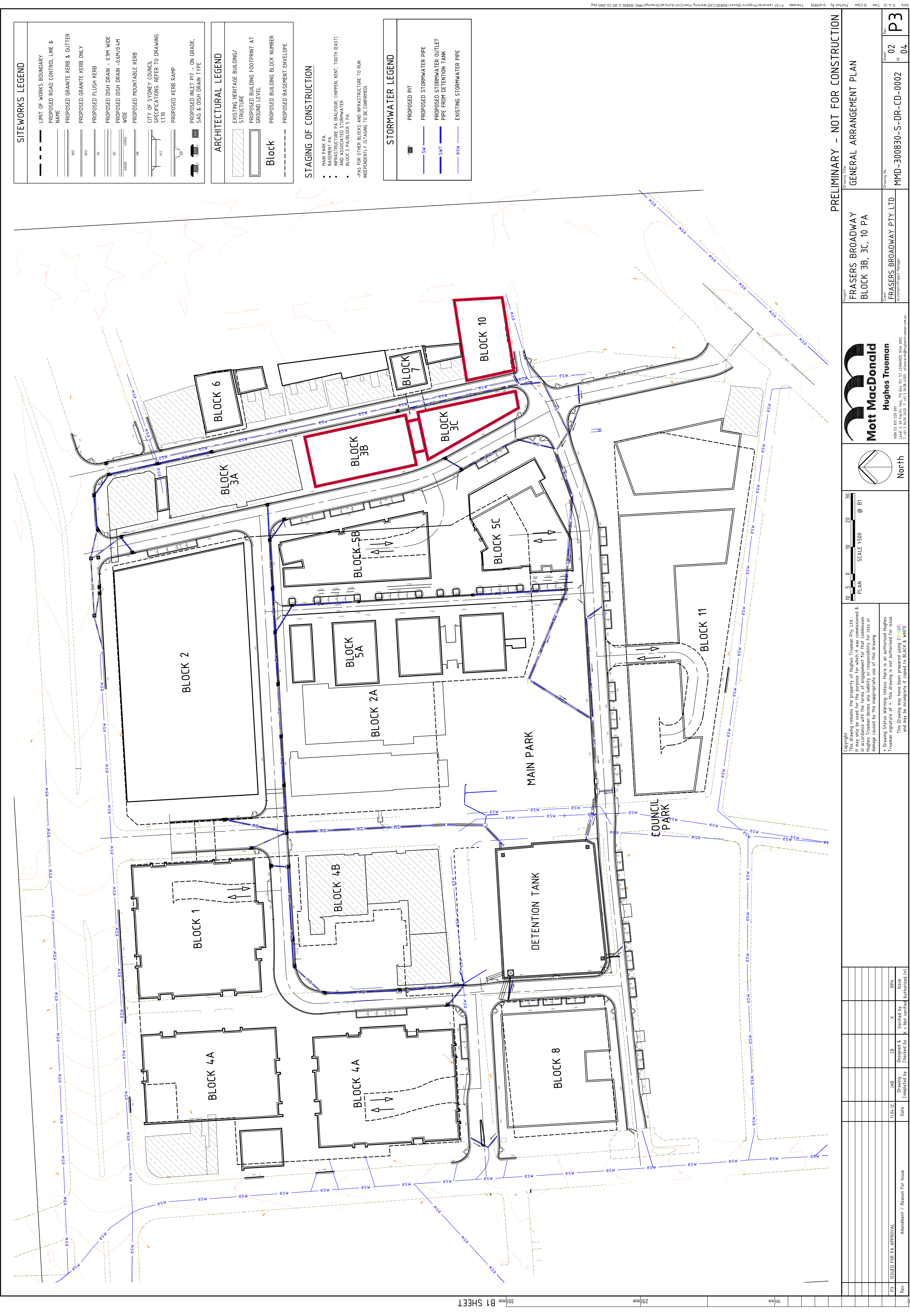
**Mott MacDonald**  
Level 2, 60 Pacific Highway  
St Leonards, NSW 2055  
PO Box 151, St Leonards  
NSW 1580, Australia  
T +61 (0) 9438 2633  
F +61 (0) 9438 4505  
W www.mottmac.com.au

**FRASERS BROADWAY PTY. LTD.**

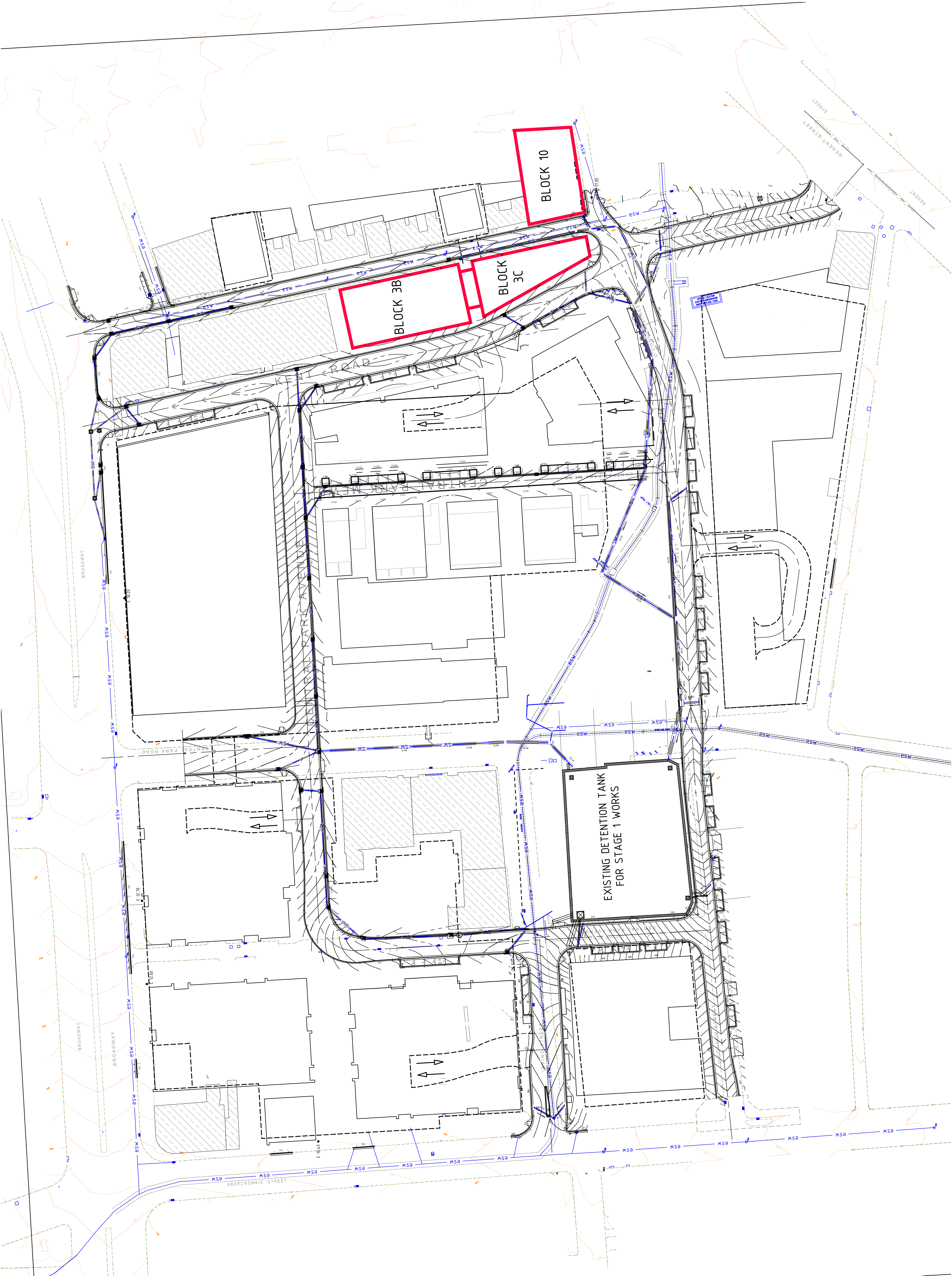
**KENSINGTON STREET PRECINCT  
CONCEPT EROSION AND  
SEDIMENT CONTROL PLAN**

Designed	DC	MMIC	Eng check	AN
Drawn	MMIC	DC	Coordination	AN
Dwg check	DC	Approved	SAW	
Scale at A1	1:250.	Status	PRELIM	Rev
Drawing Number	MMD-300830-S-DR-CD-0001			P3









SITEWORKS LEGEND	
	LIMIT OF WORKS BOUNDARY
	PROPOSED ROAD CONTROL LINE & NAME
	PROPOSED GRANITE KERB & GUTTER
	PROPOSED GRANITE KERB ONLY
	PROPOSED FLUSH KERB
	PROPOSED DISH DRAIN - 0.9M WIDE
	PROPOSED DISH DRAIN - 0.6M/0.4M WIDE
	PROPOSED MOUNTABLE KERB
	CITY OF SYDNEY COUNCIL SPECIFICATIONS. REFER TO DRAWING 1.1.10
	PROPOSED KERB RAMP
	PROPOSED INLET PIT - ON GRADE, SAG & DISH DRAIN TYPE

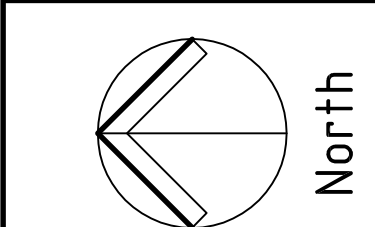
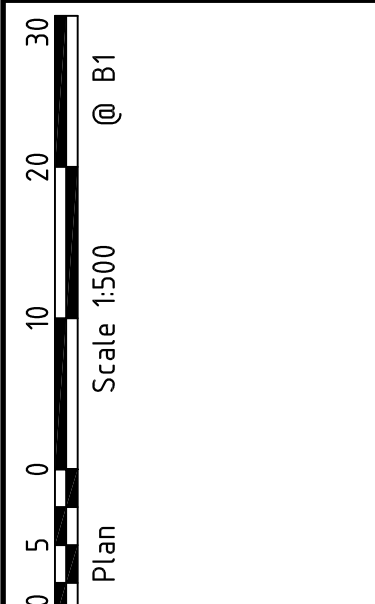
ARCHITECTURAL LEGEND	
	Existing Heritage Building/Structure
	Proposed Building Footprint at Ground Level
<b>Block</b>	
	Proposed Building Block Number
	Proposed Basement Envelope
	Proposed work in block 5 PA

STORMWATER LEGEND	
	PROPOSED PIT
	PROPOSED STORMWATER PIPE
	PROPOSED STORMWATER OUTLET PIPE FROM DETENTION TANK
	EXISTING STORMWATER PIPE

SEDIMENT & EROSION LEGEND	
	CONSTRUCT TEMPORARY SEDIMENT FENCE
	INSTALL SANDBAG SEDIMENT TRAP
	CONSTRUCT TEMPORARY SITE ENTRY/EXIT

Rev	Issued For PA Approval	Amendment / Reason For Issue
P3	11/04/22	JAB
	Date	Completed by
		Designed by
		Checked by
		Verified by
		X
		DPH
		Issue
		Authorised (+)

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