









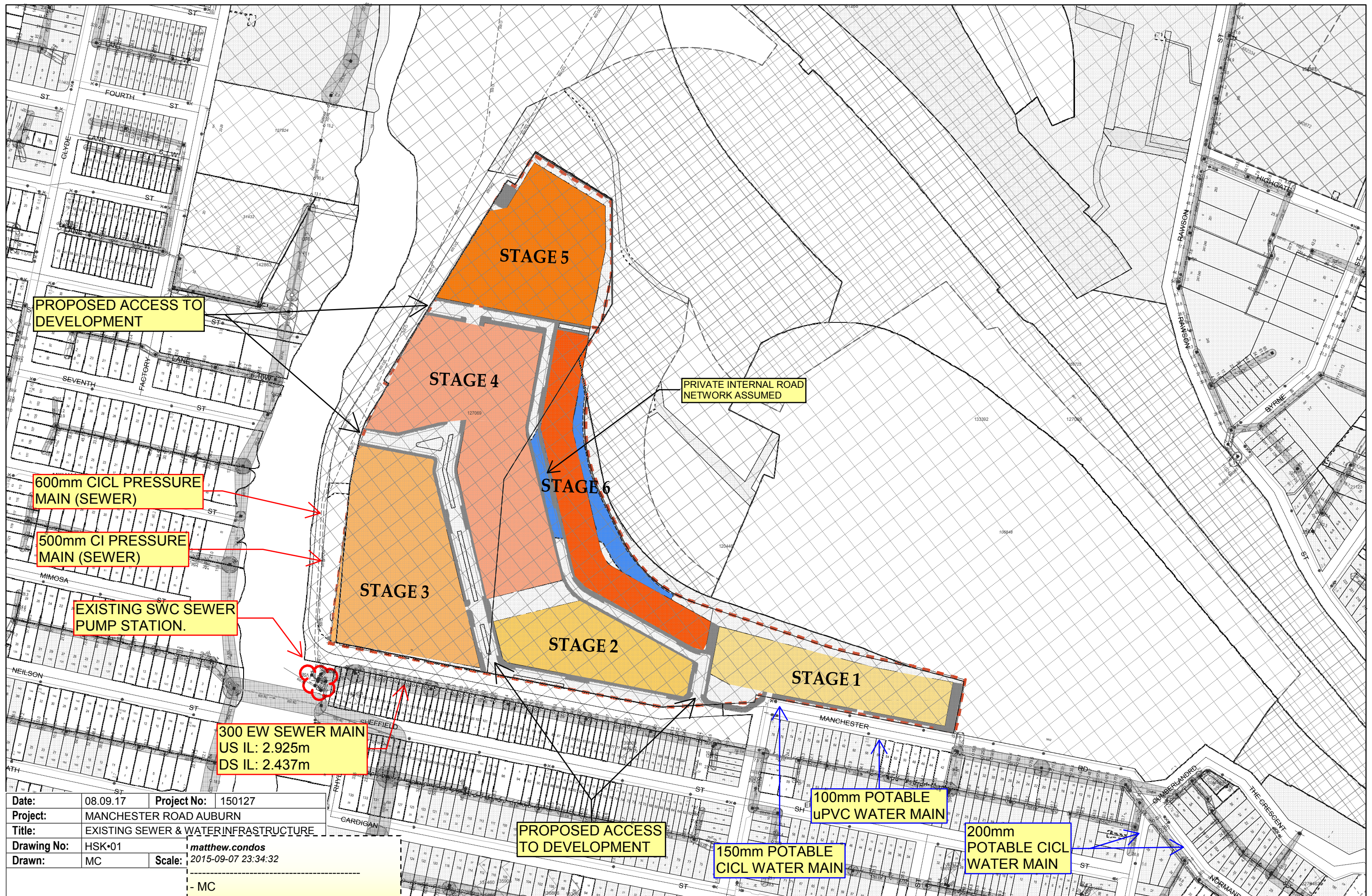




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# APPENDIX A – SCHEMATIC HYDRAULIC INFRASTRUCTURE PLANS



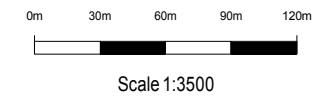
Date:	08.09.17	Project No:	150127
Project:	MANCHESTER ROAD AUBURN		
Title:	EXISTING SEWER & WATER INFRASTRUCTURE		
Drawing No:	HSK-01	Author:	matthew.condos
Drawn:	MC	Scale:	2015-09-07 23:34:32

- MC

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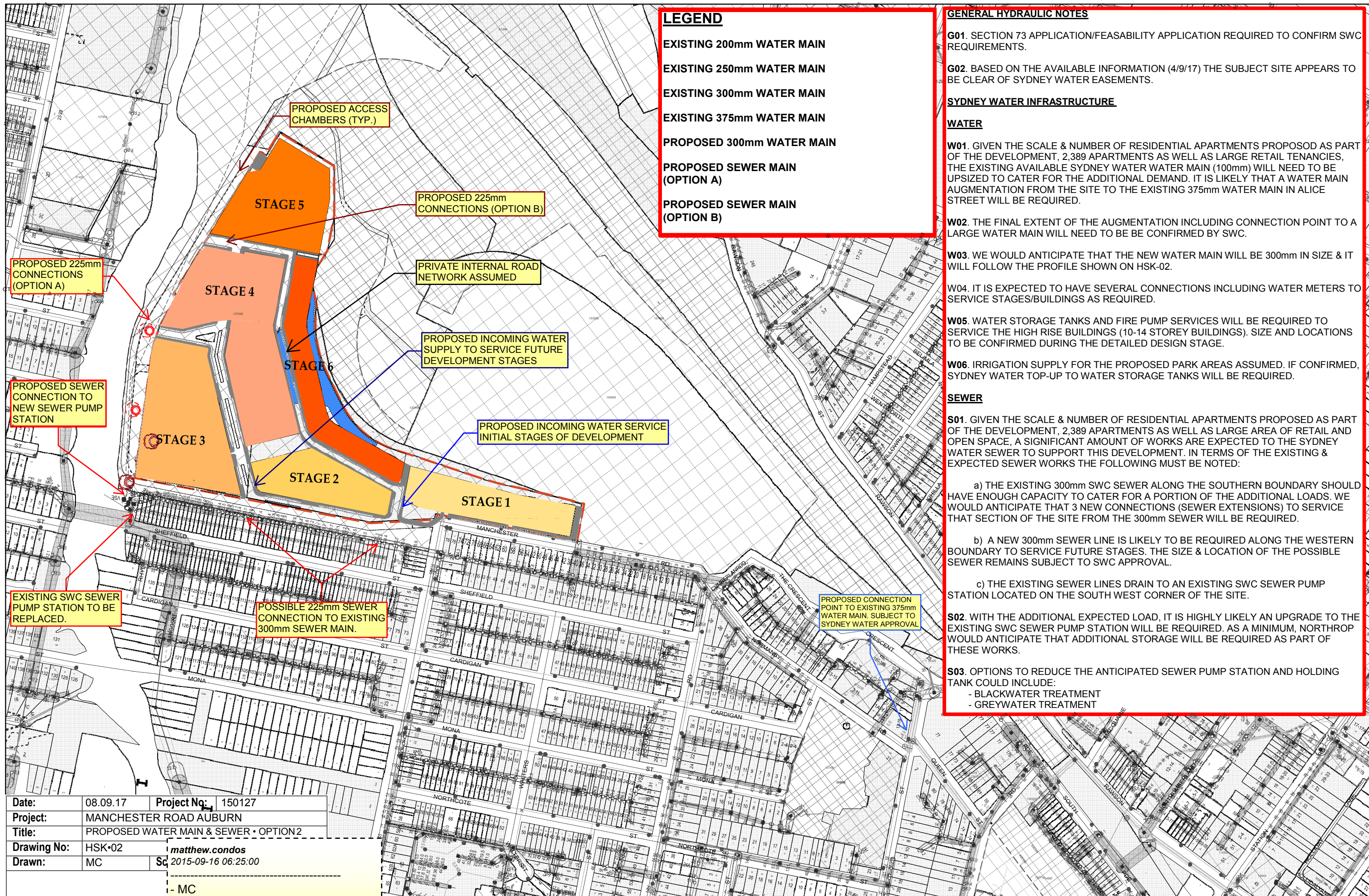
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**LEGEND**

- EXISTING 200mm WATER MAIN
- EXISTING 250mm WATER MAIN
- EXISTING 300mm WATER MAIN
- EXISTING 375mm WATER MAIN
- PROPOSED 300mm WATER MAIN
- PROPOSED SEWER MAIN (OPTION A)
- PROPOSED SEWER MAIN (OPTION B)

**GENERAL HYDRAULIC NOTES**

**G01.** SECTION 73 APPLICATION/FEASIBILITY APPLICATION REQUIRED TO CONFIRM SWC REQUIREMENTS.

**G02.** BASED ON THE AVAILABLE INFORMATION (4/9/17) THE SUBJECT SITE APPEARS TO BE CLEAR OF SYDNEY WATER EASEMENTS.

**SYDNEY WATER INFRASTRUCTURE**

**WATER**

**W01.** GIVEN THE SCALE & NUMBER OF RESIDENTIAL APARTMENTS PROPOSED AS PART OF THE DEVELOPMENT, 2,389 APARTMENTS AS WELL AS LARGE RETAIL TENANCIES, THE EXISTING AVAILABLE SYDNEY WATER WATER MAIN (100mm) WILL NEED TO BE UPSIZED TO CATER FOR THE ADDITIONAL DEMAND. IT IS LIKELY THAT A WATER MAIN AUGMENTATION FROM THE SITE TO THE EXISTING 375mm WATER MAIN IN ALICE STREET WILL BE REQUIRED.

**W02.** THE FINAL EXTENT OF THE AUGMENTATION INCLUDING CONNECTION POINT TO A LARGE WATER MAIN WILL NEED TO BE CONFIRMED BY SWC.

**W03.** WE WOULD ANTICIPATE THAT THE NEW WATER MAIN WILL BE 300mm IN SIZE & IT WILL FOLLOW THE PROFILE SHOWN ON HSK-02.

**W04.** IT IS EXPECTED TO HAVE SEVERAL CONNECTIONS INCLUDING WATER METERS TO SERVICE STAGES/BUILDINGS AS REQUIRED.

**W05.** WATER STORAGE TANKS AND FIRE PUMP SERVICES WILL BE REQUIRED TO SERVICE THE HIGH RISE BUILDINGS (10-14 STOREY BUILDINGS). SIZE AND LOCATIONS TO BE CONFIRMED DURING THE DETAILED DESIGN STAGE.

**W06.** IRRIGATION SUPPLY FOR THE PROPOSED PARK AREAS ASSUMED. IF CONFIRMED, SYDNEY WATER TOP-UP TO WATER STORAGE TANKS WILL BE REQUIRED.

**SEWER**

**S01.** GIVEN THE SCALE & NUMBER OF RESIDENTIAL APARTMENTS PROPOSED AS PART OF THE DEVELOPMENT, 2,389 APARTMENTS AS WELL AS LARGE AREA OF RETAIL AND OPEN SPACE, A SIGNIFICANT AMOUNT OF WORKS ARE EXPECTED TO THE SYDNEY WATER SEWER TO SUPPORT THIS DEVELOPMENT. IN TERMS OF THE EXISTING & EXPECTED SEWER WORKS THE FOLLOWING MUST BE NOTED:

- a) THE EXISTING 300mm SWC SEWER ALONG THE SOUTHERN BOUNDARY SHOULD HAVE ENOUGH CAPACITY TO CATER FOR A PORTION OF THE ADDITIONAL LOADS. WE WOULD ANTICIPATE THAT 3 NEW CONNECTIONS (SEWER EXTENSIONS) TO SERVICE THAT SECTION OF THE SITE FROM THE 300mm SEWER WILL BE REQUIRED.
- b) A NEW 300mm SEWER LINE IS LIKELY TO BE REQUIRED ALONG THE WESTERN BOUNDARY TO SERVICE FUTURE STAGES. THE SIZE & LOCATION OF THE POSSIBLE SEWER REMAINS SUBJECT TO SWC APPROVAL.
- c) THE EXISTING SEWER LINES DRAIN TO AN EXISTING SWC SEWER PUMP STATION LOCATED ON THE SOUTH WEST CORNER OF THE SITE.

**S02.** WITH THE ADDITIONAL EXPECTED LOAD, IT IS HIGHLY LIKELY AN UPGRADE TO THE EXISTING SWC SEWER PUMP STATION WILL BE REQUIRED. AS A MINIMUM, NORTHROP WOULD ANTICIPATE THAT ADDITIONAL STORAGE WILL BE REQUIRED AS PART OF THESE WORKS.

**S03.** OPTIONS TO REDUCE THE ANTICIPATED SEWER PUMP STATION AND HOLDING TANK COULD INCLUDE:

- BLACKWATER TREATMENT
- GREYWATER TREATMENT

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Project:	MANCHESTER ROAD AUBURN		
Title:	PROPOSED WATER MAIN & SEWER - OPTION 2		
Drawing No:	HSK-02	matthew.condos	
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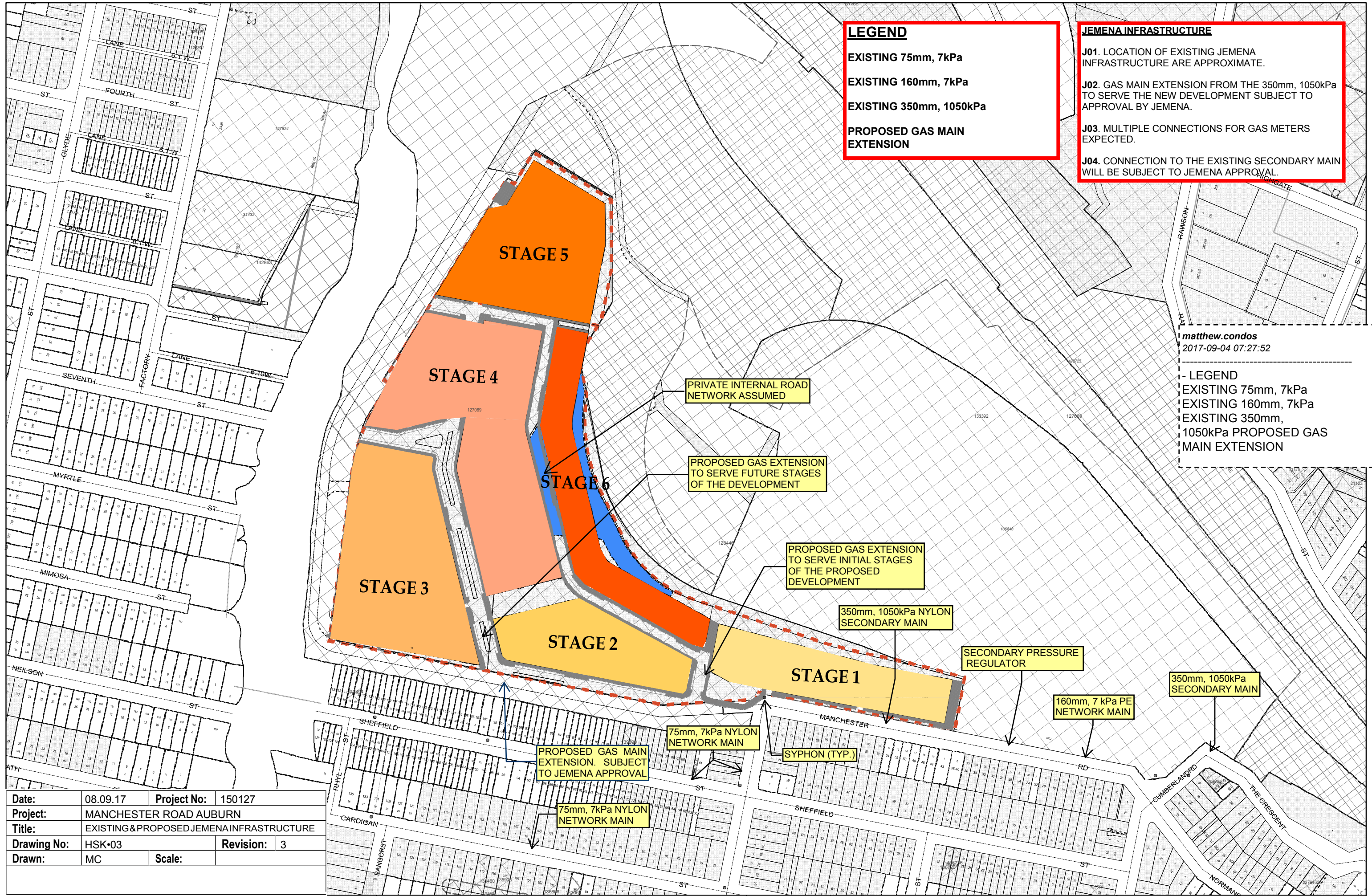
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Map:211 Grid:L16 Edition:Sydney UBD Edition 41

0m 40m 80m 120m 160m 200m

Scale 1:5000

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**LEGEND**

EXISTING 75mm, 7kPa

EXISTING 160mm, 7kPa

EXISTING 350mm, 1050kPa

PROPOSED GAS MAIN EXTENSION

**JEMENA INFRASTRUCTURE**

J01. LOCATION OF EXISTING JEMENA INFRASTRUCTURE ARE APPROXIMATE.

J02. GAS MAIN EXTENSION FROM THE 350mm, 1050kPa TO SERVE THE NEW DEVELOPMENT SUBJECT TO APPROVAL BY JEMENA.

J03. MULTIPLE CONNECTIONS FOR GAS METERS EXPECTED.

J04. CONNECTION TO THE EXISTING SECONDARY MAIN WILL BE SUBJECT TO JEMENA APPROVAL.

matthew.condos  
2017-09-04 07:27:52

**LEGEND**

EXISTING 75mm, 7kPa

EXISTING 160mm, 7kPa

EXISTING 350mm, 1050kPa

PROPOSED GAS MAIN EXTENSION

Date:	08.09.17	Project No:	150127
Project:	MANCHESTER ROAD AUBURN		
Title:	EXISTING & PROPOSED JEMENA INFRASTRUCTURE		
Drawing No:	HSK-03	Revision:	3
Drawn:	MC	Scale:	

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Map: 211 Grid: K15 Edition: Sydney UBD Edition 41

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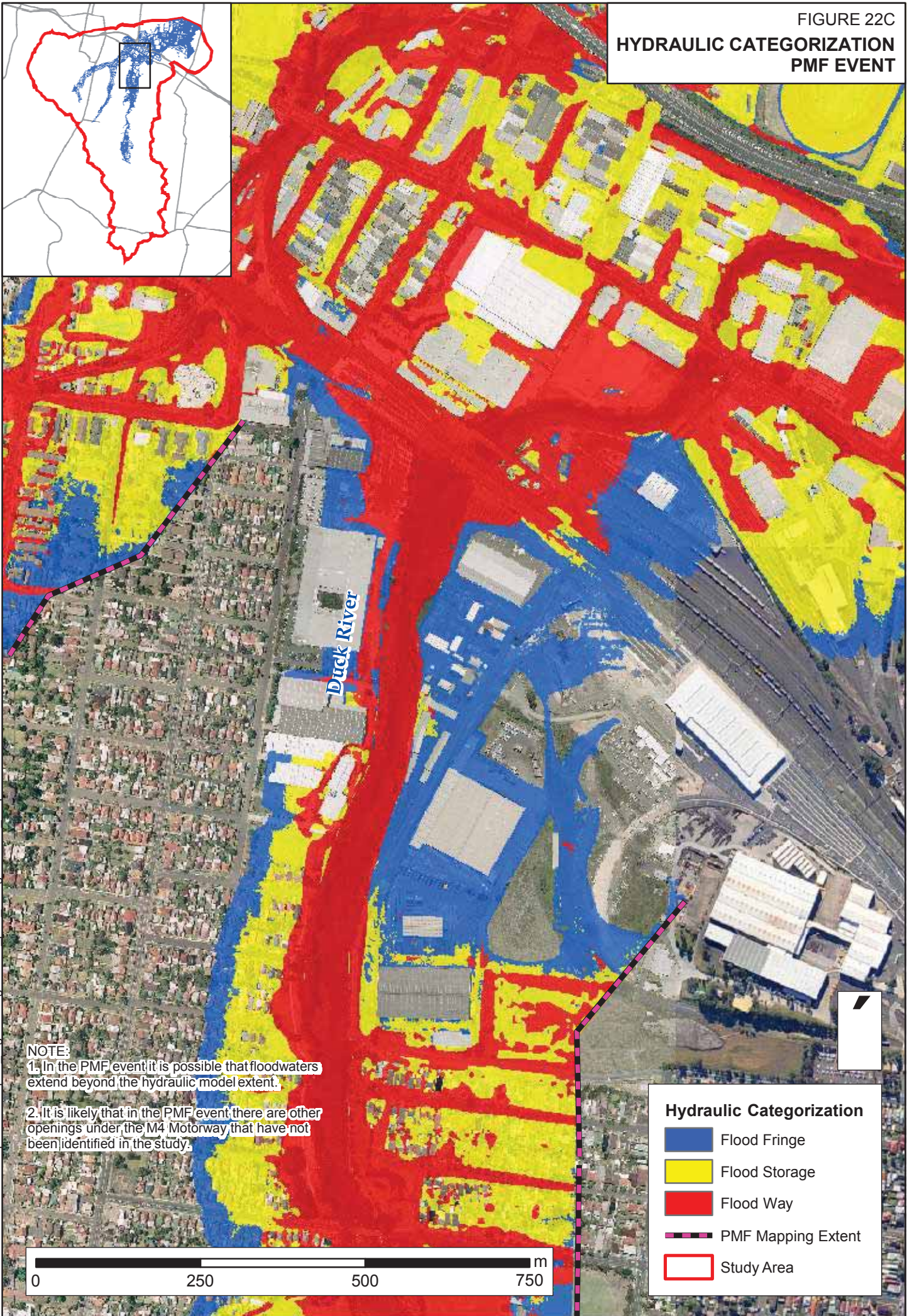
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## APPENDIX B – HYDRAULIC CATEGORISATION DIAGRAM

FIGURE 22C  
HYDRAULIC CATEGORIZATION  
PMF EVENT



**NOTE:**

1. In the PMF event it is possible that floodwaters extend beyond the hydraulic model extent.
2. It is likely that in the PMF event there are other openings under the M4 Motorway that have not been identified in the study.

**Hydraulic Categorization**

- Flood Fringe
- Flood Storage
- Flood Way
- PMF Mapping Extent
- Study Area