

KURRABA WATERLOO

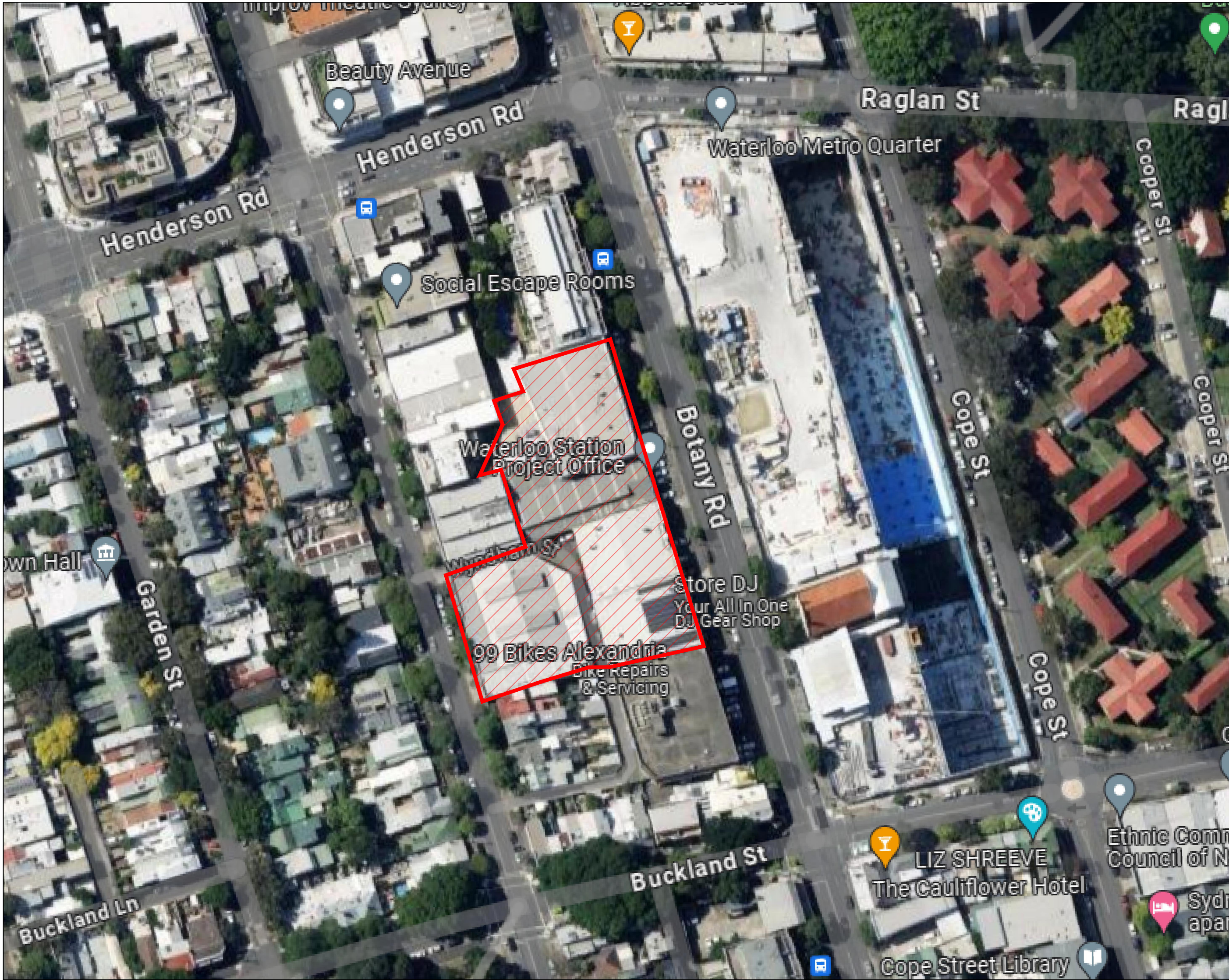
100 BOTANY ROAD, ALEXANDRIA

STORMWATER MANAGEMENT PLAN

STATE SIGNIFICANT DEVELOPMENT APPLICATION

REF: SSD-63067458

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LOCALITY PLAN

NOT TO SCALE

Rev	Revision	Description	By	App	Date
P01	ISSUE FOR SSDA		BB	AA	01.07.24
P02	ISSUE FOR SSDA		BB	AA	05.07.24
P03	ISSUE FOR SSDA		BB	AA	18.09.24

Rev	Revision	Description	By	App	Date

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Structural, Civil & Construction
Engineering Consultant

 **RobertBirdGroup**
Member of the Urbana Jurong Group

SYDNEY OFFICE
Robert Bird Group Pty Ltd
PO Box 6461
North Sydney, NSW 2059
Level 6, 100 Pacific Highway
North Sydney NSW 2060

Ph: (02) 8246 3200
Fax: (02) 8246 3201
Email: sydney@robertbird.com.au
Web: www.robertbird.com
ACN 010 580 248

Client
BOTANY ROAD DEVELOPMENT P/L

Title
COVER SHEET

Project
KURRABA WATERLOO

Date 01.07.24 Scale at A1 NTS	Drawn MARELLANO Designer B.BASKARAN	Design Checker A.JANG Approved A.JANG Job No. 23501
NOT FOR CONSTRUCTION		
Drawing Number 23501-RBG-XX-XX-DR-CV-80000	Revision P03	



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P03	ISSUE FOR SSDA	BB	AA	18.09.24

SCALE 1:200

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Rev	Revision Description	By	App	Date
1	ISSUE FOR SSDA	BB	AA	01.07.24
2	ISSUE FOR SSDA	BB	AA	05.07.24
3	ISSUE FOR SSDA	BB	AA	18.09.24

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RobertBirdGroup

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Client

BOTANY ROAD DEVELOPMENT P/L

Title

STORMWATER MANAGEMENT PLAN

Date

19.09.24

Scale

at A1
1:200

Drawn

MARELLANO

Designer

B.BASKARAN

Design Checker

AJANG

Approved

AJANG

Job No.

23501

Project

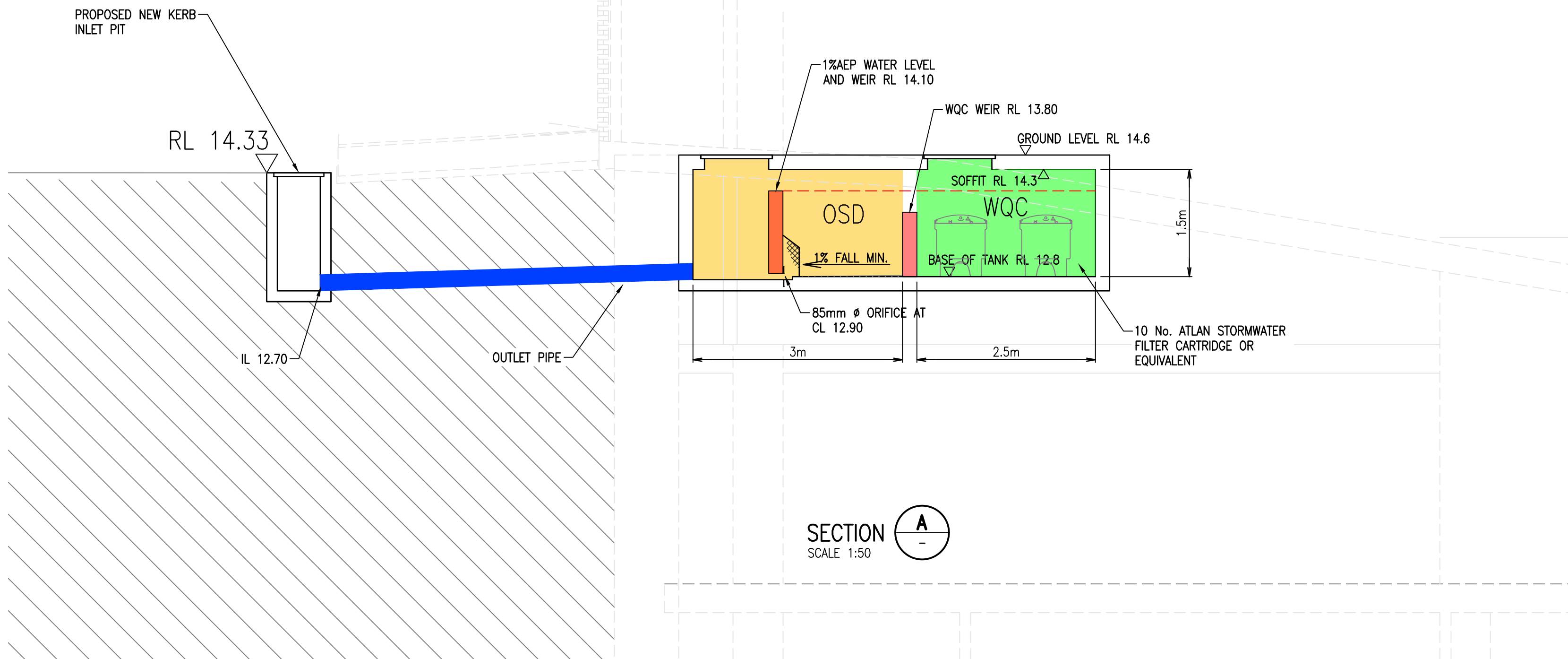
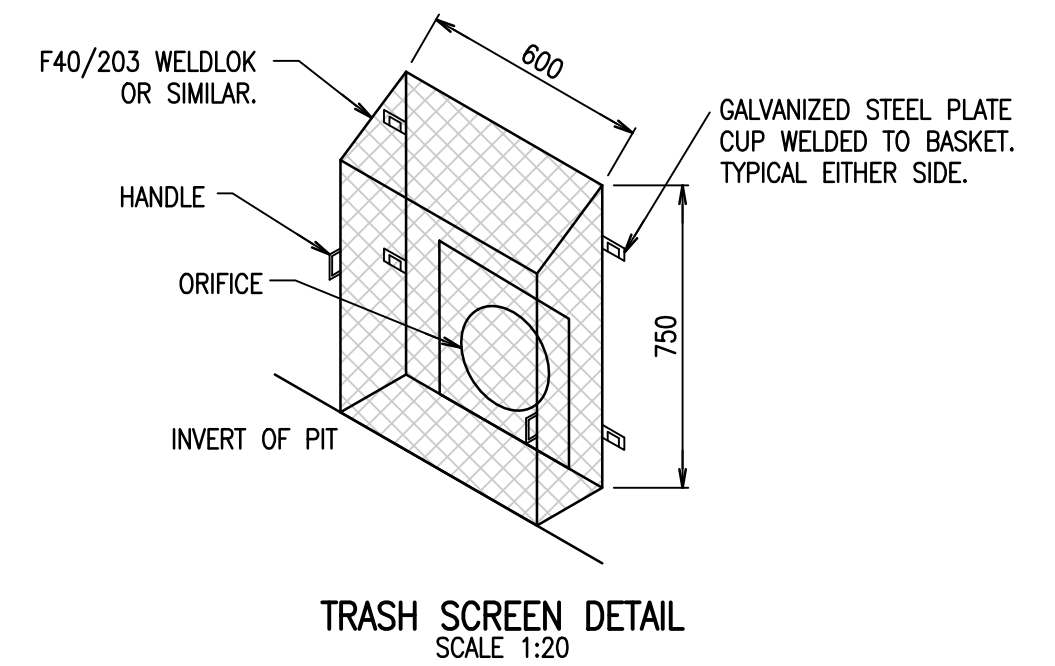
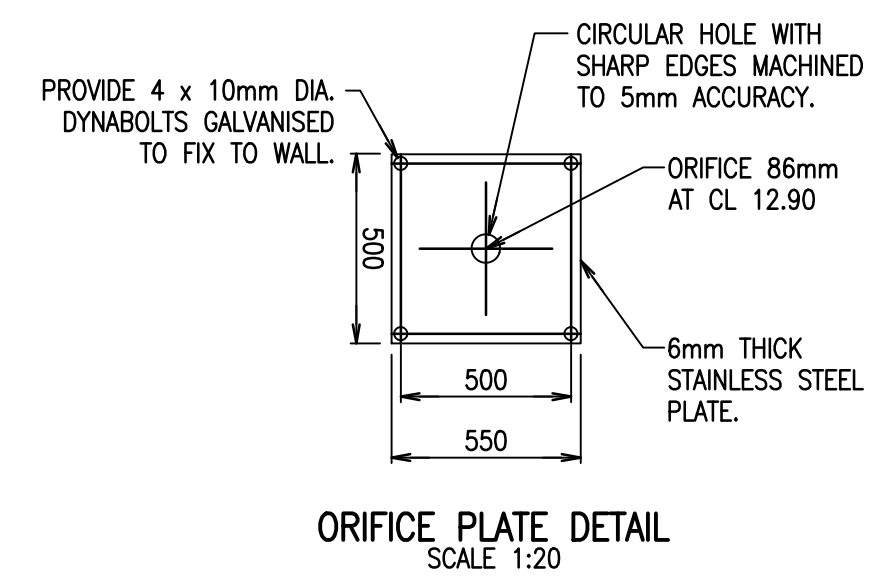
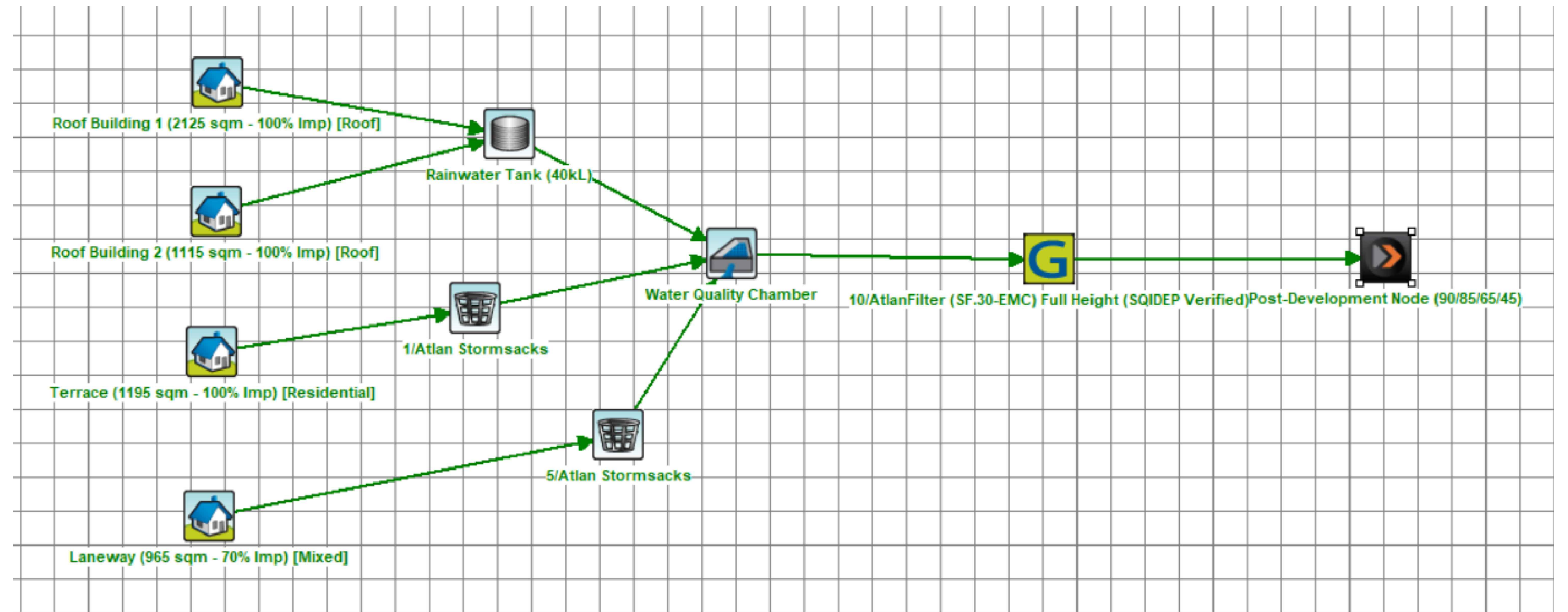
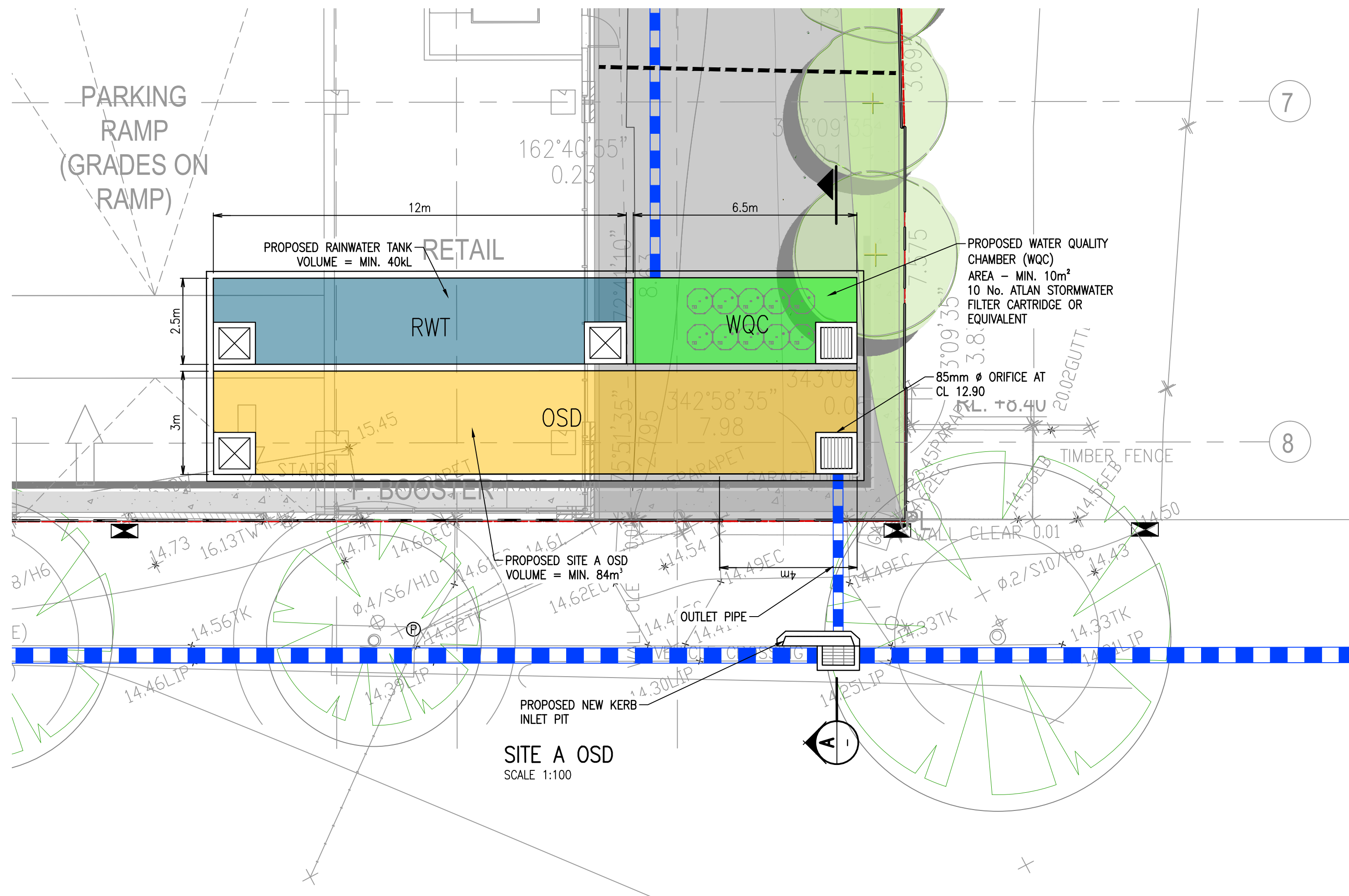
KURRABA WATERLOO

Drawing Number

23501-RBC-XX-XX-DR-CV-87001

Revision

P03



ORIFICE SIZE

$$PSD = Q_{OSD}$$

$$Q_{OSD} = C_d \cdot A \sqrt{2gH}$$

$$= C_d \cdot \frac{\pi d^2}{4} \cdot \sqrt{2gH}$$

$$d^2 = \frac{4Q_{OSD}}{\pi \cdot C_d \cdot \sqrt{2gH}}$$

$$d = \sqrt{\frac{4Q_{OSD}}{\pi \cdot C_d \cdot \sqrt{2gH}}}$$

where $Q = PSD = 199 \frac{L}{s}$

$C_d = 0.61$

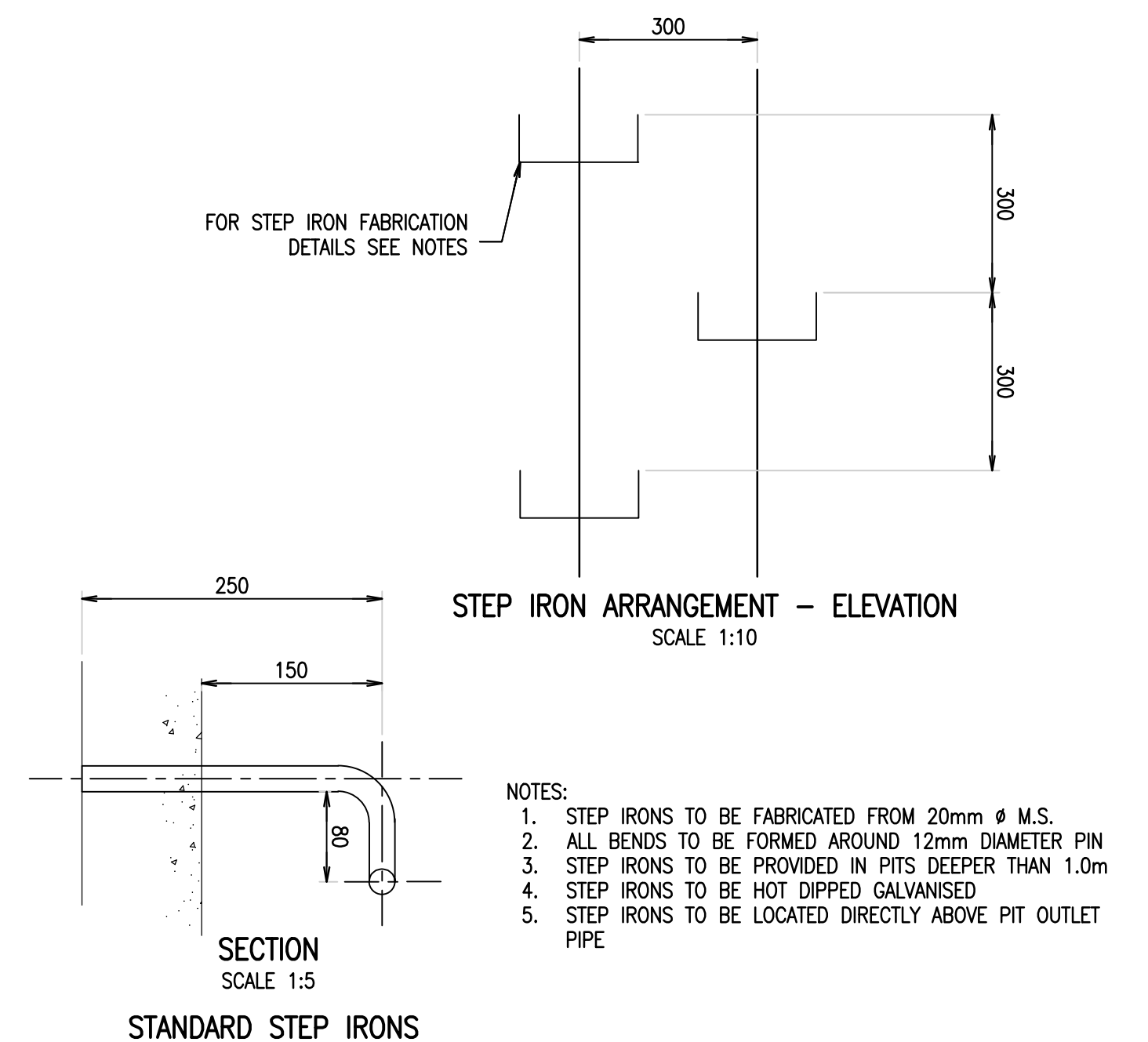
$H = 1.2m$

$g = 9.81 \frac{m}{s^2}$

$$d = \frac{4(199)}{\pi \cdot 0.61 \cdot \sqrt{2 \cdot 9.81 \cdot 1.2 \cdot 1000}}$$

$$= 0.0856m$$

$$= 85mm$$



SCALE 1:100

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ACN 010 580 248

Client
BOTANY ROAD DEVELOPMENT P/L

Title
STORMWATER DETAILS SHEET 1

Project
KURRABA WATERLOO

Date
19.09.24
Scale at A1
AS SHOWN

Drawn
MARELLANO
Designer
B.BASKARAN

Design Checker
A.JANG
Approved
A.JANG
Job No.
23501

NOT FOR CONSTRUCTION

Drawing Number
23501-RBG-XX-XX-DR-CV-87101

Revision
P03

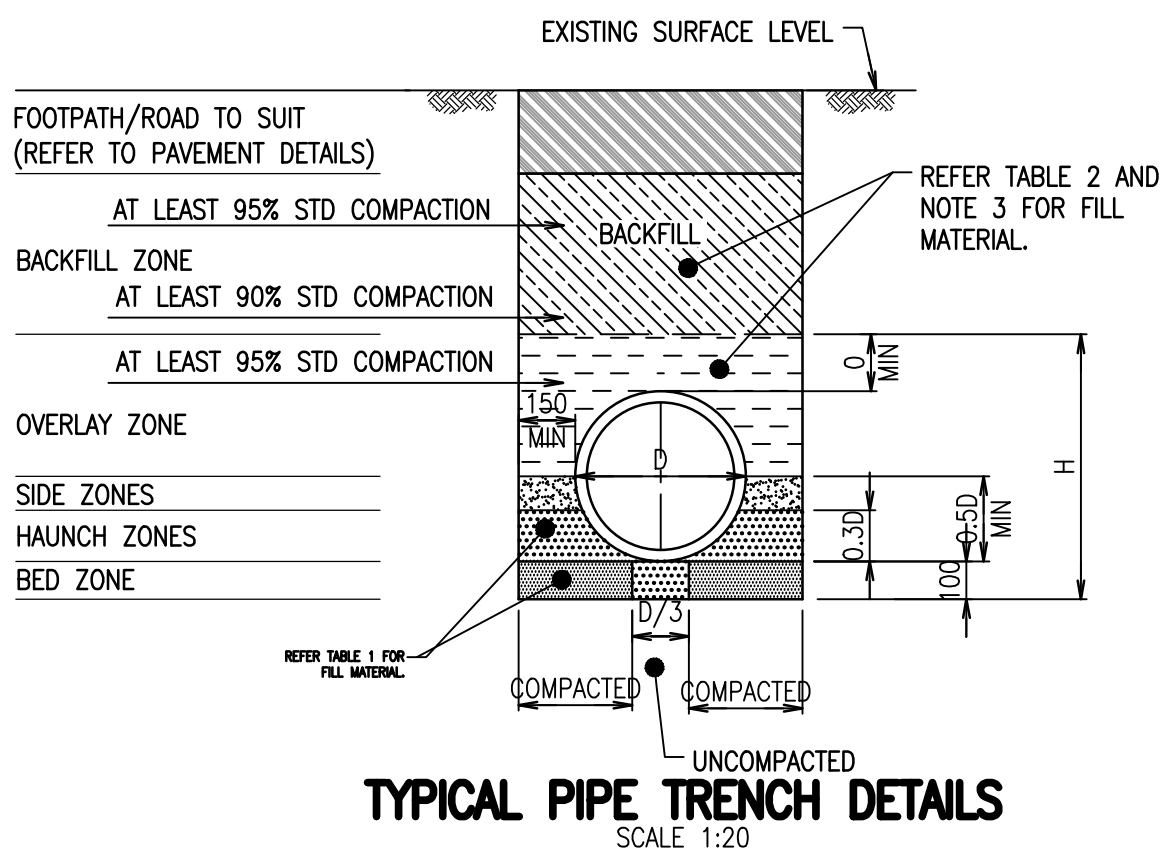
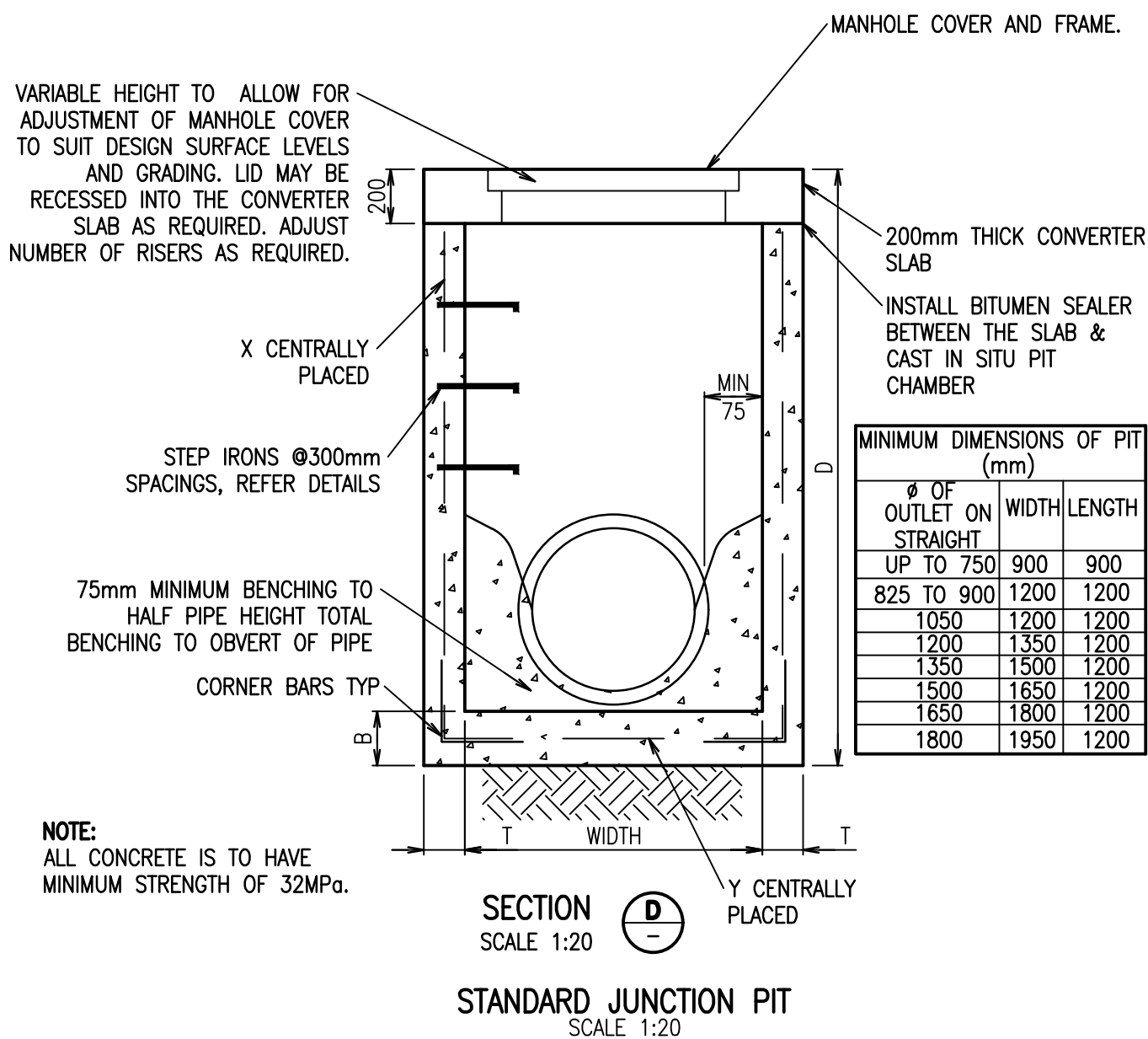
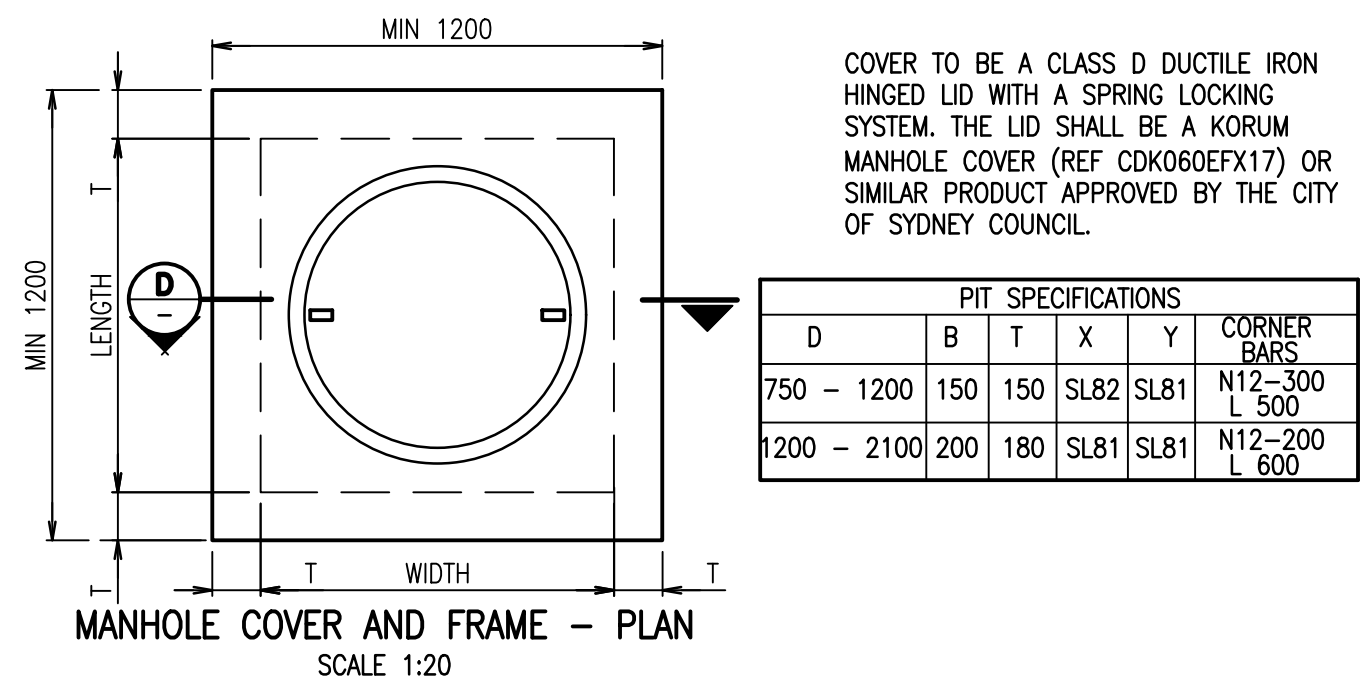
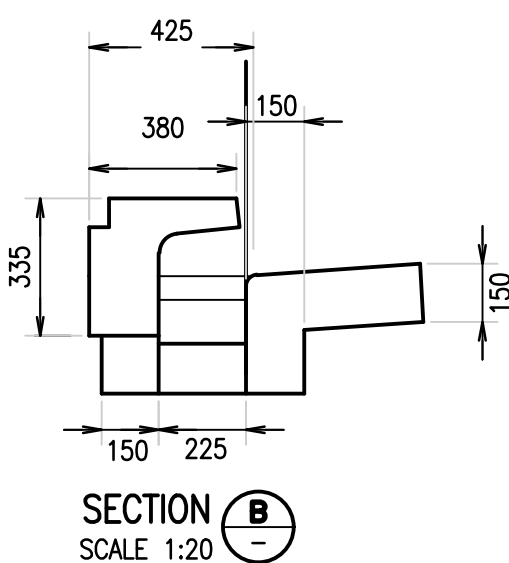
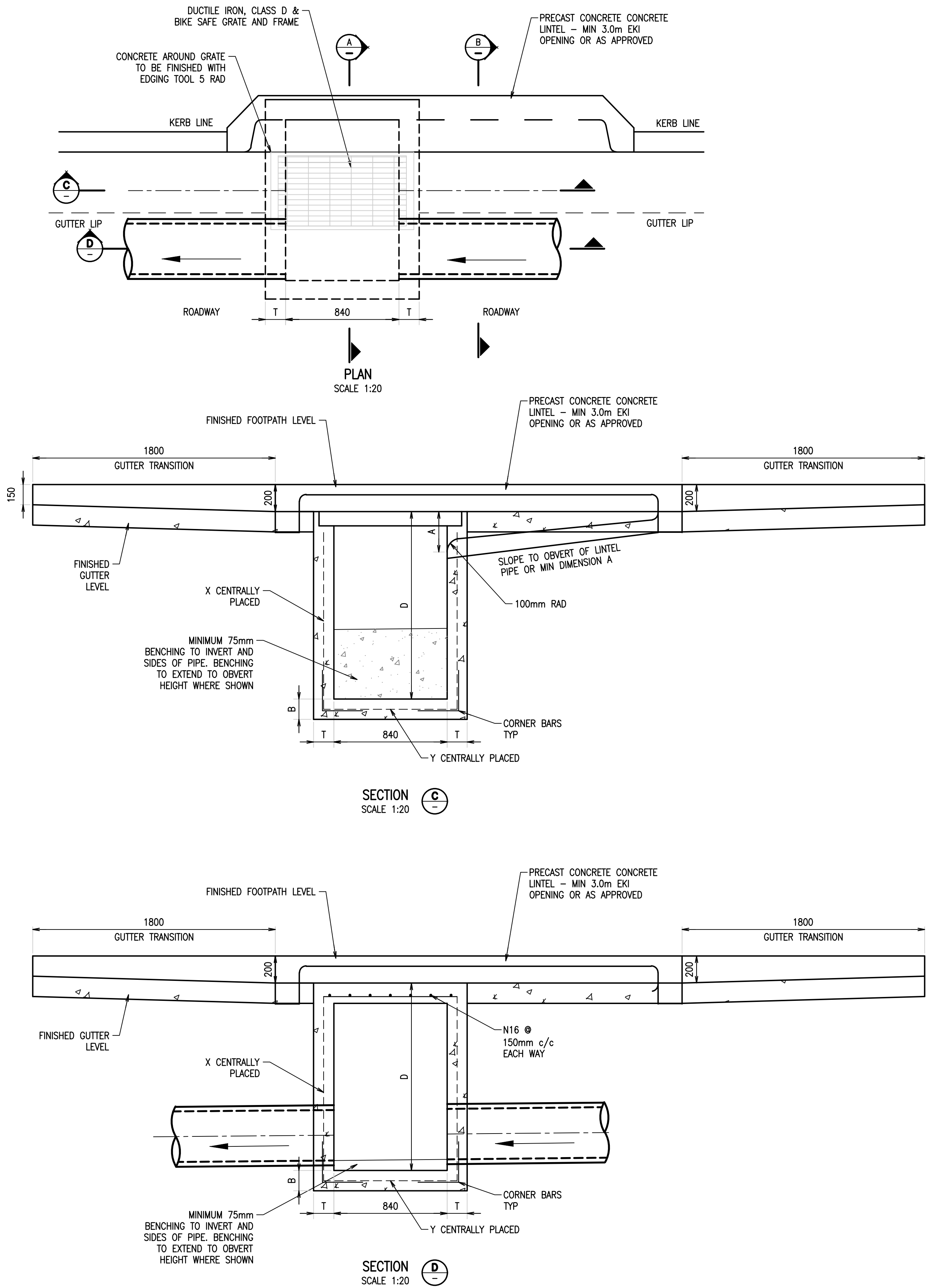


TABLE 1: GRADING LIMITS FOR SELECT FILL IN BED AND HAUNCH ZONES	
SIEVE SIZE (mm)	WEIGHT PASSING (%)
19.0	100
2.36	100-50
0.60	90-20
0.30	60-10
0.15	25-0
0.075	10-0

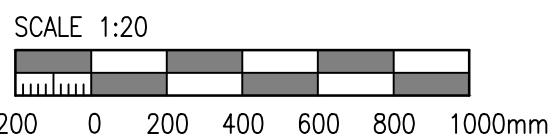
TABLE 2: GRADING LIMITS FOR SELECT FILL IN SIDE ZONES	
SIEVE SIZE (mm)	WEIGHT PASSING (%)
75.0	100
9.5	100-50
2.36	100-30
0.60	50-15
0.075	25-0



PIT SPECIFICATIONS						
D	B	T	X	Y	CORNER BARS	
750 - 1200	150	150	SL82	SL81	N12-300	L 500
1200 - 2100	200	180	SL81	SL81	N12-200	L 600
> 2100	TO STRUCTURAL ENGINEERS SPECIFICATION					

MINIMUM DIMENSION A (mm)	MINIMUM LENGTH EKI (m)
250	1.8
300	2.4
400	3.0
450	3.6
500	4.2

- NOTES:
- COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS TO BE 32MPa.
 - 100mm ϕ SUBSOIL DRAINAGE PIPE 3.0m LONG WRAPPED IN FABRIC SOCK TO BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES.
 - PROVIDE STEP IRONS WHERE PIT IS DEEPER THAN 1.0m IN ACCORDANCE WITH STEP IRONS DRAWING.
 - PITS OVER 2.1m IN DEPTH TO BE DESIGNED BY STRUCTURAL ENGINEER.
 - GRATES SHALL BE BICYCLE SAFE AND HAVE MAXIMUM INLET CAPACITY. ALL GRATES MUST BE APPROVED BY THE CITY'S REPRESENTATIVE.
 - CONCRETE STRUCTURES & REINFORCEMENT TO COMPLY WITH AS 3600, AS 4671 & CoS TECHNICAL SPECIFICATIONS.
 - DRAINAGE PIPE TO BE MINIMUM 375 ϕ CLASS 4 REINFORCED CONCRETE PIPE.
 - ALL DIMENSIONS IN MILLIMETRES UNLESS OTHERWISE STATED.



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Client

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Title

STORMWATER DETAILS SHEET 2

Project

KURRABA WATERLOO

Date
01.07.24
Scale at A1
AS SHOWN

Drawn
MARELLANO
Designer
B.BASKARAN

Design Checker
A.ANG
Approved
A.ANG
Job No.
23501

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Drawing Number
23501-RBG-XX-XX-DR-CV-87102

Revision
P03

