

# 668 Henry Lawson Drive, East Hills


## STORMWATER



## SITE MAP

## DRAWING LIST

DRAWING NO.	DRAWING TITLE
SW-000	COVER SHEETS
SW-001	NOTES AND LEGENDS
SW-100	SITE PLAN
SW-202	ROOF PLAN
SW-300	DETAIL SHEET 1
SW-301	DETAIL SHEET 2

						ADDRESS: Level 2, 96 Phillip Street, Parramatta NSW 2150		DESIGNED	A.S.	DATE	07.01.25	ADDRESS	668 Henry Lawson Drive, East Hills				
						PHONE: 9635 9890		VERIFIED	H. N.	DATE	07.01.25	SHEET TITLE	STORMWATER SERVICES COVER SHEET				
						WEBSITE: www.horizonengineers.com.au		DRAWN	A.S.	SCALE	⊙ A1 NTS						
0	A.S.	07/01/25	H.S.	07/01/25	ISSUED FOR APPROVAL	E-MAIL: info@horizonengineers.com.au		© THIS DRAWING AND DESIGN IS THE COPYRIGHT OF HORIZON ENGINEERS PTY. LTD. NO PART OF THIS DRAWING OR DESIGN SHALL BE REPRODUCED OR USED WITHOUT PRIOR WRITTEN CONSENT FROM HORIZON ENGINEERS PTY.								PROJECT NO.	24209
REV.	DES.	DATE	VER.	DATE	DESCRIPTION												







UPPER LEVEL

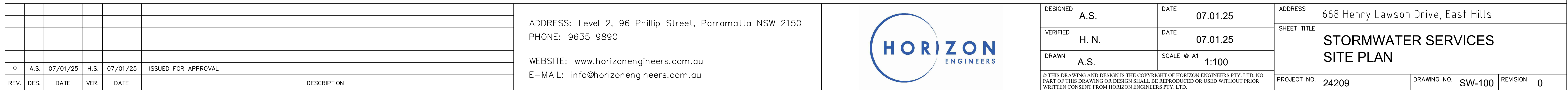
LOWER LEVEL

NOTE 2  
PRESSURE SERVICE

NOTE 1  
GRAVITY SERVICE

NOTES

1. PRESSURE SERVICES NOT SHOWN AT LOWER LEVEL FOR CLARITY
2. GRAVITY SERVICES NOT SHOWN AT UPPER LEVEL FOR CLARITY



Location

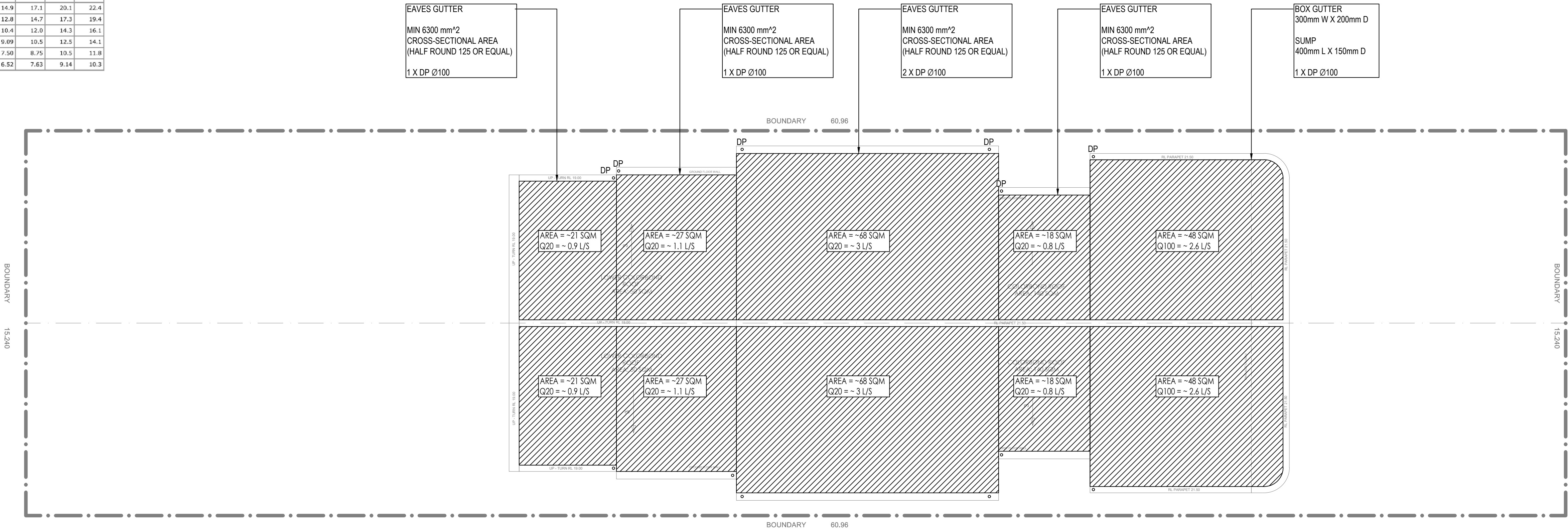
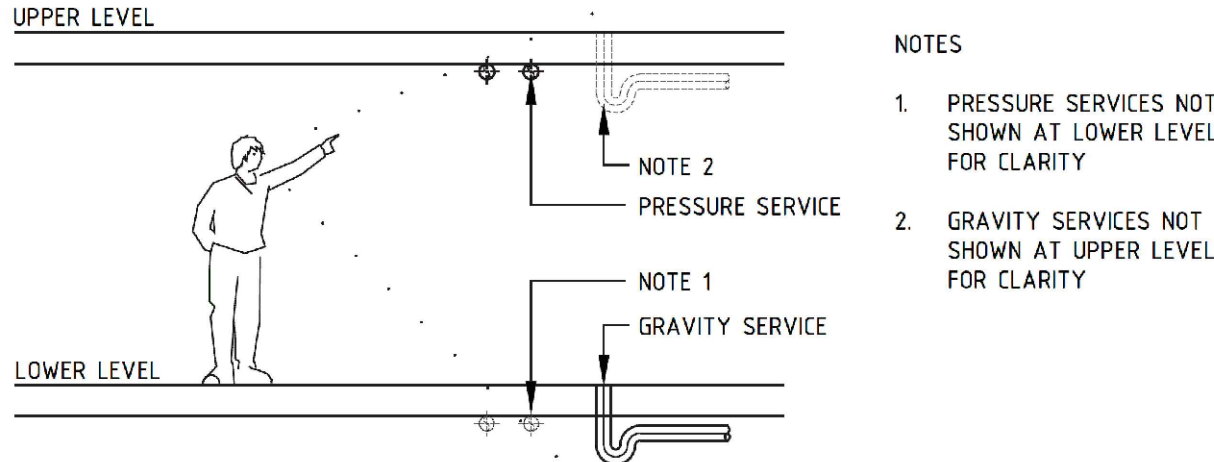
Label: Not provided  
Latitude: -33.9646 (Nearest grid cell: 33.9625 (S))  
Longitude:150.9913 (Nearest grid cell: 150.9875 (E))

IFD Design Rainfall Intensity (mm/h)

Issued: 08 January 2025

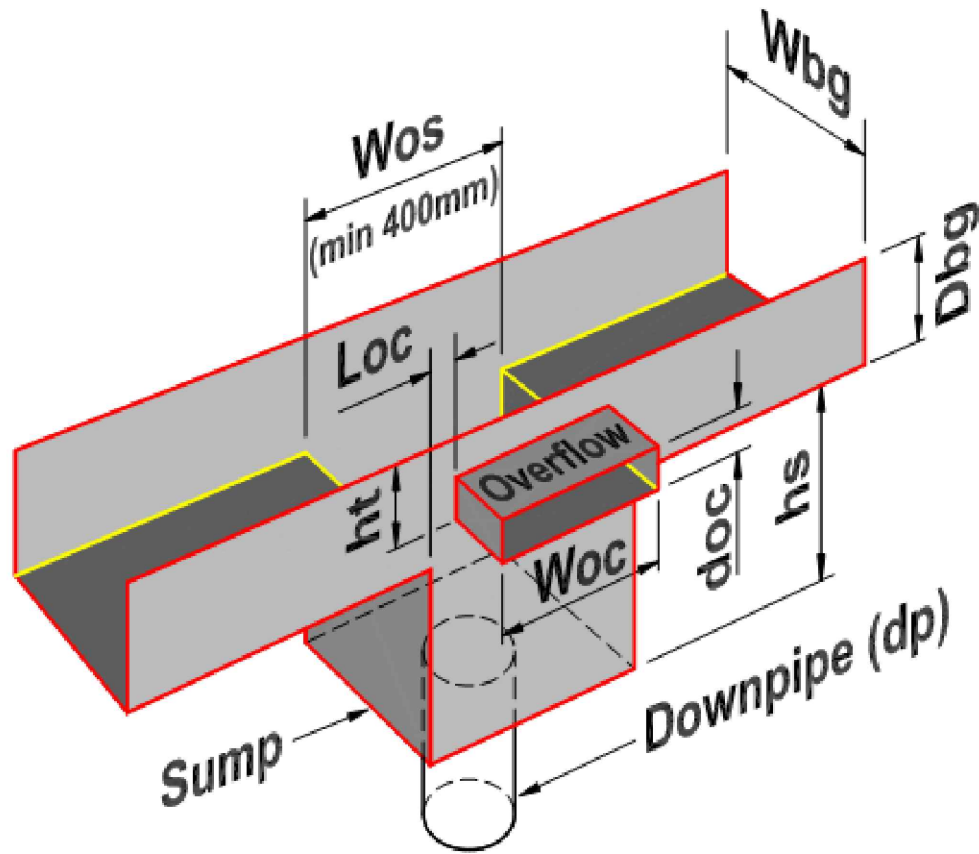
Rainfall intensity for Durations, Exceedance per Year (EP), and Annual Exceedance Probabilities (AEP).  
FAO for New AEP, probability terminology.

Duration	Annual Exceedance Probability (AEP)						
	63.2%	50%*	20%*	10%	5%	2%	1%
1 min	121	135	176	203	230	265	291
2 min	98.3	107	137	158	178	205	225
3 min	91.4	100	129	148	167	193	212
4 min	86.5	95.2	123	142	160	184	203
5 min	82.2	90.8	118	136	154	177	195
10 min	65.5	72.9	95.5	111	125	144	158
15 min	54.5	60.6	79.6	92.2	104	120	132
20 min	46.8	52.0	68.2	79.0	89.4	103	113
25 min	41.2	45.7	59.8	69.2	78.3	90.2	99.1
30 min	36.9	40.9	53.4	61.8	69.9	80.5	86.5
45 min	28.5	31.5	40.9	47.3	53.5	61.7	67.9
1 hour	23.5	26.0	33.6	38.8	44.0	50.8	56.0
1.5 hour	18.0	19.7	25.5	29.5	33.4	38.7	42.8
2 hour	14.8	16.3	21.0	24.4	27.7	32.2	35.7
3 hour	11.4	12.6	16.3	18.9	21.5	25.1	28.0
4.5 hour	8.90	9.81	12.8	14.9	17.1	20.1	22.4
6 hour	7.50	8.30	10.9	12.8	14.7	17.2	19.4
9 hour	5.93	6.62	8.84	10.4	12.0	14.3	16.1
12 hour	5.04	5.66	7.66	9.09	10.5	12.5	14.1
18 hour	4.00	4.54	6.27	7.50	8.75	10.5	11.8
24 hour	3.39	3.87	5.42	6.52	7.63	9.14	10.3



DUAL SUMP/SIDE OVERFLOW (END)

Description	Code	Sizes
<b>CATCHMENT / ARI / DOWNPIPE</b>		
Roof Catchment Area (m2)	A	72
ARI Rainfall Intensity (mm/hr) [ 100 Yr, 5 min ]	Y	195.00
Design Flow (l/s)	Q	3.90
Downpipe (mm)	dp	100
[ha factor]	ha	94
<b>BOX GUTTER</b>		
Sump located at end of Box Gutter	-	
Design Flow [Q] (l/s) for Box Gutter to End Sump	-	3.90
Box Gutter Grade	-	1:200
Box Gutter Width (mm)	Wbg	300
Box Gutter Depth (mm)	Dbg	200
<b>SUMP</b>		
Sump Depth (mm)	hs	150
Sump Length (mm)	Wos	400
<b>OVERFLOW</b>		
Overflow Channel Width	Woc	120
Overflow Channel Depth (mm)	doc	100
Overflow Channel Depth below BG (mm)	ht	150
Overflow side clearance (mm)	loc	140



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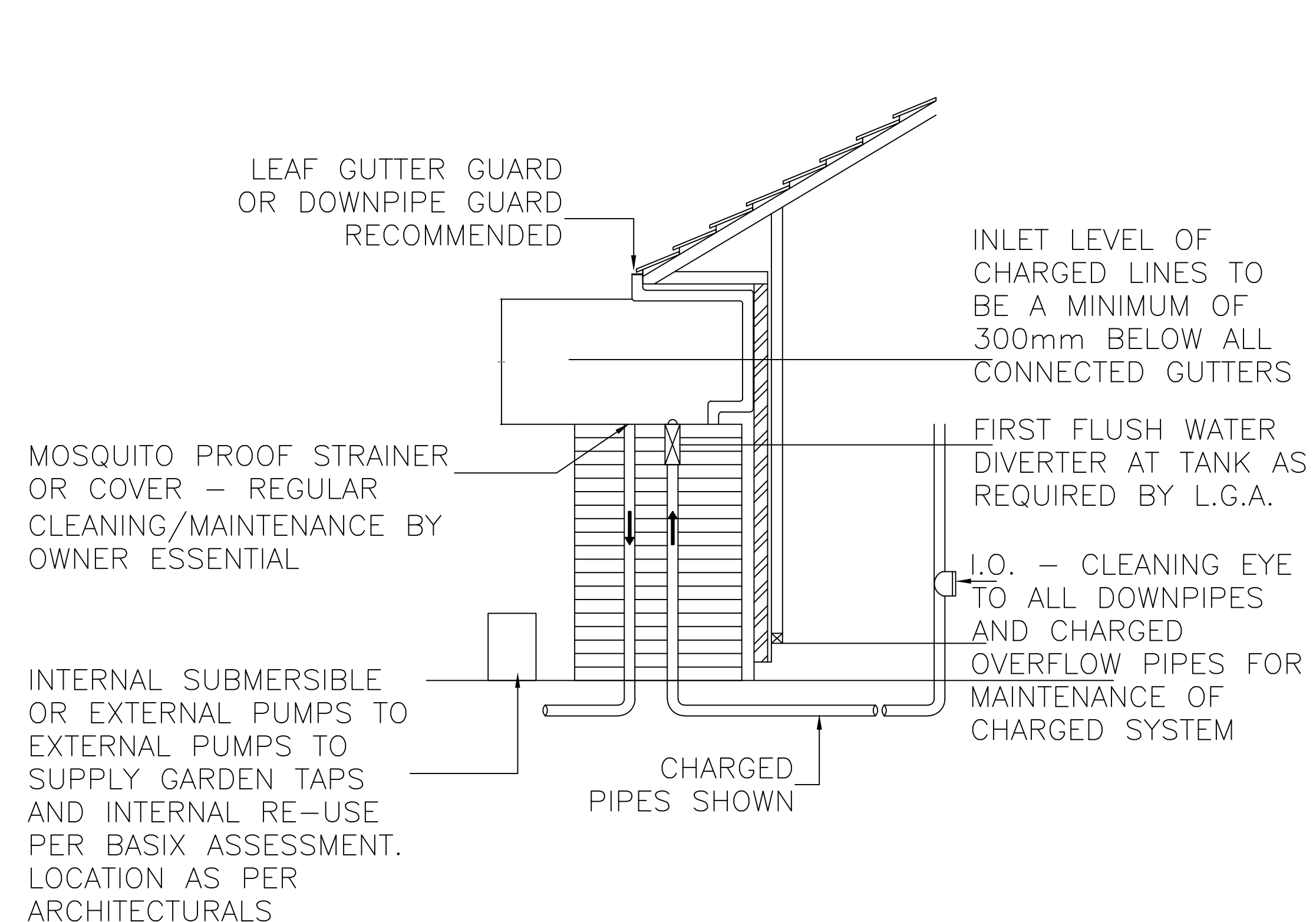
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VERIFIED	H. N.	DATE	07.01.25	SHEET TITLE	STORMWATER SERVICES ROOF PLAN
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				REVISION	0

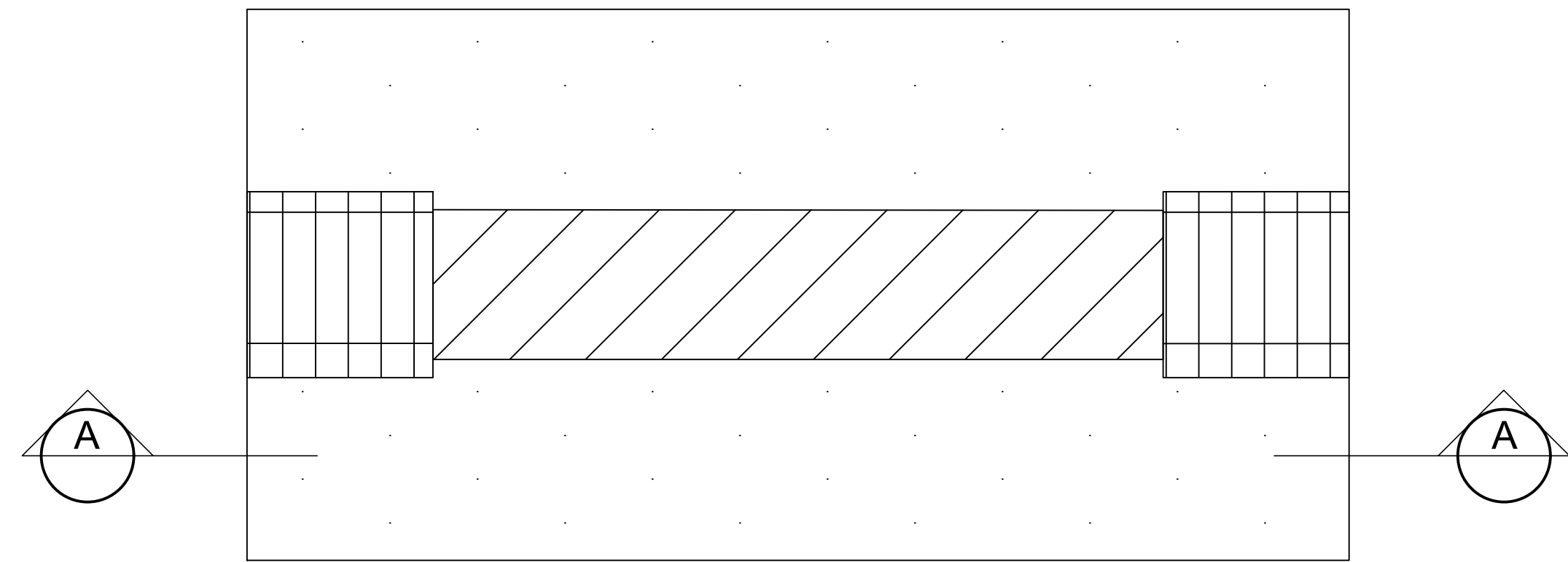




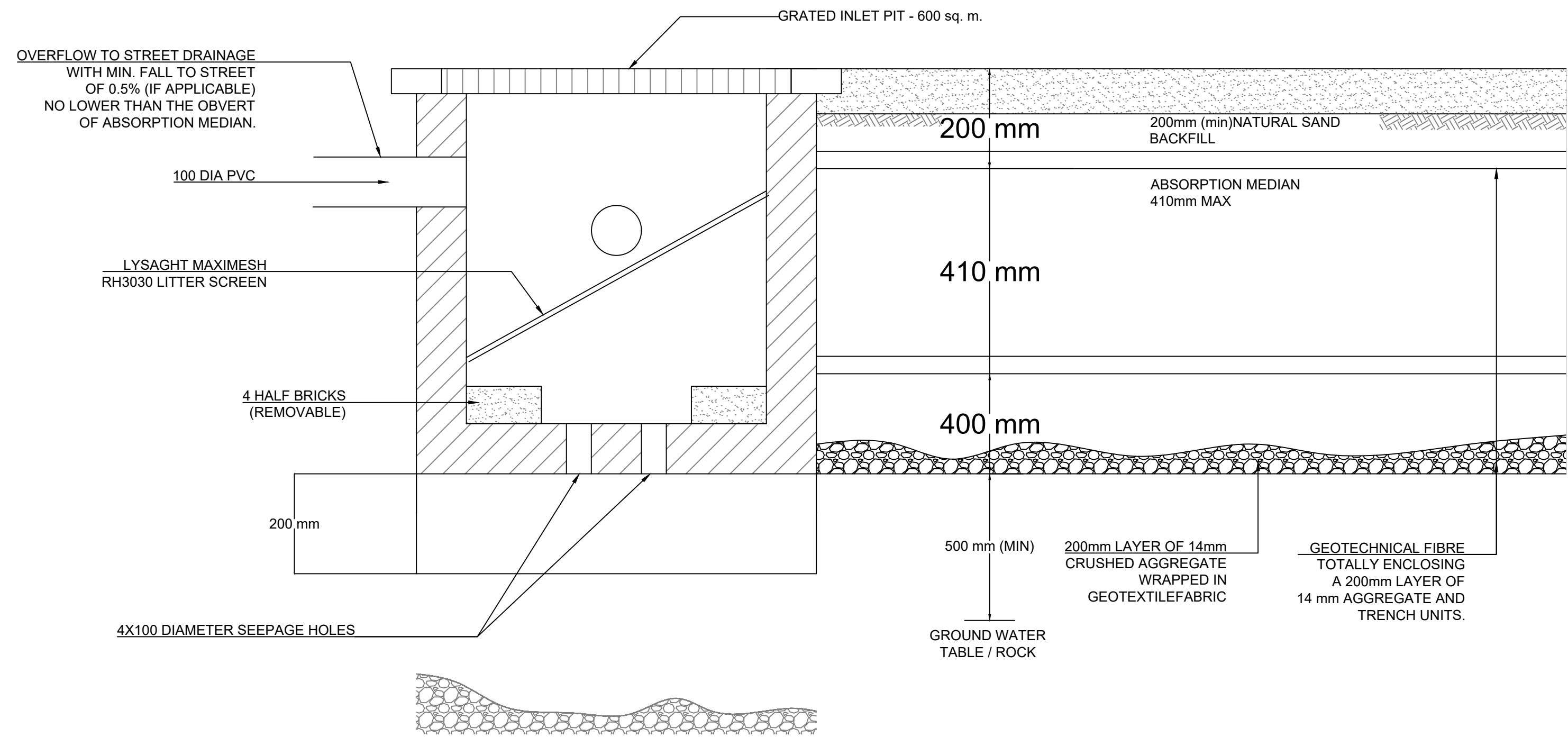
# RAINWATER RECYCLING TANKS

- TANK SHAPE AND DEVICES ARE DIGRAMATIC ONLY
- ANY MODIFICATIONS TO TANK VOLUME, INLET, OUTLET, OR OTHER DETAILS MUST BE APPROVED BY ENGINEER
- STORMWATER LINES FROM DOWNPIPES FROM ROOF AREAS ONLY TO RAINWATER TANKS
- TANK TO COMPLY WITH AS1546.1, AND INSTALLED IN ACCORDANCE WITH MANUFACTURES INSTALLATION
- FIRST FLUSH WATER DIVERTER TO COMPLY WITH SYDNEY WATER & COUNCIL DCP'S. AN APPROVED SWITCH SYSTEM SIMILAR TO "RAINBANK' TO BE USED VIA MAINS. PUMPS TO MANUFACTURES SPECIFICATIONS
- ALL JOINTS TO BE SOLVANT WELDED
- ALL EXPOSED PIPEWORK TO BE PAINTED TO WITHSTAND EXTERNAL ELEMENTS
- CLIENT TO BE RESPONSIBLE FOR MAINTENANCE SYSTEM OF CHARGED PIPELINES
- STRUCTURAL DETAILS FOR TANKS BASE BY QUALIFIED STRUCTURAL ENGINEER, AS REQUIRED BY MANUFACTURER

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							PHONE: 9635 9890		VERIFIED	H. N.	DATE	07.01.25	SHEET TITLE				STORMWATER SERVICES DETAIL SHEET 1		
							WEBSITE: www.horizonengineers.com.au		DRAWN	A.S.	SCALE	⊙ A1	NTS						
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INFILTRATION TRENCH - PLAN VIEW  
N.T.S.



INFILTRATION TRENCH - SECTION VIEW  
N.T.S.

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ADDRESS	668 Henry Lawson Drive, East Hills		
SHEET TITLE	STORMWATER SERVICES DETAIL SHEET 2		
PROJECT NO.	24209	DRAWING NO.	SW-301
REVISION	0		