

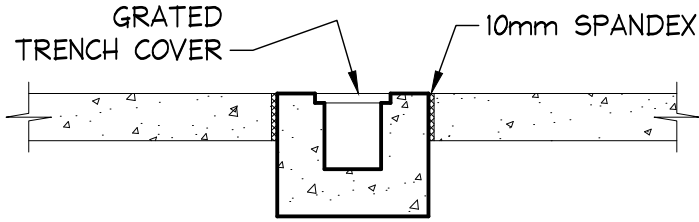
<b>NOTES:</b> 1. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WITH WORK. 2. FOR GENERAL NOTES AND DRAWING SCHEDULE REFER TO DRAWING NUMBER: S01.		<b>DOCUMENT CERTIFICATION</b> Date : DEC. 2024 Bruce Lewis ..... (Principal : Peninsula Consulting Engineers) BE(Civil), CPEng, MIEAust., NPER Institute of Engineers Membership No. 879131		<b>Peninsula Consulting Engineers</b> PO Box 6186 Narraweena, NSW, 2099 Ph: 0424 263 818 E: bruce@peninsulaconsulting.com.au A.B.N. 60 493 390 399		The copyright of this drawing remains with Peninsula Consulting Engineers. Project: <b>PROPOSED WORKS at: 1 BAKERS ROAD CHURCH POINT for: MR &amp; MRS BYFORD</b>		Drawing Title: <b>STORMWATER MANAGEMENT PLAN &amp; DETAILS</b>			Job No: <b>24-0916</b>	Drawing No: <b>H01</b>	Rev: <b>A</b>
		20-12-2024 A FOR COUNCIL SUBMISSION											
		8-10-2024 PI DRAFT											
		Date: Rev: Amendment:											



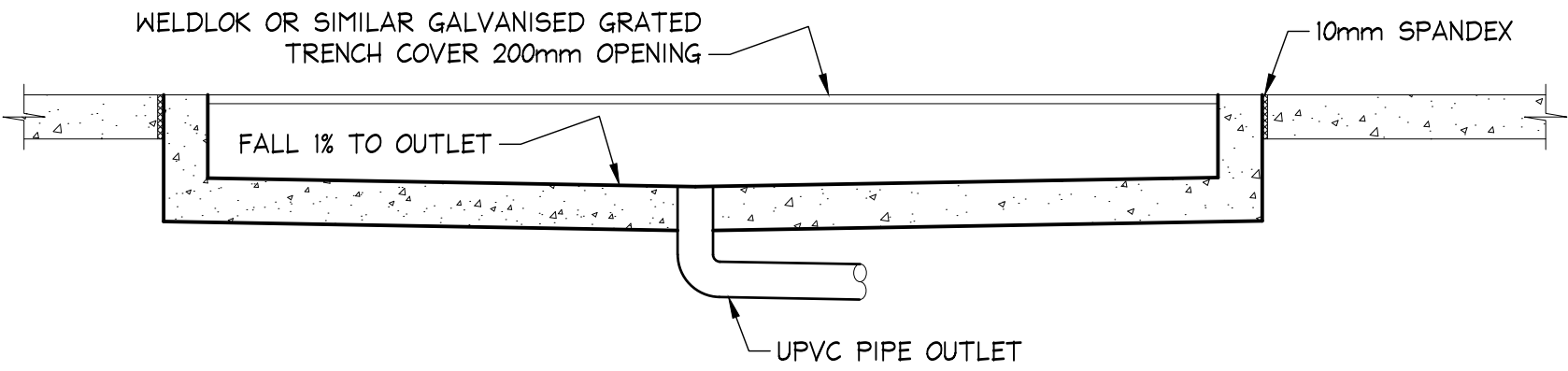
STORMWATER NOTES:

- 1 - ALL PIPES TO BE 100mm Ø SEWER GRADE uPVC UNLESS NOTED OTHERWISE.
- 2 - ALL PIPES TO BE uPVC TO AS 1254-2002 UNLESS NOTED OTHERWISE.
- 3 - ALL PIPES TO BE LAID AT 1 % MINIMUM GRADE UNLESS NOTED OTHERWISE.
- 4 - ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D. BELOW PAVEMENTS.  
( NO COMPACTION REQUIRED BELOW LANDSCAPING )  
COVER TO SURFACE FROM TOP OF PIPE TO BE AS PER AS3500.  
BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- 5 - DOWN PIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT WITH WORK.
- 6 - PROVIDE CLEANING EYES AT ALL DOWNPIPES.
- 7 - ALL PITS TO BE PRECAST, PREFORMED OR HDPE, IN ACCORDANCE WITH LOCAL COUNCIL SPECIFICATIONS.
- 8 - ALL PITS GREATER THAN 1000mm DEEP SHALL HAVE STEP IRONS AS PER COUNCIL STANDARDS.
- 9 - ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- 10 - PRIOR TO COMMENCING ANY SITE WORKS THE CONTRACTOR SHALL IMPLEMENT EROSION CONTROL MEASURES TO EPA GUIDELINES AND COUNCIL SPECIFICATIONS. ALL MEASURES TO REMAIN IN PLACE UNTIL COMPLETION AND STABILIZATION OF THE SITE TO COUNCIL SATISFACTION.
- 11 - ALL LEVELS SHOWN ARE TO AHD
- 12 - ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- 13 - ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
- 14 - ALL WORKS TO BE IN ACCORDANCE WITH AS 3500.3-2021 NATIONAL PLUMBING DRAINAGE CODE PART 3 - STORMWATER DRAINAGE & NCC 2022.

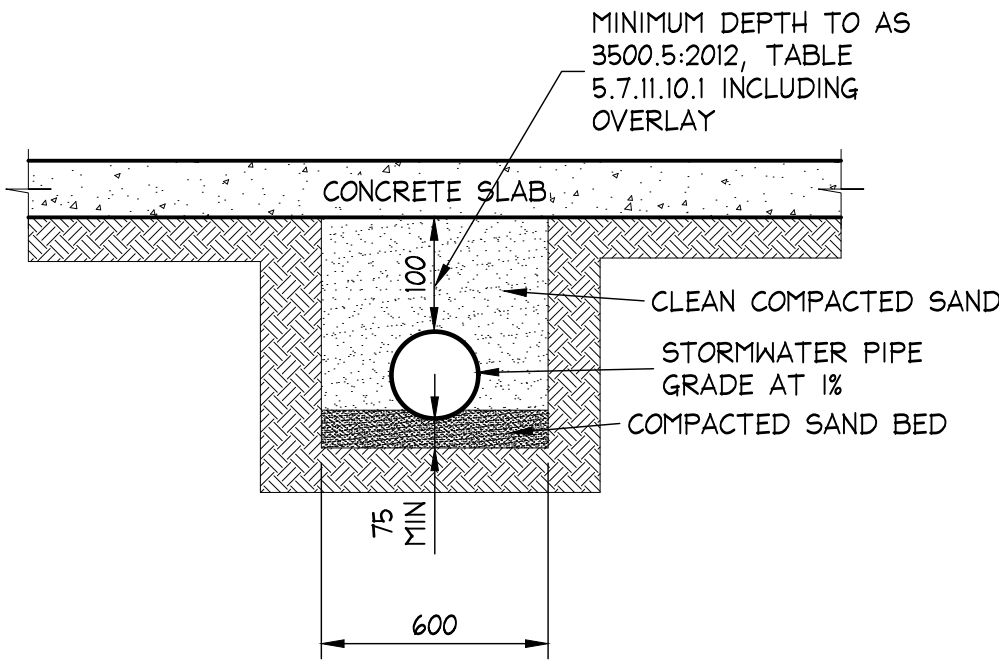
STORMWATER DRAINAGE SYSTEM SUMMARY NOTES - NORTHERN BEACHES COUNCIL	
COUNCIL'S "WATER MANAGEMENT FOR DEVELOPMENT POLICY, REVISED 26/02/2021" USED	
TOTAL SITE AREA	1195.6 m <sup>2</sup>
SECTION 5.5 - FOR REGION 2 - NORTHERN CATCHMENTS	
PRE DEVELOPMENT IMPERVIOUS AREA	544.1 m <sup>2</sup> 45%
POST DEVELOPMENT IMPERVIOUS AREA	544.1 m <sup>2</sup> 45%
ADDITIONAL IMPERVIOUS AREA	0 m <sup>2</sup>
THE PROPOSED DEVELOPMENT DOES NOT REQUIRE OSD - ALTERATIONS AND ADDITIONS WITH NO INCREASE IN IMPERVIOUS. THE DEVELOPMENT IS ALSO IN A FLOOD ZONE, THEREFORE NO OSD.	



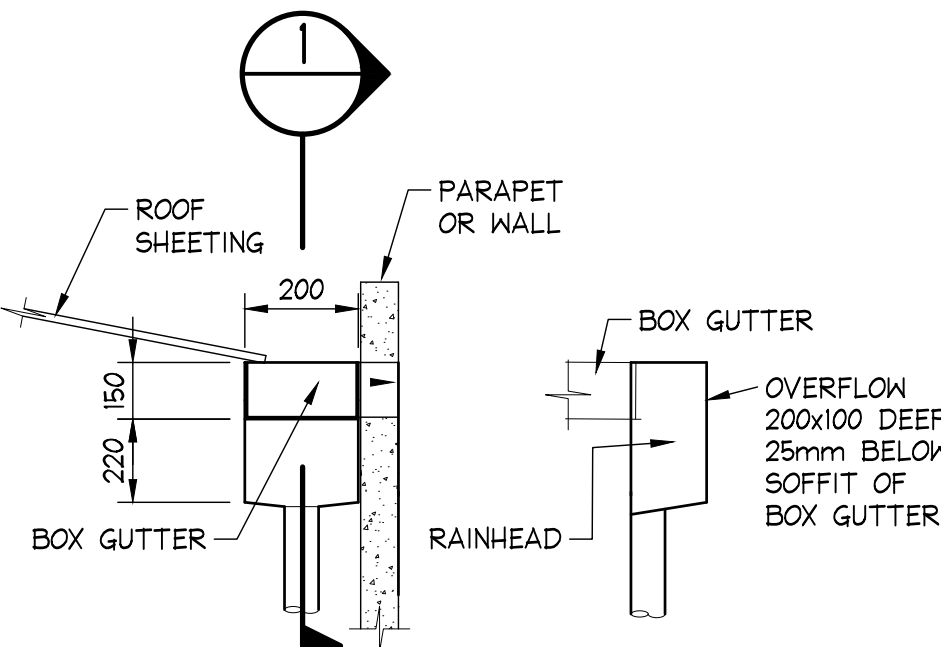
TYPICAL GRATED DRAIN  
SCALE = 1 : 20  
PRECAST OR HDPE GRATED DRAIN  
ALTERNATIVE



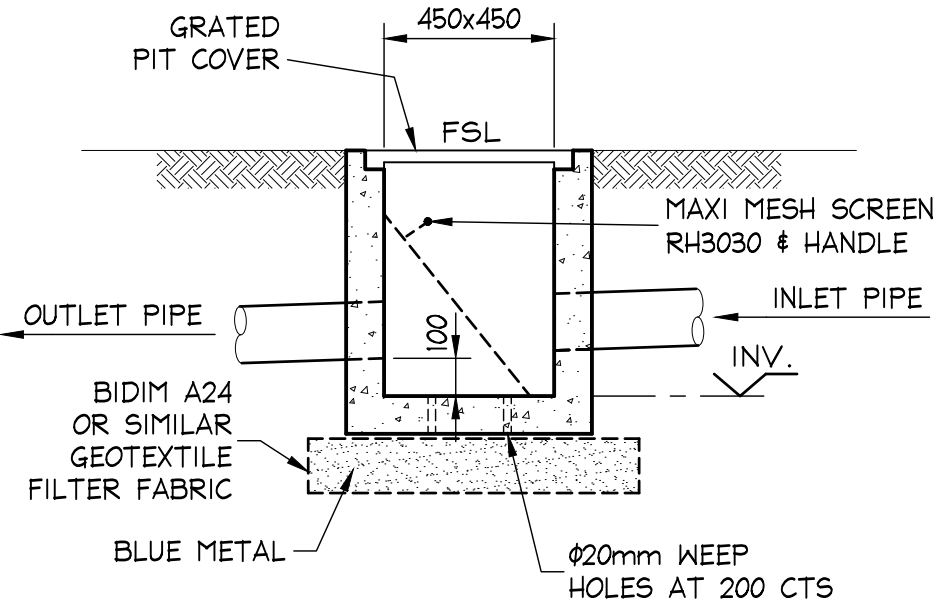
LONGITUDINAL SECTION TYPICAL GRATED DRAIN  
SCALE = 1 : 20



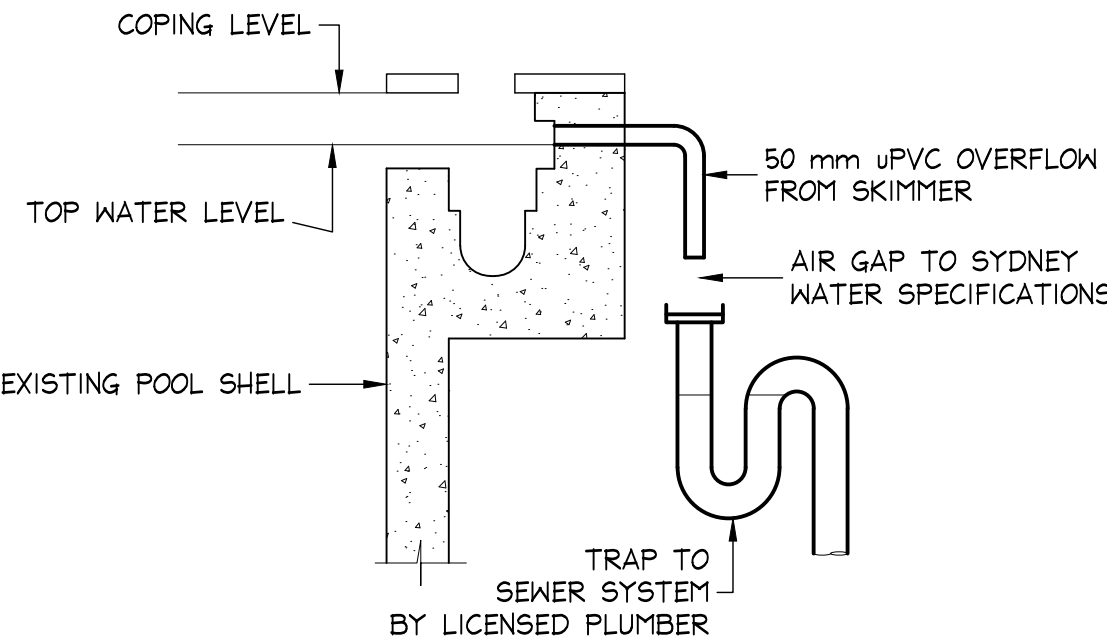
TYPICAL TRENCHING DETAIL  
SCALE = 1 : 20



CROSS SECTION RWH SECTION 1  
TYPICAL RAIN HEAD DETAIL  
SCALE = 1 : 20



PRECAST OR HDPE PIT  
REFER STORMWATER NOTES  
450x450 PIT DETAIL  
SCALE = 1 : 20



POOL OVERFLOW  
SECTION AT SKIMMER  
SCALE = 1 : 20

Northern Beaches Council						
Gutter Calculations -20 & 100 yr ARI Storm						
Alterations & Additions						
1 Bakers Road, Church Point						
to AS 3500.3 - 2021 & AS 3500.5 - 2012 & NCC 2022						
Eaves	Horizontal	Slope	Area A <sub>c</sub>	From	Downpipe	Flow in
Gutters	Area A <sub>h</sub>	Factor	from	Figure	From	Box Gutters
			Appendix	5.6.4.1.b	Table	in
		Table	12	gutter	5.6.4.7.1	<sup>100</sup> I <sub>5</sub>
		5.6.3.2	Page 79	size reqd	size reqd	L/sec
	m <sup>2</sup>		m <sup>2</sup>	mm/hr	mm <sup>2</sup>	mm
EXDP1	26.9	1.5	40.4	201	7500	100 dia
EXDP2	27.6	1.5	41.4	201	7700	100 dia
EXDP3	18.1	1.5	27.2	201	5700	satisfactory
EXDP4	24.9	1.5	37.4	201	7300	100 dia
DP5	27.6	1.5	41.4	201	7700	100 dia
DP6	18	1.5	27.0	201	5700	90 dia
DP7	24.9	1.5	37.4	201	7300	100 dia
DP8	16.8	1.5	25.2	201	5400	90 dia
RWH/DP9	23.2	NA	NA	266	NA	90 dia
DP10	19.6	1.04	20.4	201	4500	90 dia
DP11	19	1.04	19.8	201	4500	90 dia
DP12	19	1.04	19.8	201	4500	90 dia
	265.6					
new Eaves Gutters - Half Round						
Area -			9000	mm <sup>2</sup>		
Some Existing Eaves Gutters Satisfactory with additional Downpipes						
& Gutters Graded at 1 in 500 to New & Existing Downpipes						
All underground Pipes to be 100 Dia Sewer Grade PVC UNO					Box Gutters to Detail	

GUTTER CALCULATIONS

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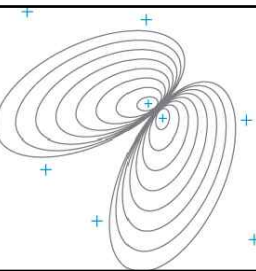
DOCUMENT CERTIFICATION

Date : DEC. 2024  
Bruce Lewis .....  
(Principal : Peninsula Consulting Engineers)  
BE(Civil), CPEng, MIEAust., NPER  
Institute of Engineers Membership No. 879131

20-12-2024	A	FOR COUNCIL SUBMISSION
8-10-2024	PI	DRAFT
Date:	Rev:	Amendment:

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Project:

PROPOSED WORKS  
at: 1 BAKERS ROAD  
CHURCH POINT  
for: MR & MRS BYFORD

Drawing Title:

STORMWATER MANAGEMENT  
CALCULATIONS & DETAILS

Job No:

24-0916

Drawing No:

H02

Rev:

A