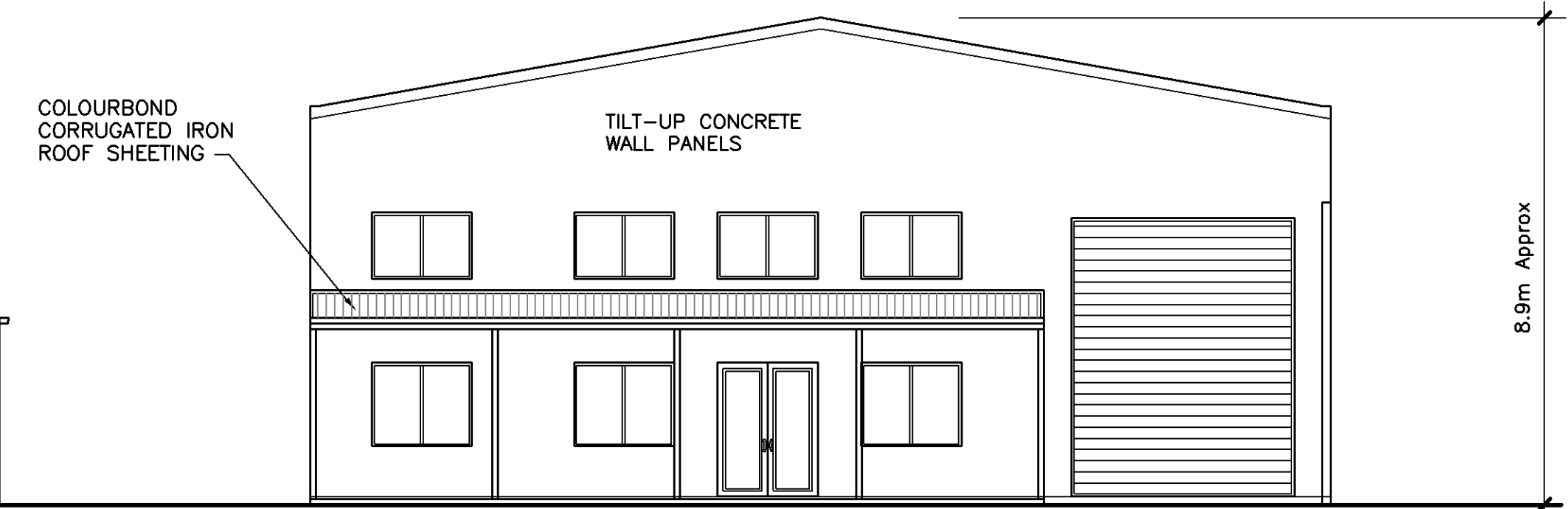
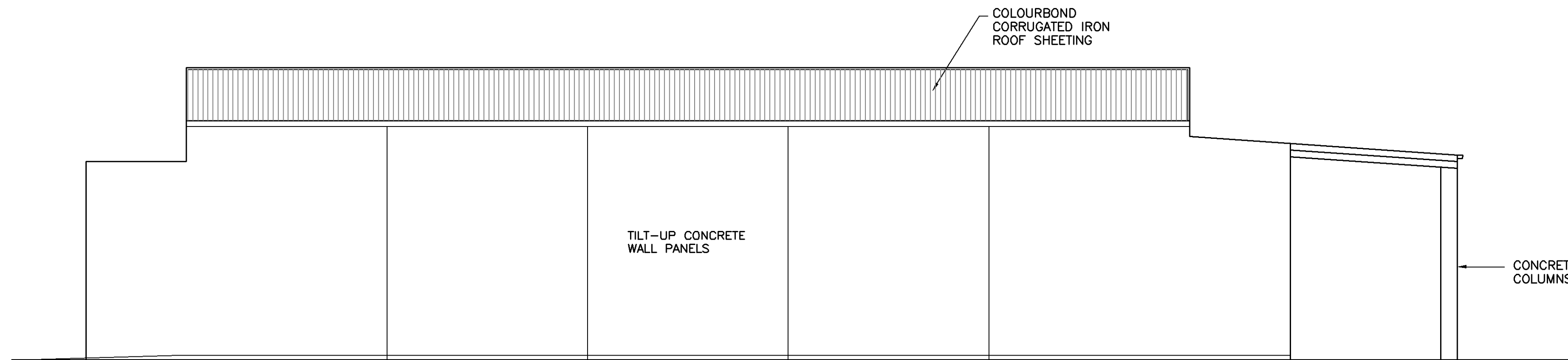


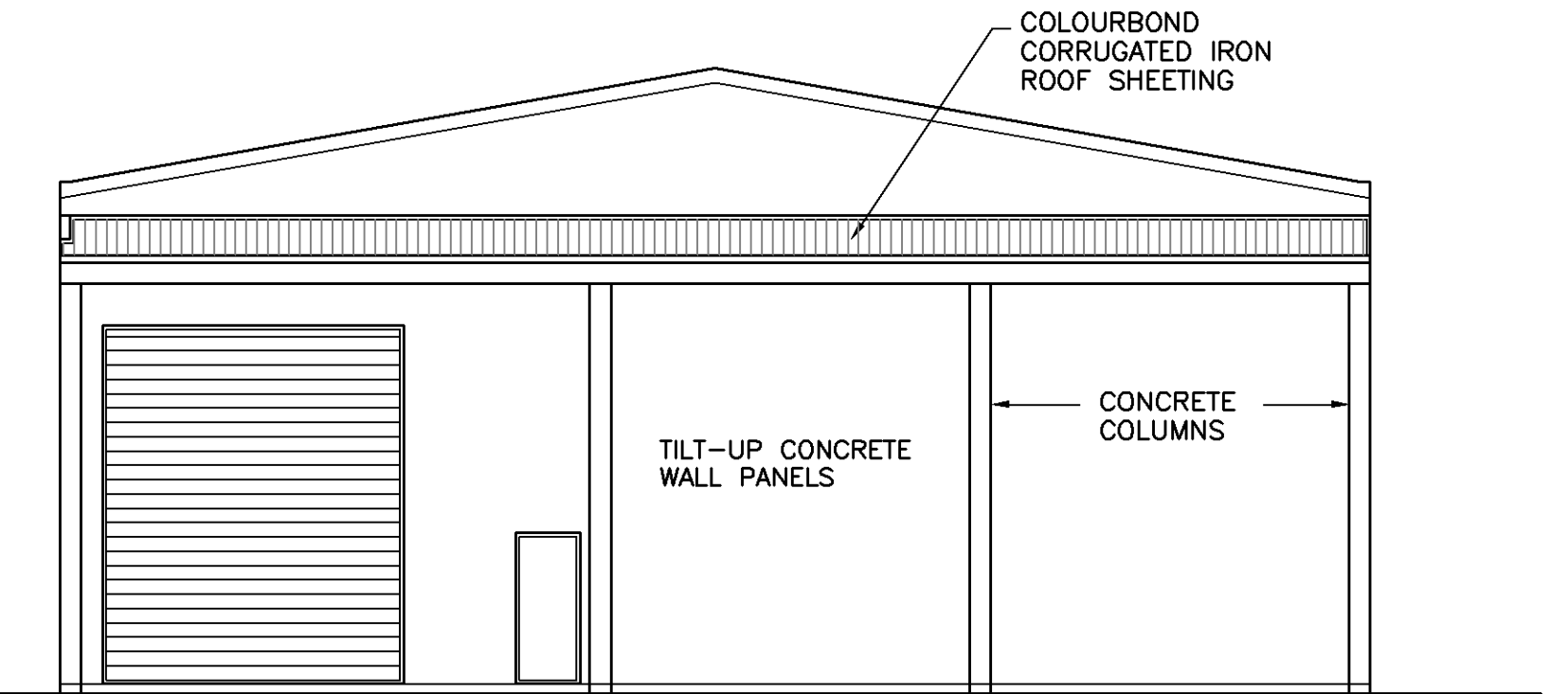
**WEST ELEVATION**  
SCALE 1:100



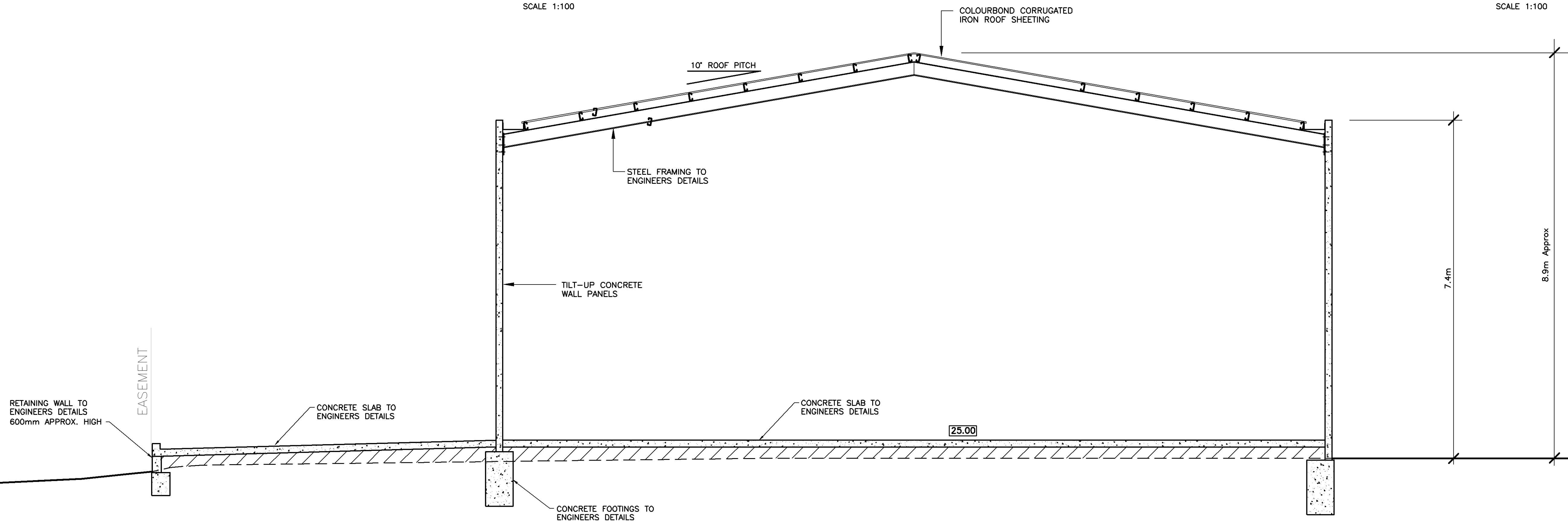
**SOUTH ELEVATION**  
SCALE 1:100



**EAST ELEVATION**  
SCALE 1:100



**NORTH ELEVATION**  
SCALE 1:100



**SECTION A-A**  
SCALE 1:50

ISSUE	DATE	AMENDMENTS
PROJECT		
PROPOSED WAREHOUSE BUILDING at 33 SOMMERVILLE CIRCUIT, EMU PLAINS LOT 2 DP 1105133		
TITLE		
DEVELOPMENT APPLICATION – ELEVATIONS		
<b>ABODE DESIGN</b>		
PHONE 02 4776 1125 0419 405 006		
PO BOX 767 RICHMOND NSW 2753		
FAX 02 4776 1145		
DRAWN	DATE	SCALES
I. Schvetz	28.5.2014	1:100
DRAWING	ISSUE	
3370-3		

PIT SCHEDULE			
NO.	SIZE	CONNECTION	PIPE SIZES & GRADES
P1	600x600	P1-P2	150 @ 1%
P2	600x600	P2-P3	150 @ 1.5%
P3	600x600	P3-P7	225 @ 1%
P4	600x600	P4-P5	150 @ 1.5%
P5	600x600	P5-P6	225 @ 1%
P6	600x600	P6-P7	225 @ 1%
P7	1200x1200	P7-BIORETENTION	225 @ 1%



**Drainage Notes:**

**GENERAL**

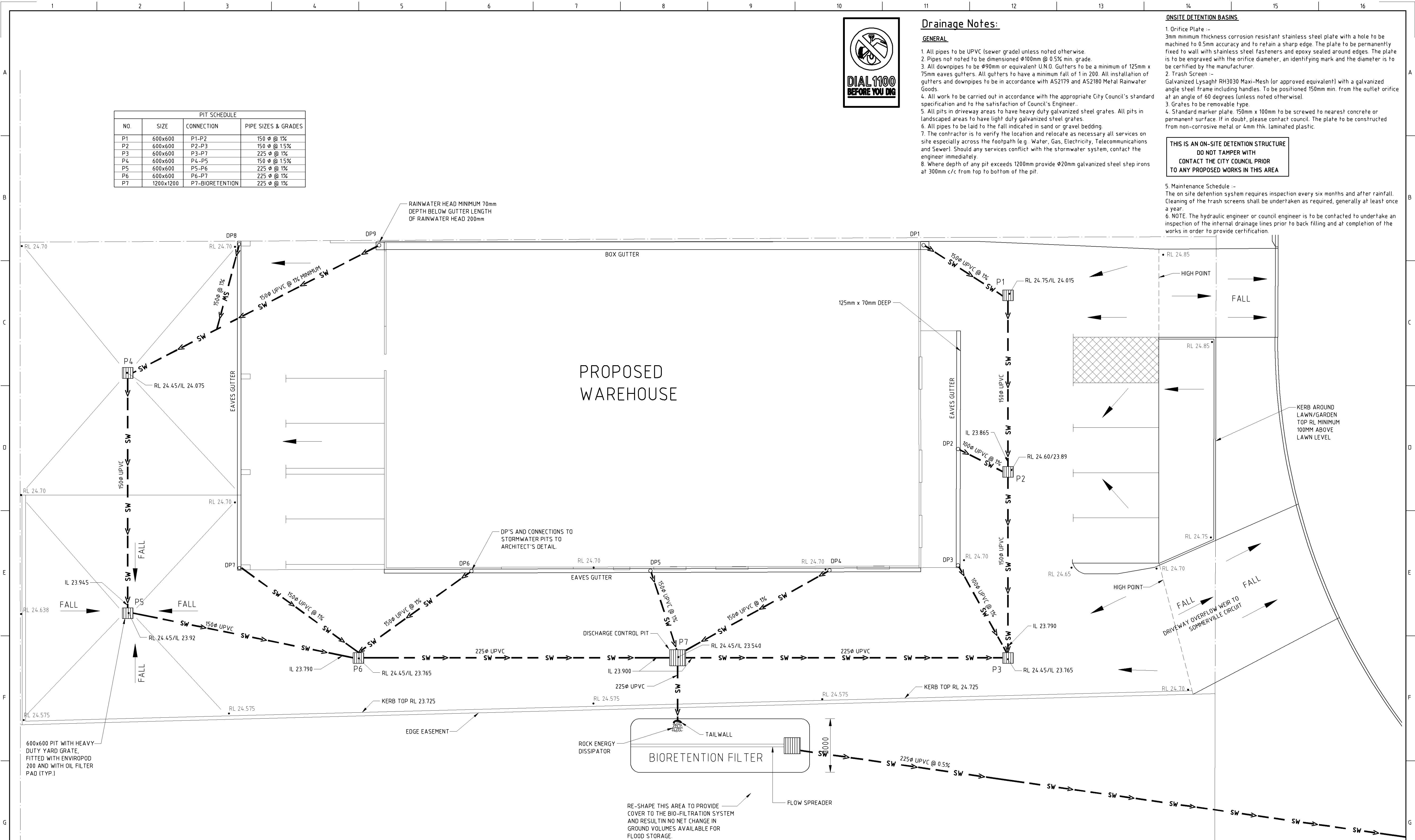
- All pipes to be UPVC (sewer grade) unless noted otherwise.
- Pipes not noted to be dimensioned  $\phi 100\text{mm}$  @ 0.5% min. grade.
- All downpipes to be  $\phi 90\text{mm}$  or equivalent U.N.O. Gutters to be a minimum of 125mm x 75mm eaves gutters. All gutters to have a minimum fall of 1 in 200. All installation of gutters and downpipes to be in accordance with AS2179 and AS2180 Metal Rainwater Goods.
- All work to be carried out in accordance with the appropriate City Council's standard specification and to the satisfaction of Council's Engineer.
- All pits in driveway areas to have heavy duty galvanized steel grates. All pits in landscaped areas to have light duty galvanized steel grates.
- All pipes to be laid to the fall indicated in sand or gravel bedding.
- The contractor is to verify the location and relocate as necessary all services on site especially across the footpath (e.g. Water, Gas, Electricity, Telecommunications and Sewer). Should any services conflict with the stormwater system, contact the engineer immediately.
- Where depth of any pit exceeds 1200mm provide  $\phi 200\text{mm}$  galvanized steel step irons at 300mm c/c from top to bottom of the pit.

**ONSITE DETENTION BASINS**

- Orifice Plate - 3mm minimum thickness corrosion resistant stainless steel plate with a hole to be machined to 0.5mm accuracy and to retain a sharp edge. The plate to be permanently fixed to wall with stainless steel fasteners and epoxy sealed around edges. The plate is to be engraved with the orifice diameter, an identifying mark and the diameter is to be certified by the manufacturer.
- Trash Screen - Galvanized Lysaght RH3030 Maxi-Mesh (or approved equivalent) with a galvanized angle steel frame including handles. To be positioned 150mm min. from the outlet orifice at an angle of 60 degrees (unless noted otherwise).
- Grates to be removable type.
- Standard marker plate. 150mm x 100mm to be screwed to nearest concrete or permanent surface. If in doubt, please contact council. The plate to be constructed from non-corrosive metal or 4mm thk laminated plastic.

**THIS IS AN ON-SITE DETENTION STRUCTURE  
DO NOT TAMPER WITH  
CONTACT THE CITY COUNCIL PRIOR  
TO ANY PROPOSED WORKS IN THIS AREA**

- Maintenance Schedule - The on site detention system requires inspection every six months and after rainfall. Cleaning of the trash screens shall be undertaken as required, generally at least once a year.
- NOTE. The hydraulic engineer or council engineer is to be contacted to undertake an inspection of the internal drainage lines prior to back filling and at completion of the works in order to provide certification.

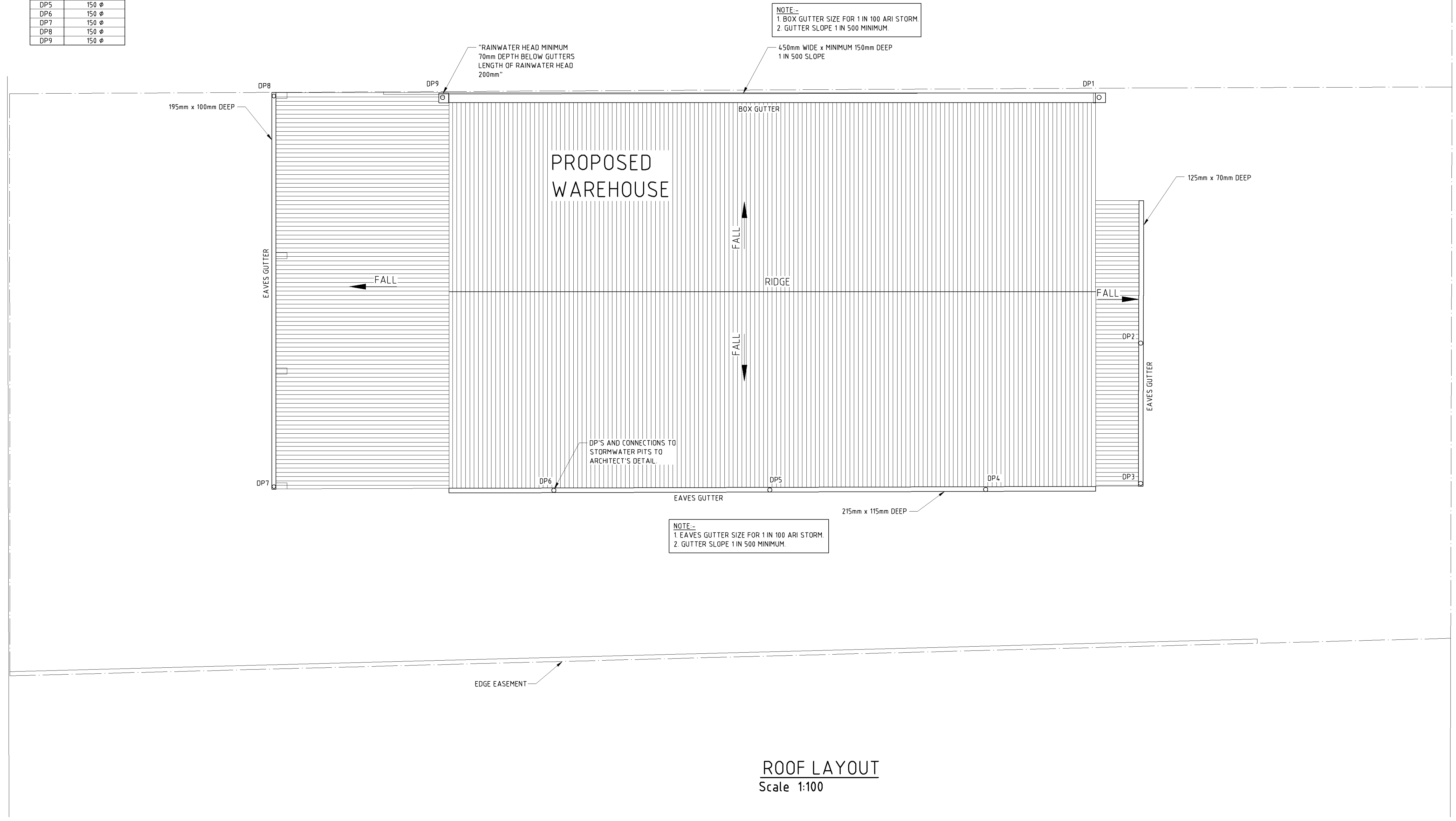


**Stormwater Drainage Concept Plan**  
Scale 1:100

<p><b>Note:</b></p> <p>The Contractor to verify all dimensions on site before commencing work. All figured dimensions given are to be taken in preference to scaling.</p>		<p><b>Copyright ©</b></p> <p>USE OF THESE DRAWINGS - The design and details shown on these drawings are applicable to this project only and may not be reproduced in whole or in part or be used for any other project or purpose without the written permission of WILLIAMS CONSULTING ENGINEERS AUSTRALIA P/L, with whom copyright resides.</p>		<p><b>Stormwater Drainage Concept Plan</b></p> <p>THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS SIGNED BY THE ENGINEER</p> <p>DESIGN INFORMATION</p> <p>RAINFALL <math>t_c = 5</math> mins 1 IN 100 ARI = 220mm/hour</p> <p>DATE: 05/10/2014</p>		<p><b>Proposed WAREHOUSE</b> at 33 SOMMERVILLE CIRCUIT, EMU PLAINS, NSW.</p>		<p>DESIGN BY: R.D.W.</p> <p>CHECKED: [Signature]</p> <p>SCALES: 1:100</p>		<p>DETAILS BY: GRN</p> <p>DRAWING No: 2014/128/SW1</p> <p>DATE: OCT 2014</p> <p>ISSUE: -</p>							
<p>AMENDMENTS</p> <table border="1"> <thead> <tr> <th>Issue</th> <th>Date</th> <th>Amendment</th> <th>Checked</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		Issue	Date	Amendment	Checked					<p>PAPER SIZE: <b>A1</b> PRINT SCALE: A1x100</p>		<p>PRINTED 10/10/2014</p> <p>PAPER SIZE: <b>A1</b> PRINT SCALE: A1x100</p>		<p><b>WILLIAMS CONSULTING ENGINEERS AUSTRALIA P/L.</b> CONSULTING CIVIL AND STRUCTURAL ENGINEERS.</p> <p>78 St. Johns Road, Blaxland, NSW. 2774      5000 Channel Highway, Gordon, T.A.S. 7150 Post Office Box 79, Blaxland, NSW. 2774      Post Office Box 79, Middleton, T.A.S. 7163 PHONE: 02-47395765      Mob: 0425307531      PHONE: 03-62921788 EMAIL: ralph@wcea.com.au      EMAIL: ralph@wcea.com.au</p>			
Issue	Date	Amendment	Checked														

NOTES:  
1. REFER TO NOTES ON DRAWING 2014/128/SW1.

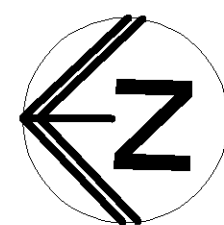
DP SCHEDULE	
NO.	SIZE
DP1	150 Ø
DP2	100 Ø
DP3	100 Ø
DP4	150 Ø
DP5	150 Ø
DP6	150 Ø
DP7	150 Ø
DP8	150 Ø
DP9	150 Ø



ROOF LAYOUT  
Scale 1:100

Issue	Date	Amendment	Checked
AMENDMENTS			


**Note:**  
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All figured dimensions given are to be taken in preference to scaling.

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PAPER SIZE  
**A1**  
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**Roof Layout**


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DESIGN INFORMATION  
RAINFALL t = 5 mins  
1 IN 100 ARI = 220mm/HOUR

PRINTED 10/10/2014

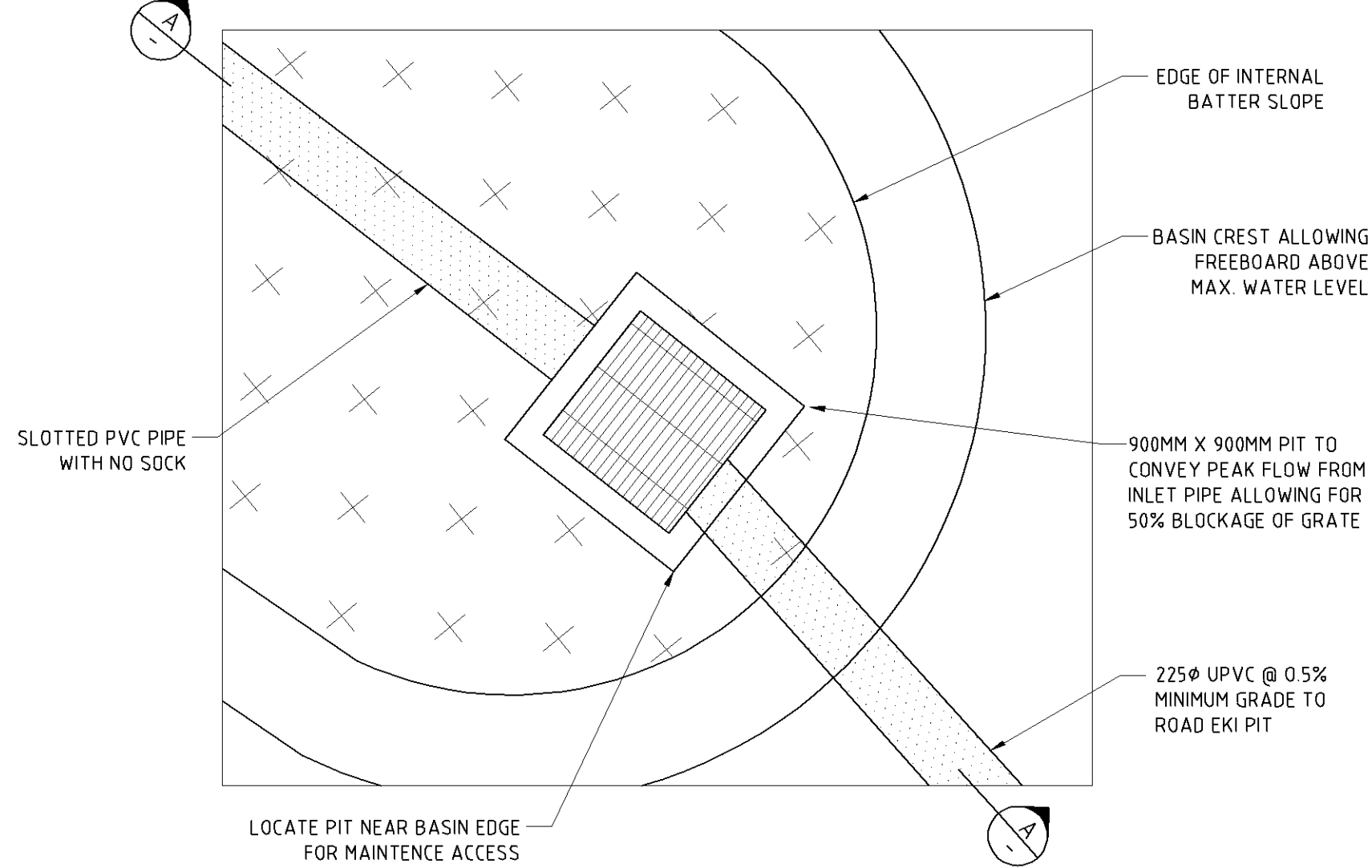
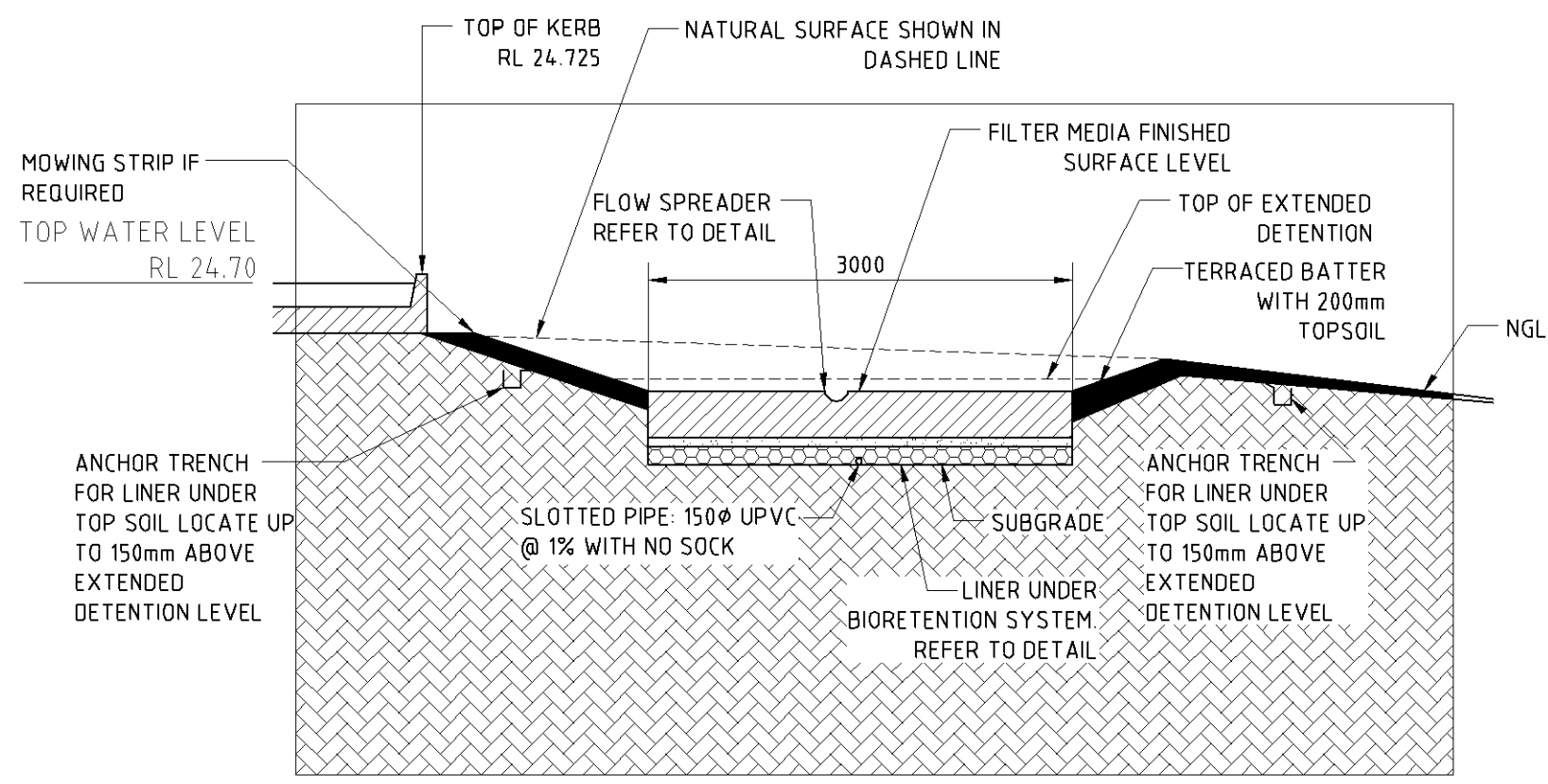
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PRINT SCALE A1 x 100

Proposed WAREHOUSE  
at 33 SOMMERVILLE CIRCUIT,  
EMU PLAINS, NSW.

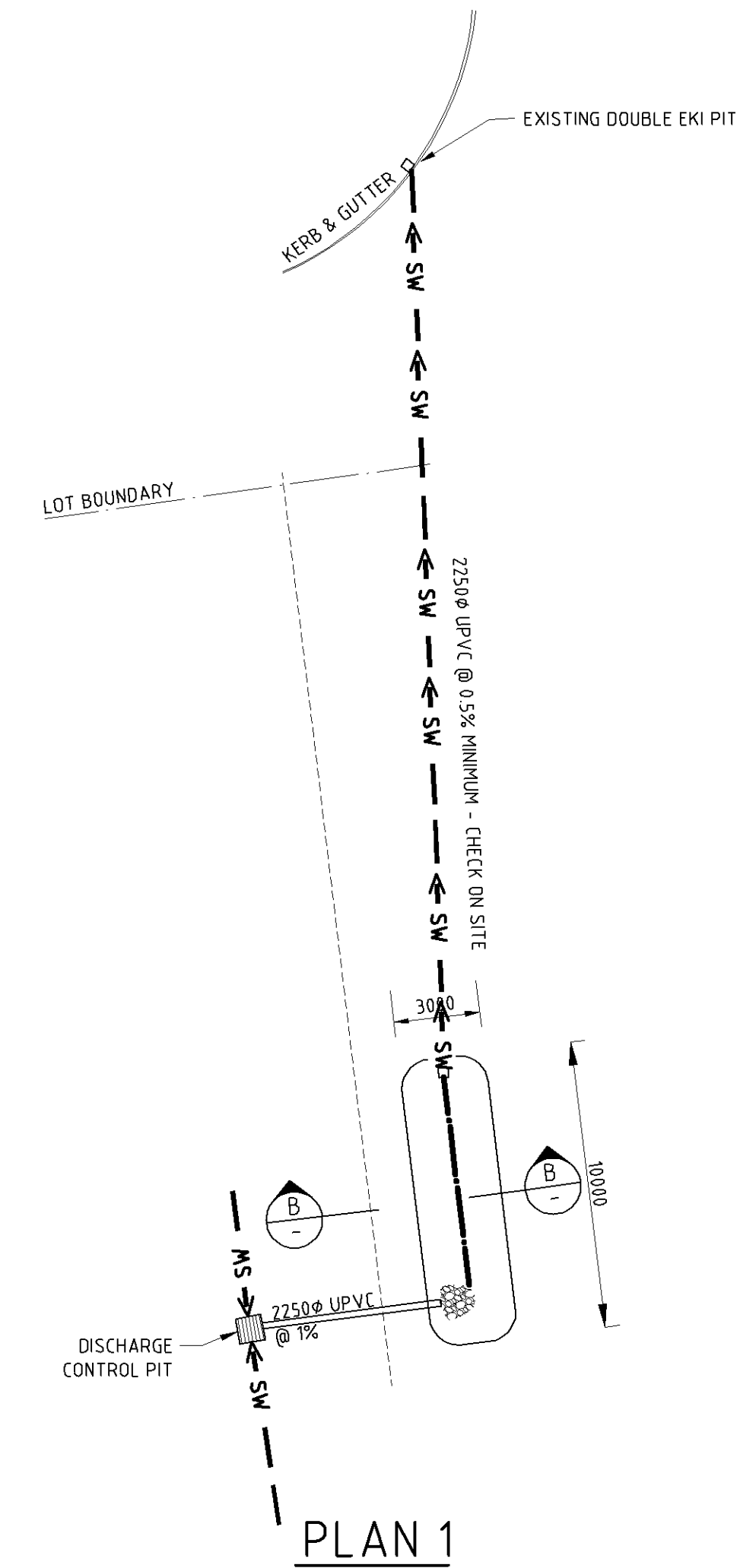
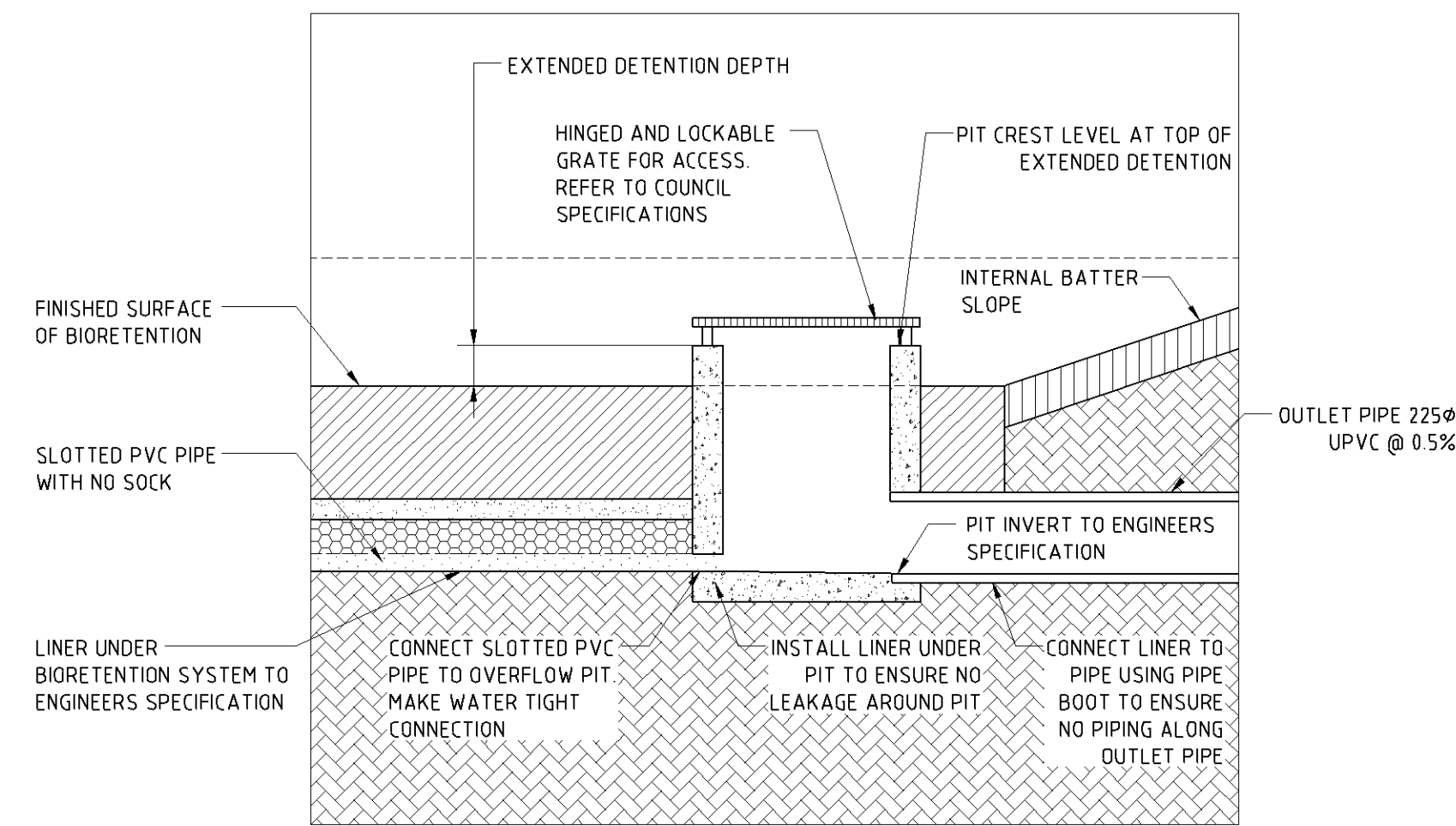
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CHECKED 	DRAWING No. <b>2014/128/SW2</b>
SCALES <b>1:100</b>	DATE <b>OCT 2014</b>
<b>WILLIAMS CONSULTING ENGINEERS AUSTRALIA P/L.</b> CONSULTING CIVIL AND STRUCTURAL ENGINEERS. 78 St. Johns Road, Blaxland, NSW. 2774    5000 Channel Highway, Gordon, T.A.S. 7150 Post Office Box 79, Blaxland, NSW. 2774    Post Office Box 79, Middleton, T.A.S. 7163 PHONE : 02-47395765    Mob : 0425307531    PHONE : 03-62921788 EMAIL : ralph@wcea.com.au    EMAIL : ralph@wcea.com.au	



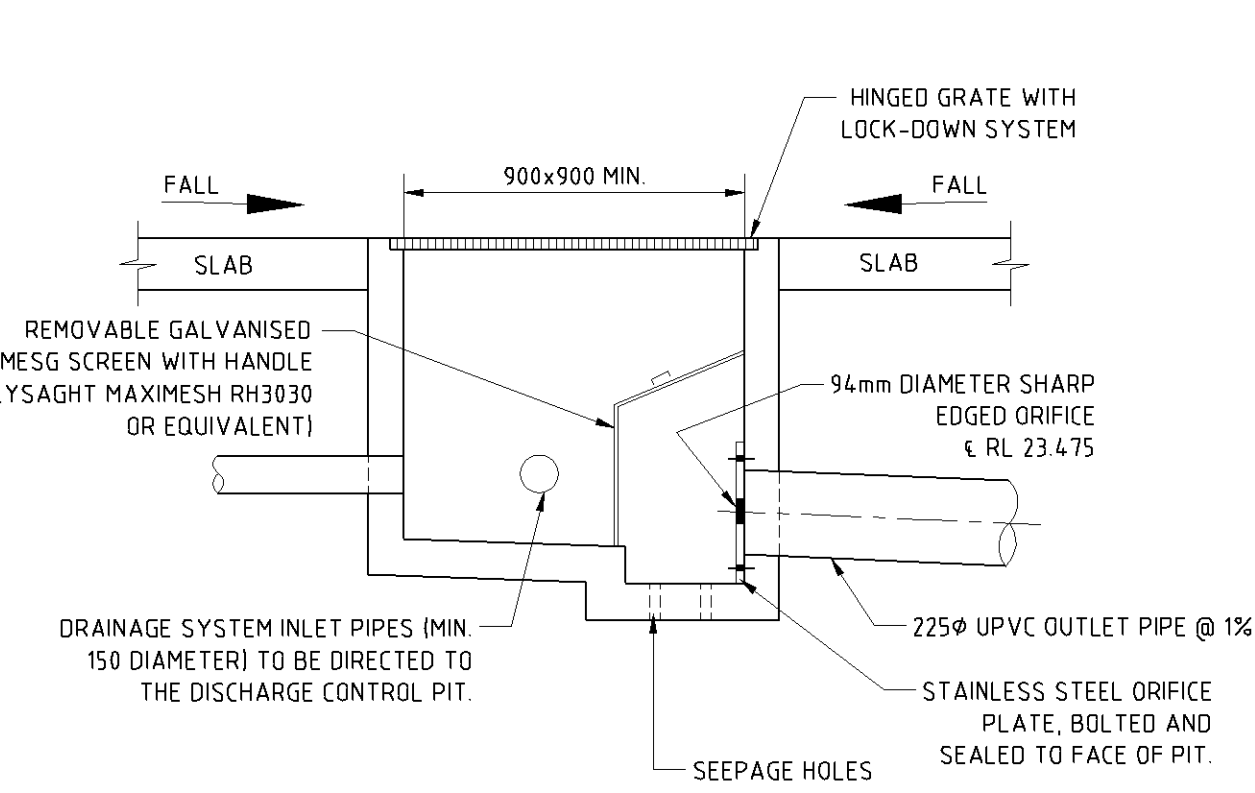
NOTES:  
1. REFER TO NOTES ON DRAWING 2014/128/SW1.



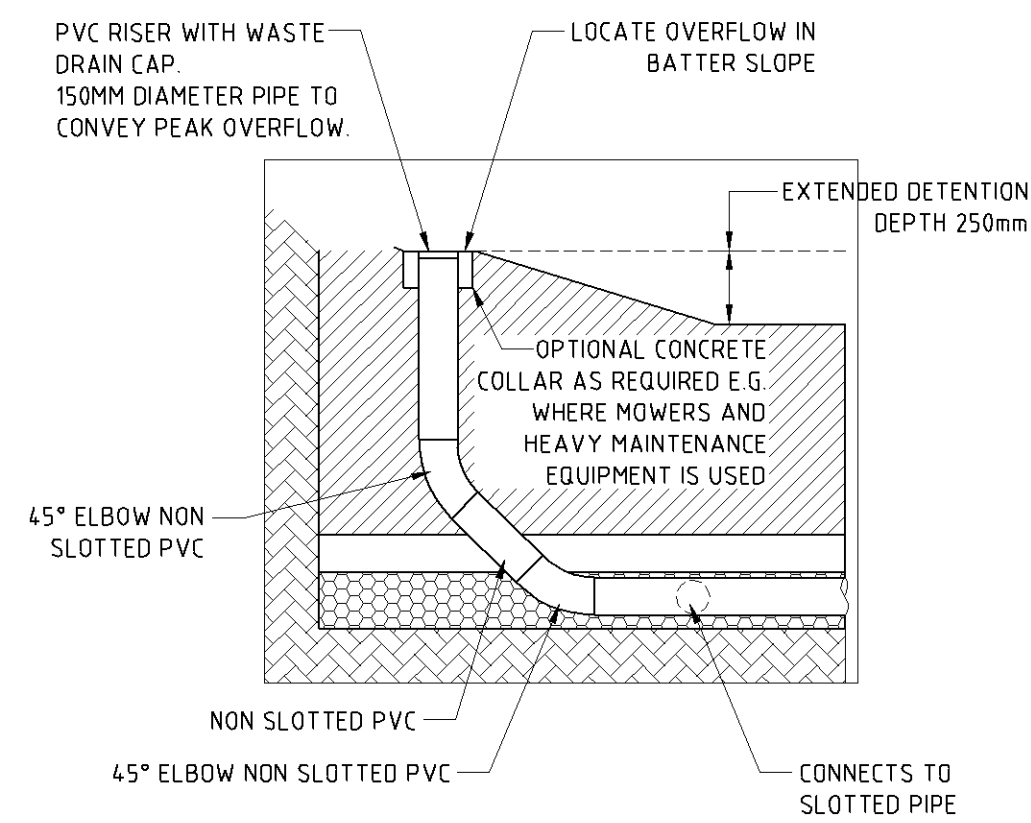
OVERFLOW PIT DETAIL  
Scale 1:50



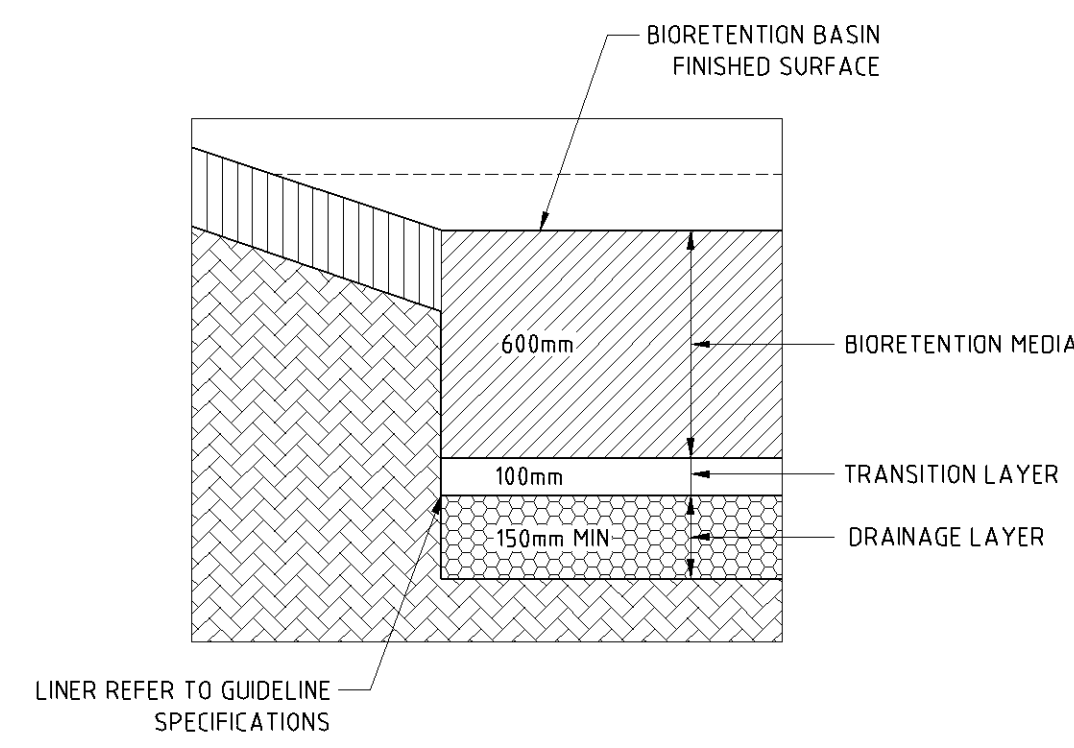
BIORETENTION CONNECTION TO COUNCIL DRAINAGE SYSTEM  
Scale 1:200



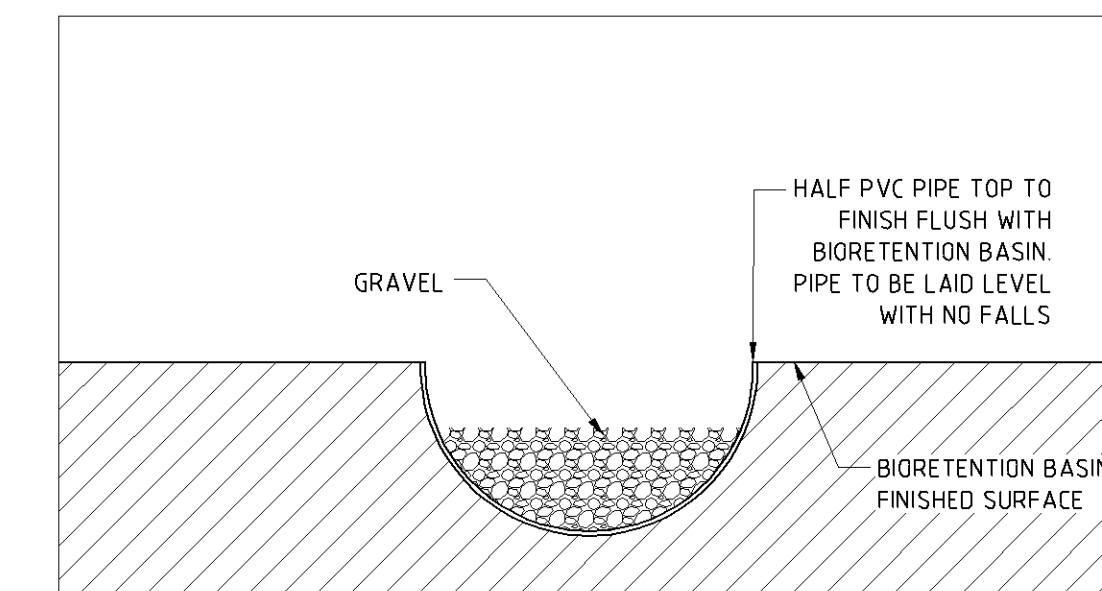
OSD DISCHARGE CONTROL PIT  
Scale 1:20



CLEANOUT PIPE DETAIL  
Scale NTS



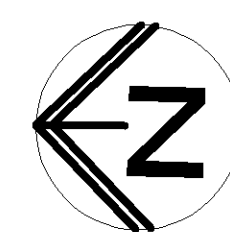
TYPICAL SOIL PROFILE  
Scale NTS



FLOW SPREADER  
Scale NTS

Note:

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Stormwater OSD Storage Sections and Details

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DESIGN INFORMATION

Proposed WAREHOUSE  
at 33 SOMMERVILLE CIRCUIT,  
EMU PLAINS, NSW.

DESIGN BY R.D.W.	DETAILS BY GRN
CHECKED <i>R.D.W.</i>	DRAWING No. 2014/128/SW3
SCALES AS SHOWN	DATE May 2014
	ISSUE -

WILLIAMS CONSULTING ENGINEERS AUSTRALIA P/L.  
CONSULTING CIVIL AND STRUCTURAL ENGINEERS.

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Issue	Date	Amendment	Checked
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