

# Stormwater Concept Drainage Plan

## Proposed Additions & Alterations

### No.52 Pitt Road, North Curl Curl

#### Drainage Design Notes:

- All stormwater pipes are to be P.V.C. sewer grade and shall be installed in accordance with AS3500 and council requirements.
- The roofwater drainage system has been designed for 1 in 20 years ARI 5 mins duration.
- All downpipes are to be 100 mm diameter or approved equivalent and sealed and glued joints.
- Leaf gutter guard or downpipe guard is recommended to be installed on all gutters/DP to minimize debris from entering the rainwater tank system.
- All DP and DPS shall be installed according to AS3500.3:2018 . Maximum roof area per downpipe for the nominated gutter site to be determined using manufactures specification with overflow provisions by installers.
- All stormwater drainage lines to be at minimum 1% grade unless noted otherwise on plan.
- General layout only, the builder is to verify all levels on the site prior to commencing construction.
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- Builder to ensure all drainage areas including balconies, parapets to have overflow mechanism in case of blockage with adequate overflow section through planters, parapets etc.
- All pits within the property area to be fitted with WELDLOK or approved equivalent grates in accordance to AS3996;
  - Light duty grate for landscaped area
  - Heavy duty grate where subjected to vehicular crossing.
- All fences shall be kept at least 100mm above the ground level to facilitate the free passage for stormwater overland flow.
- Minimum Pipe cover shall be as per council guidelines and as follows:

Location	Minimum Cover
-Not Subject to Vehicle Loading	100mm Single Residential
	300mm All Other Developments
-Subject to Vehicle Loading	450mm Where not in a Road
-Under a Sealed Road	600mm
-Unsealed Road	750mm
-Paved Driveway	100mm Plus Depth of Concrete

Please refer AS2032 for installation of UPVC pipes for further information.
- If the proposed drainage system is designed to connect to the council's existing drainage system, it is advised that the 'Work Permit' is to be obtained from the respective council before commencing any works on council's property.

#### Rainwater Tank Notes:

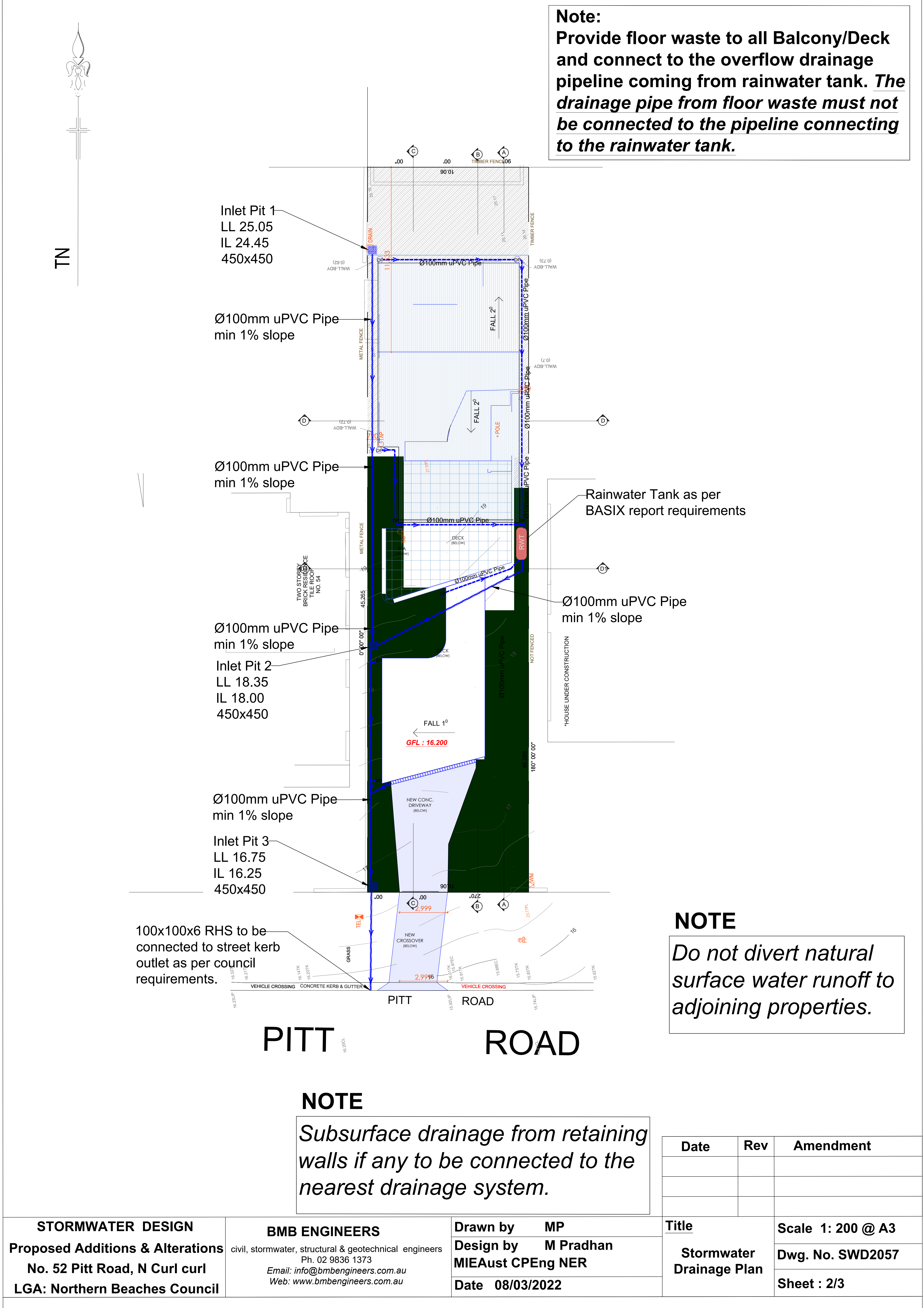
- The system to be installed with the following considerations:
  - A 'First Flush' diversion to remove roof contaminants,
  - Adequate screening to prevent mosquito breeding and entry of animal or floating matter.
- Tank to be plumbed to top-up the potable water supply during dry period when the tank is 80% empty.
- No direct cross-connection with the Sydney Water potable supply and and an air gap maintained above the overflow in the tank.
- A sign to be installed stating "Not for human consumption".
- Rain water tank to be connected as per BASIX requirements.
- Rainwater tank to be installed by a licensed plumber in accordance with AS3500 National Plumbing and Drainage Code, HB230 Rainwater Tank Design and Installation Handbook, other relevant codes and manufacture's specifications

*Only roof drainage pipeline to be connected to Rainwater Tank.*

SYMBOL	NOTATION
	Stormwater drainage line
	Roof water drainage line
	Downpipe
	Downpipe spreader
	Floor waste
	Grated pit
LL	Lid level
IL	Invert level
	Overland flow path
	Grated trench drain

Date	Rev	Amendment	<div>STORMWATER DESIGN</div> <div>Proposed Additions &amp; Alterations</div> <div>No. 52 Pitt Road, N Curl curl</div> <div>LGA: Northern Beaches Council</div>		<div>BMB ENGINEERS</div> <div>civil, stormwater, structural &amp; geotechnical engineers</div> <div>Ph. 02 9836 1373</div> <div>Email: info@bmbengineers.com.au</div> <div>Web: www.bmbengineers.com.au</div>	Design by M Pradhan	Title	Dwg. No. SWD2057
						MIEAust CPEng NER 		
						Date 08/03/2022	Stormwater General Notes	Sheet No. 1/3



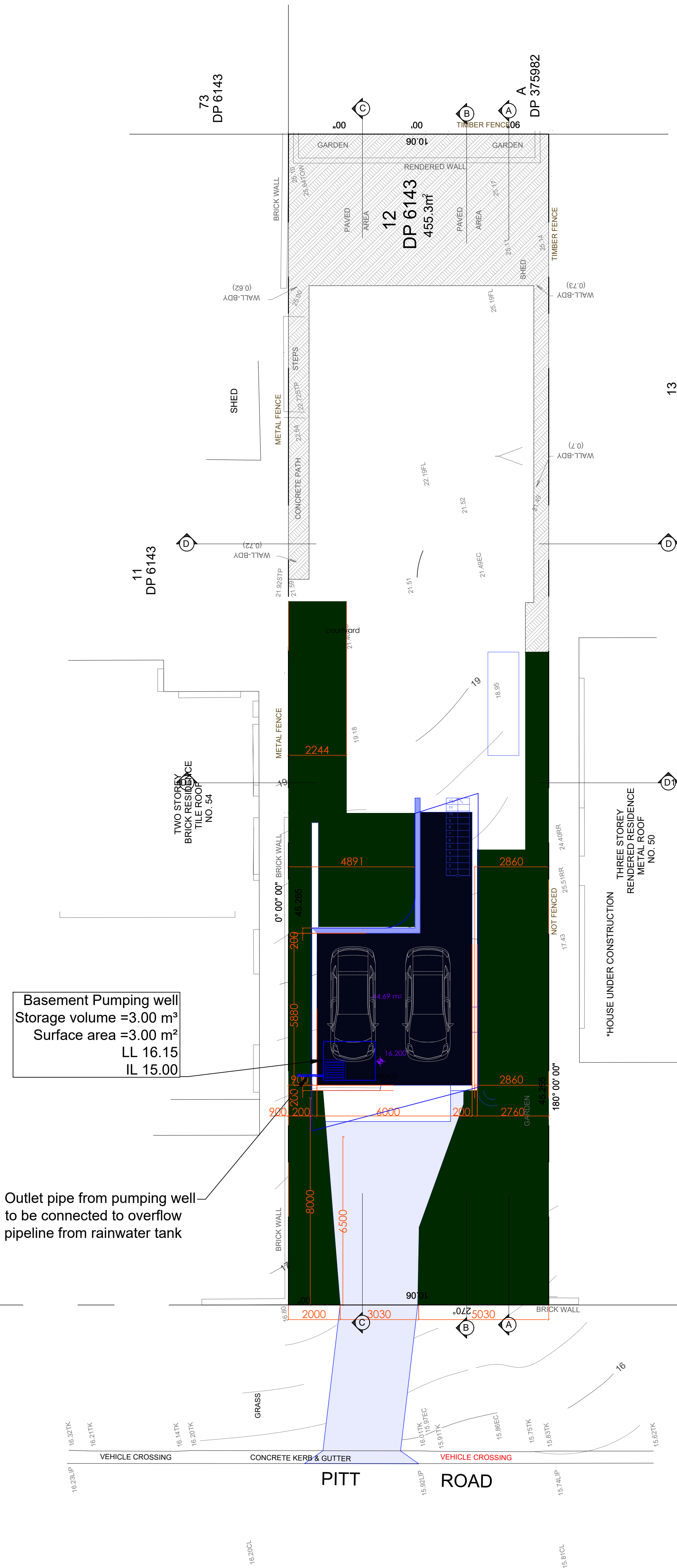


**Note:**  
Provide floor waste to all Balcony/Deck and connect to the overflow drainage pipeline coming from rainwater tank. The drainage pipe from floor waste must not be connected to the pipeline connecting to the rainwater tank.

**NOTE**  
*Do not divert natural surface water runoff to adjoining properties.*

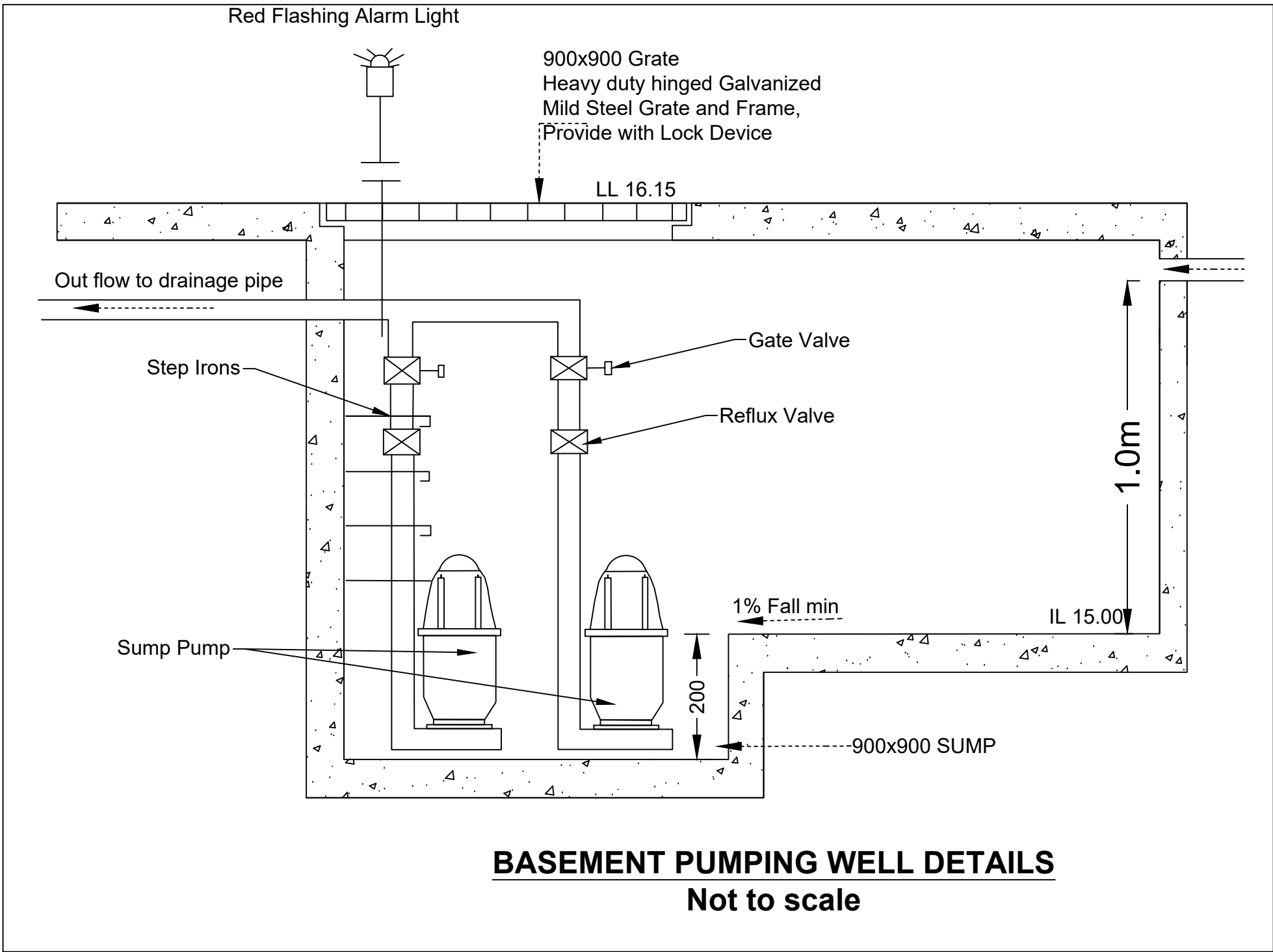
**NOTE**  
*Subsurface drainage from retaining walls if any to be connected to the nearest drainage system.*

<b>STORMWATER DESIGN</b> Proposed Additions & Alterations No. 52 Pitt Road, N Curl curl LGA: Northern Beaches Council	<b>BMB ENGINEERS</b> civil, stormwater, structural & geotechnical engineers Ph. 02 9836 1373 Email: info@bmbengineers.com.au Web: www.bmbengineers.com.au	Drawn by <b>MP</b> Design by <b>M Pradhan</b> <b>MIEAust CPEng NER</b> Date <b>08/03/2022</b>	Title		Scale <b>1: 200 @ A3</b>
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Basement Pumping well  
Storage volume =3.00 m<sup>3</sup>  
Surface area =3.00 m<sup>2</sup>  
LL 16.15  
IL 15.00

Outlet pipe from pumping well  
to be connected to overflow  
pipeline from rainwater tank



**BASEMENT PUMPING WELL DETAILS**  
Not to scale

- Note:**
- Provide child proof lock on tank access grates.
  - To be constructed as per structural engineering requirements.

**NOTE**

Structure design of pumping well tanks to be prepared by the qualified structure engineer.

**STORMWATER DESIGN**  
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**Drawn by MP**  
**Design by M Pradhan**  
**MIEAust CPEng NER**  
**Date 08/03/2022**

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<b>Title</b>		<b>Scale 1: 200 @ A3</b>
<b>Basement Stormwater Drainage Plan</b>		<b>Dwg. No. SWD2057</b>
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