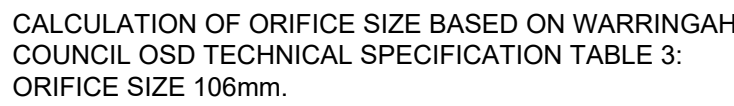
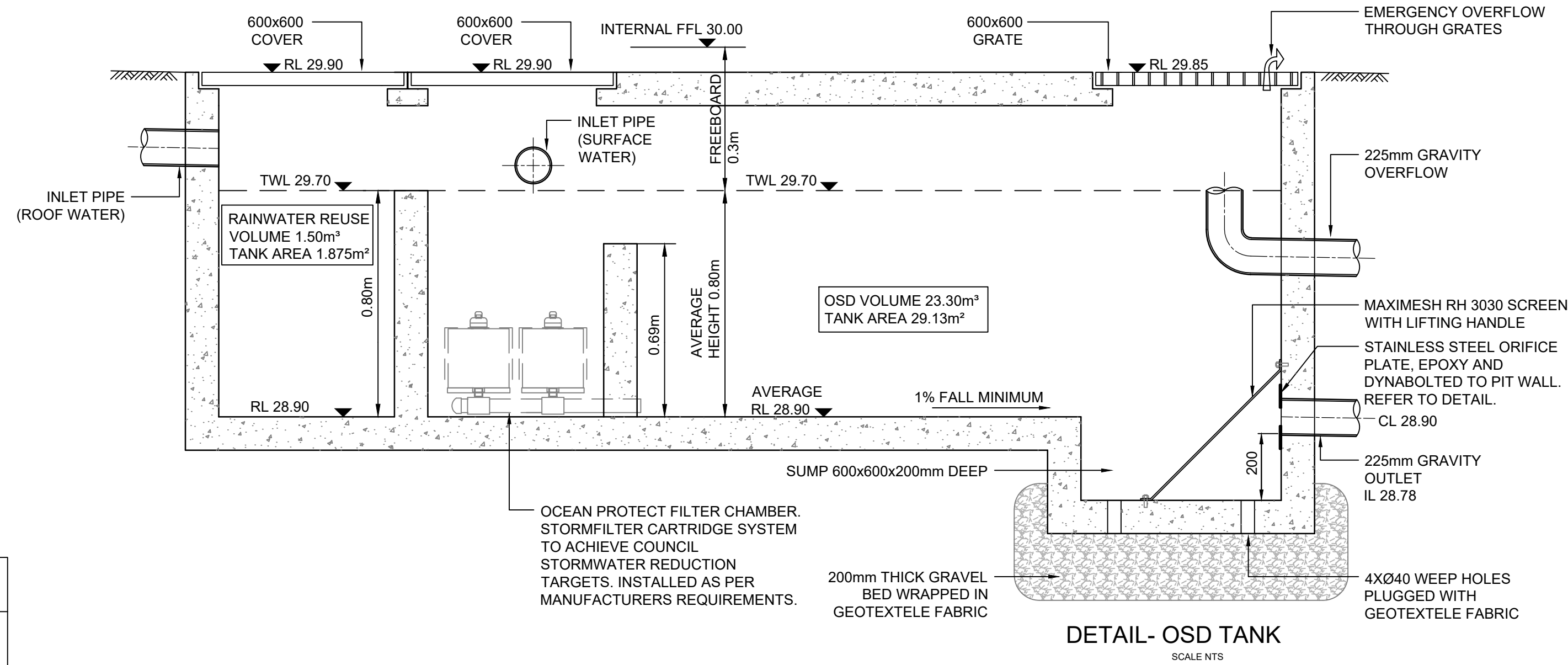


- CONFIRM LOCATION, SIZE, CONDITION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO COMMENCEMENT OF WORK.
2. ALL WORK TO BE IN ACCORDANCE WITH LOCAL AUTHORITIES REQUIREMENTS, BCA AND RELEVANT AUSTRALIAN STANDARDS (IN PARTICULARLY AS 3500)
3. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL AND OTHER CONSULTANTS DOCUMENTS. ALL DISCREPANCIES SHALL BE REFERRED TO THE PROJECT MANAGER BEFORE PROCEEDING WITH THE WORK.
4. LOCATION OF ALL DOWNPIPES, PITS AND PIPEWORK IS DIAGRAMMATIC ONLY. FINAL LOCATION TO BE CO-ORDINATED DURING CONSTRUCTION CERTIFICATE DOCUMENTATION.
5. ALL MATERIALS USED IN THE WORK SHALL BE NEW AND OF THE BEST QUALITY AND TYPE AVAILABLE TO CONFORM WITH THE RELEVANT AUSTRALIAN STANDARDS AND BEAR THE REQUIRED STANDARDS MARK AND WATERMARK.
6. MAKE ALL APPLICATIONS TO LOCAL COUNCIL. PAY ALL FEES AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS AS REQUIRED BY THE AUTHORITIES.
7. PIPEWORK UP TO 225mm DIAMETER SHALL BE UPVC DRAINAGE WASTE GRADE WITH SOLVENT WELDED JOINTS.
8. PIPEWORK SHALL BE LAID AT 1:100 MINIMUM GRADE UNLESS NOTED OTHERWISE. PIPEWORK MAY BE LAID AT STEEPER GRADES AS REQUIRED TO MEET COVER REQUIREMENTS OR AS NOMINATED BY PIPEWORK INVERT LEVELS.
9. SUBSOIL PIPEWORK SHALL BE INSTALLED AS REQUIRED, INCLUDING BEHIND ALL RETAINING STRUCTURES, PLANTERS AND WHERE GROUND WATER IS ENCOUNTERED. SHALL BE 90mm SLOTTED UPVC PIPE WRAPPED IN CLOTH SOCK AND SURROUNDED WITH 150mm THICKNESS OF 20mm DIAMETER BLUE METAL AND SURROUNDED IN GEOTEXTILE FABRIC.
10. ALL EXTERNAL LEVELS TO FALL AWAY FROM BUILDING. BUILDER TO ENSURE THRESHOLD REQUIREMENTS, OVERLAND FLOW PATHS TO BE MAINTAINED AROUND BUILDING TO PREVENT WATER INGRESS.
11. ALL LANDSCAPED AREAS LOCATED ABOVE CONCRETE SLABS TO BE EQUIPPED WITH DEDICATED OUTLET, WATERPROOFING MEMBRANE, DRAINAGE CELL AND GEOFABRIC.
12. SUBSOIL, UPLIFT PRESSURE, VERTICAL WALL DRAINAGE AND PIT CONSTRUCTION DETAILS TO BE CONFIRMED / CO-ORDINATED WITH STRUCTURAL AND GEOTECHNICAL ENGINEERS DURING CONSTRUCTION STAGE OF THE PROPOSED DEVELOPMENT.
13. ALL BALCONIES TO BE PROVIDED WITH SAFETY OVERFLOWS (FINAL LOCATION OF OVERFLOWS TO BE CONFIRMED BY ARCHITECT).



WARRINGAH COUNCIL OSD TECHNICAL SPECIFICATION APPENDIX 6- TABLE 2B (>60% IMP):	
SITE AREA: OSD SSR: PSD:	695.6m² 23.3m³ <u>21 L/sec</u>
RAINWATER TANK VOLUME (BASIX):	<u>1.5m³</u>

MINIMUM INTERNAL MEASUREMENTS:				
DEPTH TO BASE OF CHAMBER	RECTANGULAR		CIRCULAR	LADDER / STEP IRON
	WIDTH	LENGTH		
SMALLER THAN 600	450	450	600	NO
601 TO 900	600	600	900	NO
901 TO 1200	600	900	1050	NO
GREATER THAN 1200	900	900	1050	YES

MINIMUM INTERNAL MEASUREMENTS:				
DEPTH TO BASE OF CHAMBER	RECTANGULAR		CIRCULAR	LADDER / STEP IRON
	WIDTH	LENGTH		
SMALLER THAN 600	450	450	600	NO
601 TO 900	600	600	900	NO
901 TO 1200	600	900	1050	NO
GREATER THAN 1200	900	900	1050	YES

B	ISSUED FOR DA	17.11.2020
A	ISSUED FOR DA	12.11.2020
REV	DESCRIPTION	DATE

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PROJECT

67 PACIFIC PDE
DEE WHY NSW

DRAWING TITLE

**STORMWATER SERVICES
LEGEND, DETAILS &
CALCULATIONS**

	DISCIPLINE	ENGINEER	SCALE @ A1
	HYD	PC	NTS@A1 NTS@A3
	PROJECT No.	DRAWING No.	REVISION
	20-110	H-DA-00	B

STORMWATER DA DRAWING ONLY

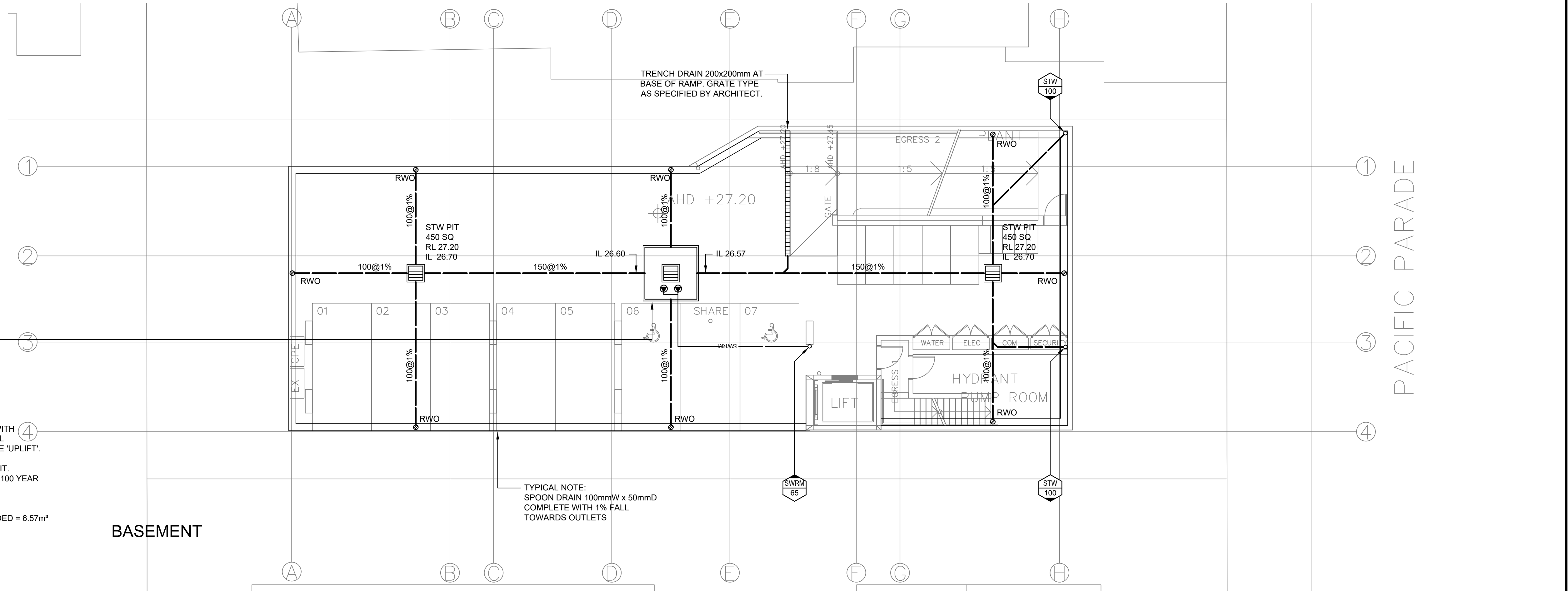
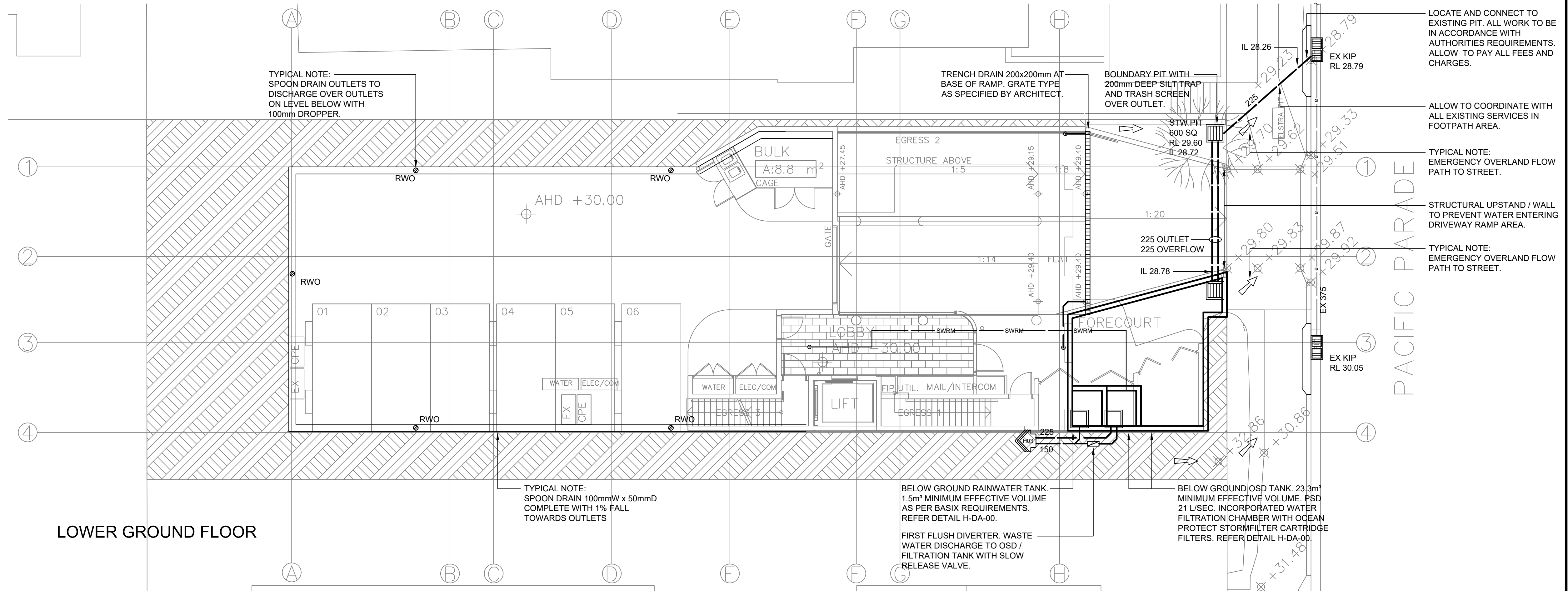
- NOT FOR CONSTRUCTION
- FINAL LOCATION OF ALL DOWNPIPES, PITS, RAINWATER OUTLETS AND SUBSOIL PIPES TO BE CONFIRMED

LANDSCAPING DRAINAGE

- ALL LANDSCAPED AREAS LOCATED ABOVE CONCRETE SLABS TO BE EQUIPPED WITH WATERPROOFING MEMBRANE, DRAINAGE CELL AND GEOFABRIC

GEOTECHNICAL & STRUCTURAL ADVICE

- CARPARK, SUBSOIL, UPLIFT PRESSURE, VERTICAL WALL DRAINAGE AND PIT CONSTRUCTION DETAILS TO BE CONFIRMED / CO-ORDINATED WITH STRUCTURAL AND GEOTECHNICAL ENGINEERS DURING CONSTRUCTION STAGE OF THE PROPOSED DEVELOPMENT



STORMWATER PUMP OUT PIT COMPLETE WITH:

- DUAL PUMPS- GRUNDFOS OR APPROVED EQUAL
- CLASS 'B' INLET / ACCESS GRATE (600x900mm)
- CONTROL PANEL
- AUDIBLE HIGH LEVEL ALARM
- FLOAT SWITCHES (ALTERNATE PUMP RUN)
- PUMP DUTY: 5.0 ltrs / sec @ 10mHEAD (EACH PUMP)
- 10.0 ltrs / sec MAX FLOW.

STORMWATER RISING MAIN DISCHARGE TO OSD TANK.

PIT MATERIAL / CONSTRUCTION TO BE CO - ORDINATED WITH STRUCTURAL & GEOTECHNICAL ENGINEERS. PAY SPECIAL ATTENTION TO GROUNDWATER PRESSURE AND POSSIBLE 'UPLIFT'.

PIT SIZE:

- 63mSQ 'OPEN TO THE SKY' ARE DISCHARGING TO THE PIT.
- BELOW GROUND STORAGE REQUIRED = 5.85m³ (2 HOUR 100 YEAR ARI STORM EVENT)
- ASSUMED SEEPAGE INFLOW RATE = 0.1 ltrs / sec (TO BE VERIFIED DURING CONSTRUCTION)
- MINIMUM EFFECTIVE BELOW GROUND STORAGE PROVIDED = 6.57m³

REV	DESCRIPTION	DATE
B	ISSUED FOR DA	17.11.2020
A	ISSUED FOR DA	12.11.2020

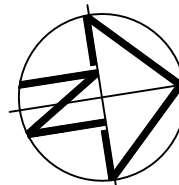
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ARCHITECT
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PROJECT
67 PACIFIC PDE
DEE WHY NSW

DRAWING TITLE
STORMWATER SERVICES
BASEMENT & LOWER
GROUND FLOOR PLAN



DISCIPLINE	ENGINEER	SCALE @ A1
HYD	PC	1:100@A1 1:200@A3
PROJECT No.	DRAWING No.	REVISION
20-110	H-DA-02	B

STORMWATER DA DRAWING ONLY

- NOT FOR CONSTRUCTION
- FINAL LOCATION OF ALL DOWNPIPES, PITS, RAINWATER OUTLETS AND SUBSOIL PIPES TO BE CONFIRMED

LANDSCAPING DRAINAGE

- ALL LANDSCAPED AREAS LOCATED ABOVE CONCRETE SLABS TO BE EQUIPPED WITH WATERPROOFING MEMBRANE, DRAINAGE CELL AND GEOFABRIC

GEOTECHNICAL & STRUCTURAL ADVICE

- CARPARK, SUBSOIL, UPLIFT PRESSURE, VERTICAL WALL DRAINAGE AND PIT CONSTRUCTION DETAILS TO BE CONFIRMED / CO-ORDINATED WITH STRUCTURAL AND GEOTECHNICAL ENGINEERS DURING CONSTRUCTION STAGE OF THE PROPOSED DEVELOPMENT

TYPICAL NOTE:
SUBSOIL DRAINAGE TO ALL PLANTERS
AND BEHIND ALL RETAINING
STRUCTURES AS REQUIRED.

LANDSCAPE / RETAINING WALL TO
DIVERT ANY UPSTREAM OVERLAND
FLOW AROUND THE PROPOSED
DEVELOPMENT.

TRENCH DRAIN 100x100mm.
GRATE TYPE AS SPECIFIED
BY ARCHITECT.

ROOF AND UPPER LEVEL STORMWATER
DRAINAGE TO BE DOCUMENTED DURING CC
DESIGN STAGE. MINIMUM 200mSQ OF ROOF
AREA TO DRAIN TO RAINWATER REUSE TANK
AS PER BASIX REQUIREMENTS.

OVERFLOW PROVISION TO
SPOON DRAIN BELOW.

LEVEL 1

ROOF AND UPPER LEVEL STORMWATER
DRAINAGE TO BE DOCUMENTED DURING CC
DESIGN STAGE. MINIMUM 200mSQ OF ROOF
AREA TO DRAIN TO RAINWATER REUSE TANK
AS PER BASIX REQUIREMENTS.

TYPICAL NOTE:
SPOON DRAIN 600mm WIDE.
COMPLETE WITH 1% FALL
TOWARDS OUTLETS.

UPPER GROUND FLOOR

REV	DESCRIPTION	DATE
B	ISSUED FOR DA	17.11.2020
A	ISSUED FOR DA	12.11.2020

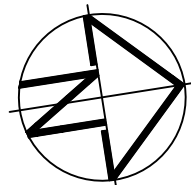
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PROJECT
**67 PACIFIC PDE
DEE WHY NSW**

DRAWING TITLE
**STORMWATER SERVICES
UPPER GROUND FLOOR &
LEVEL 1 PLAN**



DISCIPLINE	ENGINEER	SCALE @ A1
HYD	PC	1:100@A1 1:200@A3
PROJECT No.	DRAWING No.	REVISION
20-110	H-DA-03	B