


STORMWATER DRAINAGE NOTES:

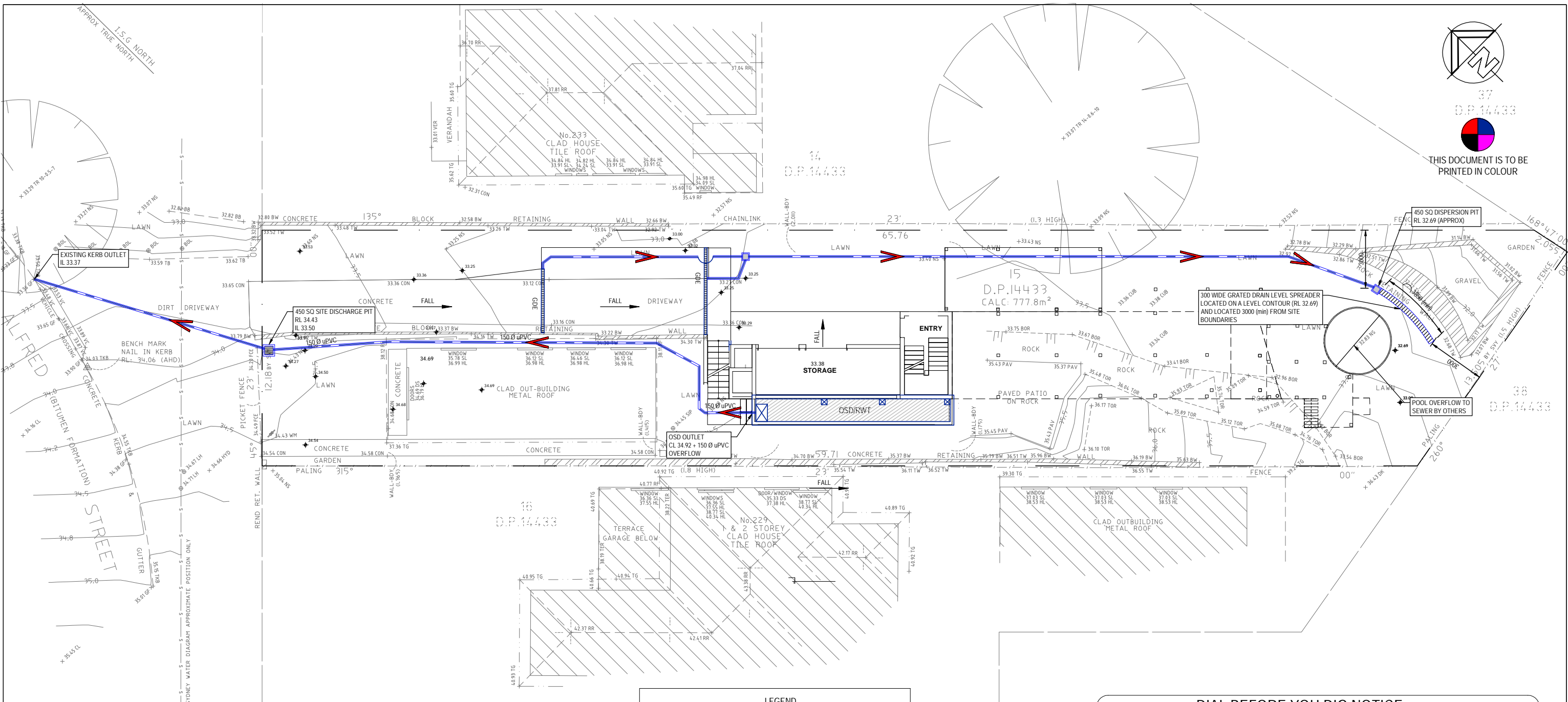
- ALL PIPES TO BE 100mm Ø uPVC, LAID AT 1% MINIMUM GRADE TO AS1254.2002 U.N.O.
- ALL PIPES SHALL BE LAID ON A 75mm SAND BED, COMPACTED TO 100% S.M.D.D BELOW PAVEMENTS. (NO COMPACTION IS REQUIRED BELOW LANDSCAPING).
- COVER TO SURFACE FROM TOP OF PIPE TO BE 300mm MINIMUM. BACKFILL TO BE ADEQUATELY CONSOLIDATED AROUND PIPES BY METHOD OF RAMMING AND WATERING IN. TRENCHES TO BE FILLED WITH GRANULAR MATERIAL AS SPECIFIED.
- DOWNPIPE LOCATIONS ARE INDICATIVE ONLY. LOCATIONS TO BE CONFIRMED WITH ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- PROVIDE CLEANING EYES AND LEAF CATCHERS TO ALL DOWNPIPES.
- ALL WORK TO BE IN ACCORDANCE WITH LOCAL COUNCIL STANDARDS AND SPECIFICATIONS.
- ALL LEVELS SHOWN ARE TO AHD.
- ENSURE THAT ALL PITS AND STORMWATER PIPES ARE LOCATED CLEAR FROM TREE ROOT SYSTEMS.
- ALL EXISTING EARTHENWARE PIPES TO BE UPGRADED TO uPVC.
- ALL WORKS TO BE IN ACCORDANCE WITH AS3500.3-2003 NATIONAL PLUMBING AND DRAINAGE CODE PART 3 - STORMWATER DRAINAGE.
- SUBSOIL DRAINS ARE TO BE INSTALLED IN ACCORDANCE WITH AS3500.3 ALONGSIDE WALLS THAT IMPEDE THE NATURAL FLOW OF GROUNDWATER. THIS MAY ALSO INVOLVE TRENCHING INTO THE CLAY OR ROCK SUBGRADE TO DIRECT GROUNDWATER AWAY FROM STRUCTURES.
- EXISTING ROOF DRAINAGE AND SITE DRAINAGE SYSTEM TO BE CHECKED AND UPGRADED AS REQUIRED. BUILDER TO INSPECT AND UPGRADE DRAINAGE IN ACCORDANCE WITH AS3500.3 IF REQUIRED.

RAINWATER STORAGE / REUSE NOTES:

- THE RAINWATER TANK IS TO BE INSTALLED AND USED AS PER BASIX REQUIREMENTS AND SYDNEY WATER AND NSW HEALTH REQUIREMENTS FOR NON DRINKING USE ONLY.
- ALL CONNECTIONS TO PLUMBING AND RAINWATER TANKS IS TO BE IN ACCORDANCE WITH SYDNEY WATERS 'GUIDE TO INSTALLING A RAINWATER TANK' AVAILABLE AT: WWW.SYDNEYWATER.COM.AU.
- PROVIDE DUAL SUPPLY SYSTEM AND BACKFLOW PREVENTION SYSTEM IN ACCORDANCE WITH 'BASIX - DESIGN GUIDE FOR SINGLE DWELLINGS' BY NSW DEPARTMENT OF INFRASTRUCTURE, PLANNING AND NATURAL RESOURCES.
- IF NOT SPECIFIED ON PLANS, THE FIRST FLUSH SYSTEM IS TO HAVE A MINIMUM SIZE OF 20L PER 100 m2 OF ROOF CATCHMENT AREA PRIOR TO ENTERING THE RAINWATER TANK. INDIVIDUAL SITE ANALYSIS IS REQUIRED IN HEAVILY POLLUTED AREAS TO DETERMINE IF LARGER VOLUMES OF FIRST FLUSH RAINWATER ARE TO BE DIVERTED. IF IN DOUBT, CHECK WITH LOCAL HEALTH AUTHORITIES.
- SCREENED DOWNPIPE RAINWATER HEAD OR OTHER SUITABLE LEAF AND DEBRIS DEVICE TO BE INSTALLED ON EACH DOWNPIPE. SCREEN MESH TO BE 4-6mm AND DESIGNED TO BE SELF-CLEANING.
- FIRST FLUSH DEVIDED, OR APPROVED ALTERNATIVE TO BE INSTALLED WITH AND AUTOMATED DIVERSION AND DRAINAGE SYSTEM, THAT IS, NO MANUAL DIVERSION AND DRAINAGE VALVES. REFER TYPICAL FLUSH OUT PIT FOR DETAILS.
- BEFORE PURCHASING MATERIALS OR PAINT TO BE USED ON ROOF CATCHMENT AREAS, THE MANUFACTURER'S RECOMMENDATIONS ON LABELS AND BROCHURES FOR RAINWATER TANK SUITABILITY TO BE READ AND ADHERED TO.
- BUILDER/PLUMBER TO ENSURE THE INSTALLATION OF THE RAINWATER TANK SYSTEM IS IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND THE RAINWATER TANK DESIGN AND INSTALLATION HANDBOOK - HB 230- 2008. IF IN DOUBT CONTACT ENGINEER.
- RAINWATER TANK TO BE WATERPROOFED IN ACCORDANCE WITH HB-230-2008.
- ORIFICE PLATE (IF APPLICABLE) TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE ROOF DRAINAGE SYSTEM AND CONNECTION OF THE STORMWATER SYSTEM TO THE OSD TANK.

SITE INFORMATION SUMMARY	
COUNCIL	NORTHERN BEACHES (REGION 2)
SITE AREA	777.8 m ²
EXISTING IMPERVIOUS AREA	302 m ² (39%)
PROPOSED IMPERVIOUS AREA	445 m ² (58%)
INCREASE	143 m ²
SINCE THE PROPOSED NEW DEVELOPMENT IMPERVIOUS AREA EXCEEDS 40% OSD IS REQUIRED. STREAMLINED METHOD OSD COMPUTATION SUMMARY PROVIDED BELOW	
SSR	15.56 m ³
PSD	31 l/s
BASIX RAINWATER STORAGE REQUIRED	7.78 m ³ (REFER BASIX)
OSD OFFSET APPLIED	7.78 m ³ (50% OSD VOLUME)
REVISED OSD VOLUME (AFTER OFFSET)	7.78 m ³ (7.96 m ³ PROVIDED)

			Client BOLT		Project 231 ALFRED STREET CROMER		Designed CH	26/11/24	
						Checked CH	Approved CH	Scale 1 : 200	
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24	Architect / Designer SUE CONNOR ARCHITECT			Title GENERAL NOTES	Drawing number SW01	Job number 2024088	Revision C
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24							
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24							
	AMENDMENT	DATE	PO BOX: 1510, DEE WHY ABN - 90 645 409 801	APPROVED CONSULTING ENGINEERS					




NOTE: SUBSOIL DRAINAGE IS NOT SHOWN FOR DA SUBMISSION.








NOTE: ALL DRAINAGE LINES SHOWN ARE INDICATIVE ONLY. LOCATION MAY VARY ON SITE DUE TO CONSTRAINTS

SITE DRAINAGE AND OSD OUTLET PLAN


SCALE 1:200

			Client		Project	231 ALFRED STREET CROMER		Designed	26/11/24
							Checked	Approved	Scale
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24	Architect / Designer			SUE CONNOR ARCHITECT	CH	CH	1 : 200
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24							
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24							
	AMENDMENT	DATE	PO BOX: 1510, DEE WHY ABN - 90 645 409 801			Title	SITE DRAINAGE PLAN	Drawing number	Job number
			APPROVED CONSULTING ENGINEERS						

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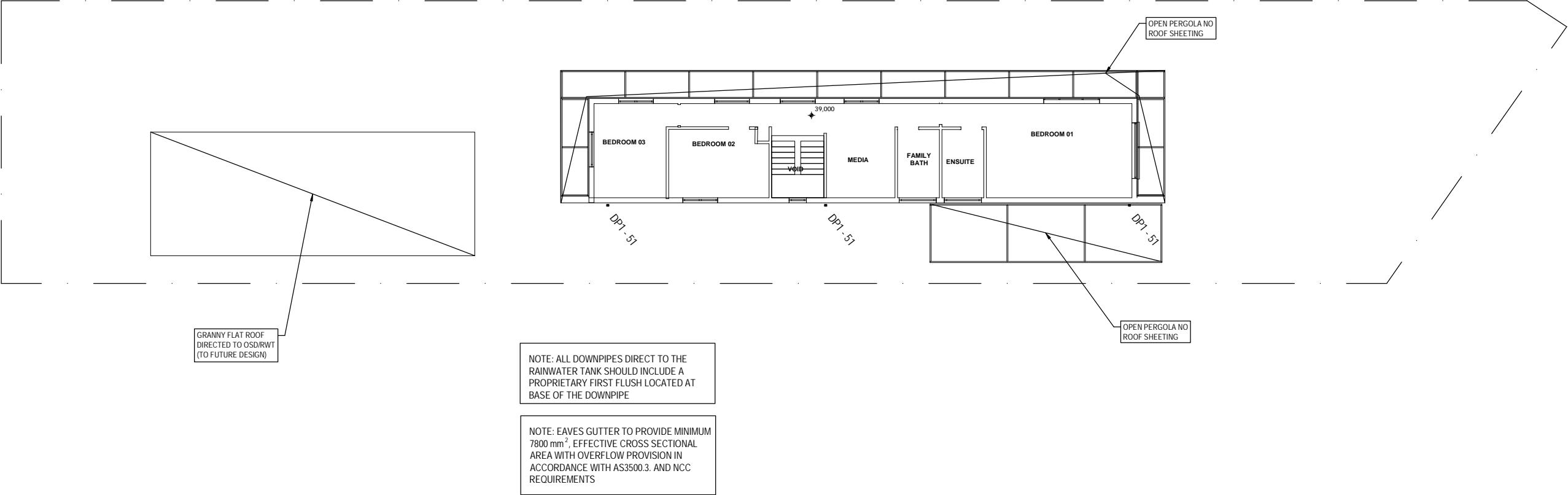
LEGEND	
DP1 - xxx 	DP1 - 100 x 50 RHS DOWNPIPE TO OSD/RWT xxx - ROOF CATCHMENT AREA TO DOWNPIPE
EDP 	EXISTING DOWNPIPE. LOCATION APPROXIMATE
SP 	DENOTES SPREADER PIPE TO ROOF BELOW
 FALL	SURFACE TO FALL IN DIRECTION INDICATED BY ARROW (1% MINIMUM FALL)
	GRAVITY LINE PROVIDE 1% (MIN) FALL IN DIRECTION INDICATED, UNO.
 GDE	150 (W) CAST INSITU GRATED DRAIN
	100mm Ø uPVC STORMWATER PIPELINE, UNO
SS	PIPELINE STRAPPED TO SOFFIT OF STRUCTURE BELOW IN ACCORDANCE WITH AS3500.3 AND AS2300. PROVIDE 1% (min) FALL IN DIRECTION INDICATED BY ARROW

SCALE 1:200

			<div>Client</div> <div>BOLT</div> <div>Architect / Designer</div> <div>SUE CONNOR ARCHITECT</div> <div>PO BOX: 1510, DEE WHY ABN - 90 645 409 801</div>	<div></div> <div>APPROVED CONSULTING ENGINEERS</div>	Project	231 ALFRED STREET CROMER			Designed CH	26/11/24
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24				Checked CH	Approved CH	Scale 1 : 200		
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24			Title	GARAGE LEVEL DRAINAGE PLAN		Drawing number	Job number	Revision
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24				SW03	2024088	C		
	AMENDMENT	DATE								




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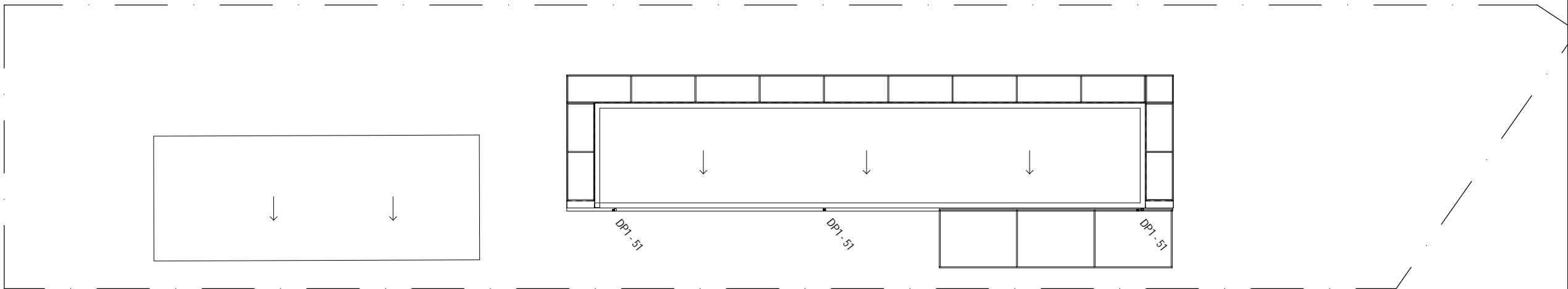


LEGEND	
DP1 - xxx ●	DP1 - 100 x 50 RHS DOWNPIPE TO OSD/RWT xxx - ROOF CATCHMENT AREA TO DOWNPIPE
EDP ●	EXISTING DOWNPIPE. LOCATION APPROXIMATE
SP ●	DENOTES SPREADER PIPE TO ROOF BELOW
←	ARROW INDICATES DIRECTION OF ROOF SLOPE. REFER ARCHITECTURAL PLANS FOR ROOF PITCH SURFACE TO FALL IN DIRECTION INDICATED BY ARROW (1% MINIMUM FALL)
← FALL	

LOWER ROOF DRAINAGE PLAN


SCALE 1:200

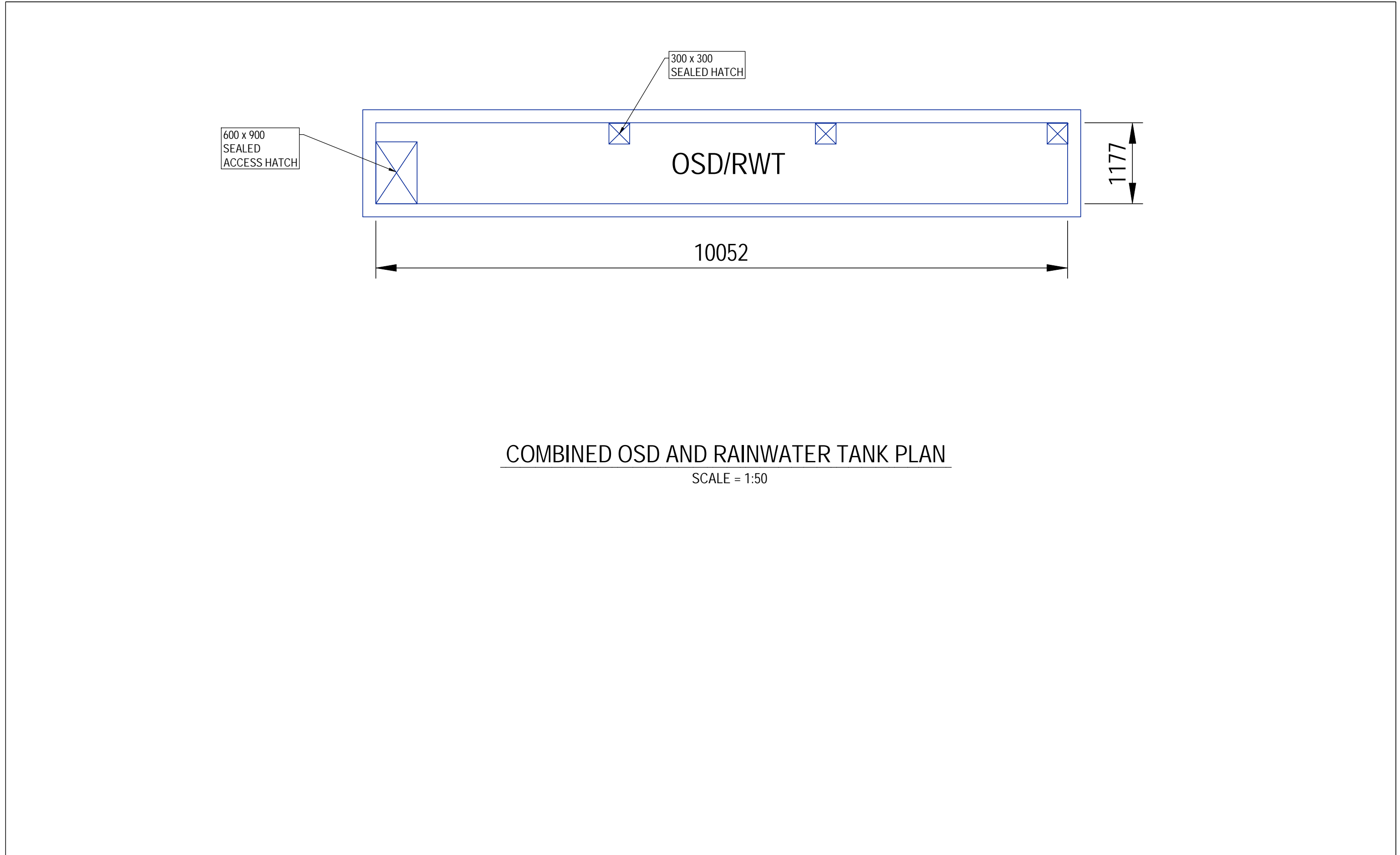
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			BOLT				Checked CH	Approved CH	Scale 1 : 200
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B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24	SUE CONNOR ARCHITECT						
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24	PO BOX: 1510, DEE WHY ABN - 90 645 409 801						
		AMENDMENT	DATE						



NOTE: EAVES GUTTER TO PROVIDE MINIMUM 7800 mm², EFFECTIVE CROSS SECTIONAL AREA WITH OVERFLOW PROVISION IN ACCORDANCE WITH AS3500.3. AND NCC REQUIREMENTS


ROOF DRAINAGE PLAN

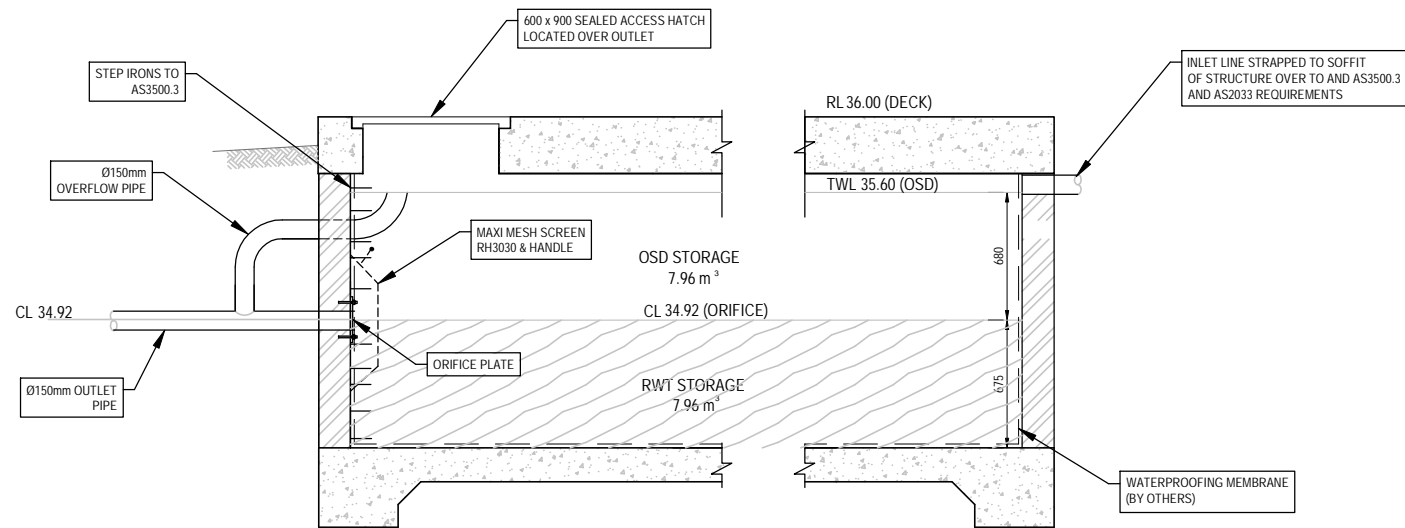
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						Checked CH	Approved CH	Scale 1 : 200	
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24	Architect / Designer		SUE CONNOR ARCHITECT PO BOX: 1510, DEE WHY ABN - 90 645 409 801	Title ROOF DRAINAGE PLAN	Drawing number SW05	Job number 2024088	Revision C
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24							
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24							
	AMENDMENT	DATE							



COMBINED OSD AND RAINWATER TANK PLAN

SCALE = 1:50

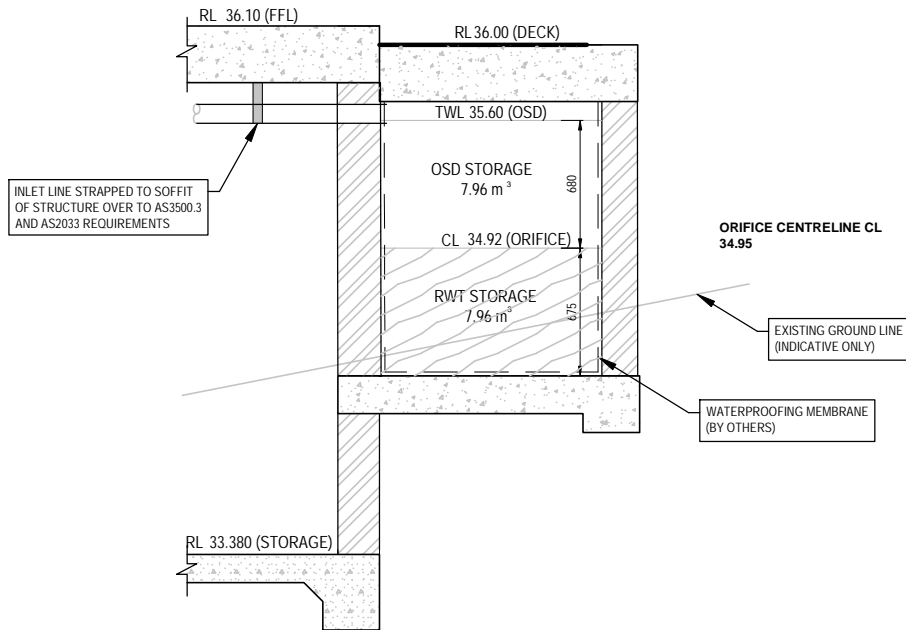
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			BOLT				Checked CH	Approved CH	Scale 1 : 200	
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24	Architect / Designer		SUE CONNOR ARCHITECT	Title	DETAILS	Drawing number SW06	Job number 2024088	Revision C
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24								
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24								
	AMENDMENT	DATE	PO BOX: 1510, DEE WHY ABN - 90 645 409 801							



NOTE: TANK STRUCTURE TO STRUCTURAL ENGINEERS DESIGN

TYPICAL ON SITE DETENTION TANK LONGSECTION DETAIL

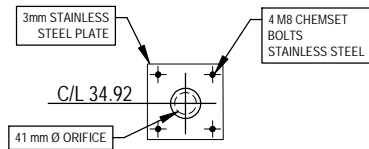
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NOTE: TANK STRUCTURE TO STRUCTURAL ENGINEERS DESIGN

TYPICAL ON SITE DETENTION TANK CROSS-SECTION DETAIL

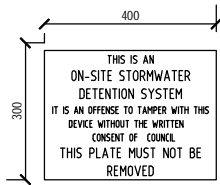
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NOTE: ORIFICE PLATE SIZE TO BE CONFIRMED PRIOR TO CONSTRUCTION

ORIFICE PLATE DETAIL

SCALE = NTS



OSD TANK PLAQUE

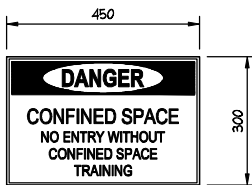
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LEGEND:
BLACK ON
YELLOW
BACKGROUND


SIGN FOR RWT AND OUTLETS

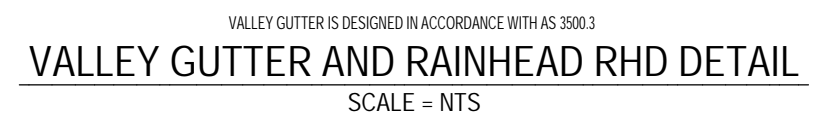
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TANK ENTRY SIGN


SCALE = N.T.S.

			Client	BOLT		Project	231 ALFRED STREET CROMER		Designed CH	26/11/24	
								Checked CH	Approved CH	Scale 1 : 200	
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24	Architect / Designer	SUE CONNOR ARCHITECT		Title	DETAILS	Drawing number SW07	Job number 2024088	Revision C	
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24									
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1. DISPERSION TRENCH TO BE LAID ON A LEVEL CONTOUR.
2. GROUND LEVEL ABOVE TRENCH MUST BE LEVEL SO AS TO EVENLY DISPERSE WATER DOWN HILL OF THE TRENCH
3. IF ROCK IS ENCOUNTERED DURING EXCAVATION FOR DISPERSION TRENCH NOTIFY ENGINEER FOR ALTERNATE DETAIL.



			Client BOLT	 APPROVED CONSULTING ENGINEERS	Project 231 ALFRED STREET CROMER		Designed CH	26/11/24
						Checked CH	Approved CH	Scale 1 : 200
C	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	26/11/24	Architect / Designer SUE CONNOR ARCHITECT		Title DETAILS	Drawing number SW08	Job number 2024088	Revision C
B	ISSUE FOR DA SUBMISSION ONLY - NOT FOR CONSTRUCTION	14/11/24						
A	PRELIM OSD LOCATION - FOR COMMENT ONLY	18/10/24	PO BOX: 1510, DEE WHY ABN - 90 645 409 801					
	AMENDMENT	DATE						