



FOR DA ONLY

Issue	Date	Amendment	Int.	App.
A	13-09-18	PRELIMINARY ISSUE	LDG	DDG
B	08-11-18	ISSUED FOR DA	LDG	DDG
C	11-12-19	REVISED BACKGROUND		

CO-ORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH	TP01.04-GROUND PLAN-(K)	K	09/12/2019
MECH			
STRUCT			
ELEC			
CIVIL	21337 - C		
NOTE : SYMBOLS ARE DRAWN IN THE CORRECT POSITION BUT ARE NOT SHOWN TO SCALE			

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Client / Architect

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ISO 9001
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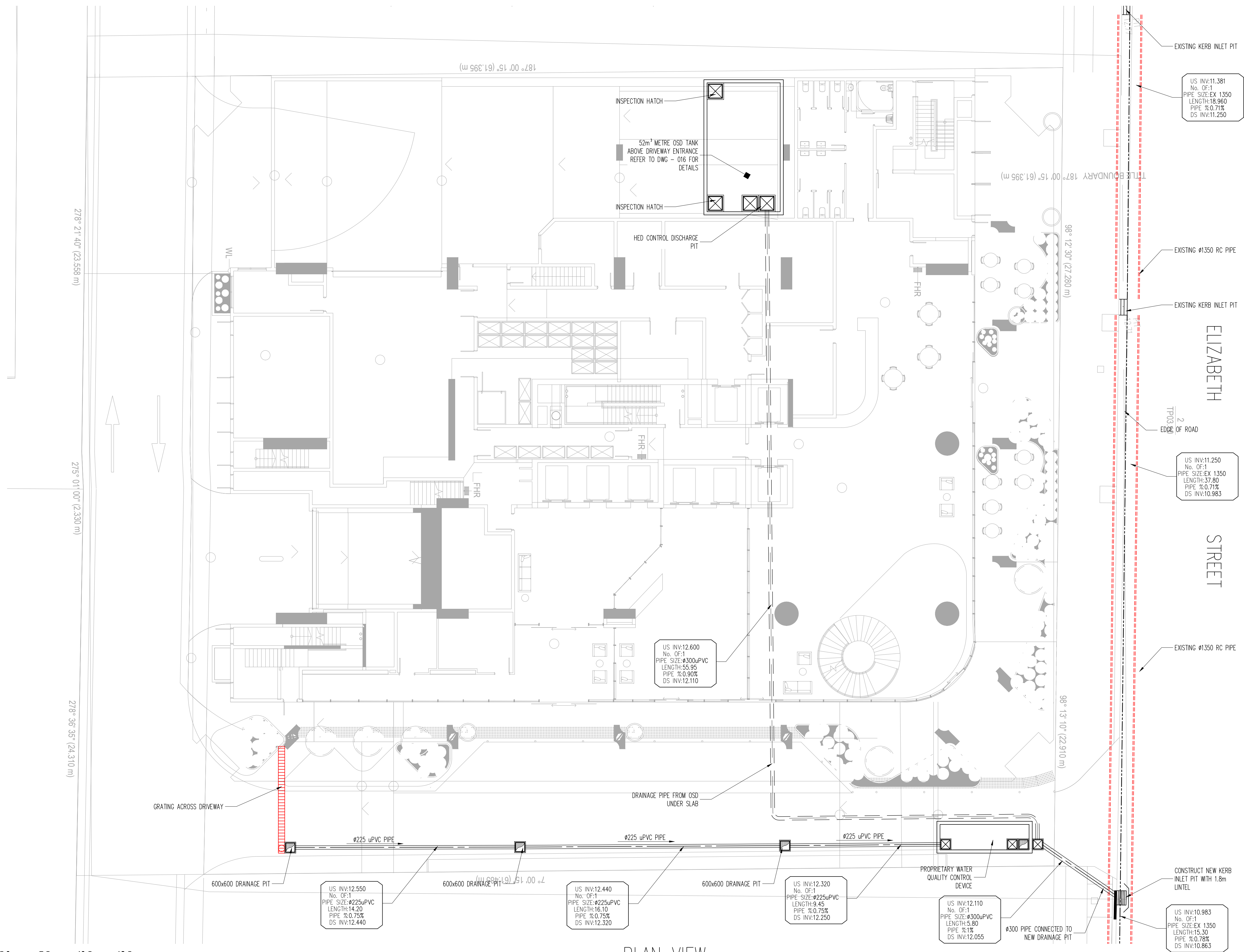
Project:

26 ELIZABETH STREET,
LIVERPOOL, NSW, 2170

Drawing Title:

GROUND FLOOR
STORMWATER
AND DETAILS

North Point:	Design:
	SB
Date:	Design Validated:
14/08/2018	LDG
Job No.:	Amendment Approved:
21337	DDG
	Drawn:
	SB
	Scale:
	AS SHOWN
	(A1)
	Disc:
	Dwg No.:
	Stage:
	Issue:
	- C - 004 - 1 - C



2.5 0 2.5 5.0 7.5 10.5 12.5
DIMENSIONS ARE IN METRES
1:125 (A1)

PLAN VIEW
SCALE 1:125

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A	13-09-18	PRELIMINARY ISSUE	LDG	DDG
B	08-11-18	ISSUED FOR DA	LDG	DDG
C	10-06-19	LEVELS ADDED TO PIPE NETWORK	LDG	DDG
D	1-10-19	REVISED ARCHITECTURAL BACKGROUND	JDC	DDG
E	09-12-19	REVISED ARCHITECTURAL BACKGROUND	JDC	DDG

CO-ORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH	TP01.04-GROUND PLAN-K	K	09-12-19
ARCH			
MECH			
STRUCT			
ELEC			
CIVIL	21337 - C		
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Project:

26 ELIZABETH STREET,
LIVERPOOL, NSW, 2170

Drawing Title:

**GROUND FLOOR
STORMWATER
AND DETAILS**

North Point:

21337

Date: 14/08/2018

Job No: 21337

Design: SB

Design Validated: LDG

Amendment Approved: DDG

Drawn: SB

Scale: AS SHOWN (A1)

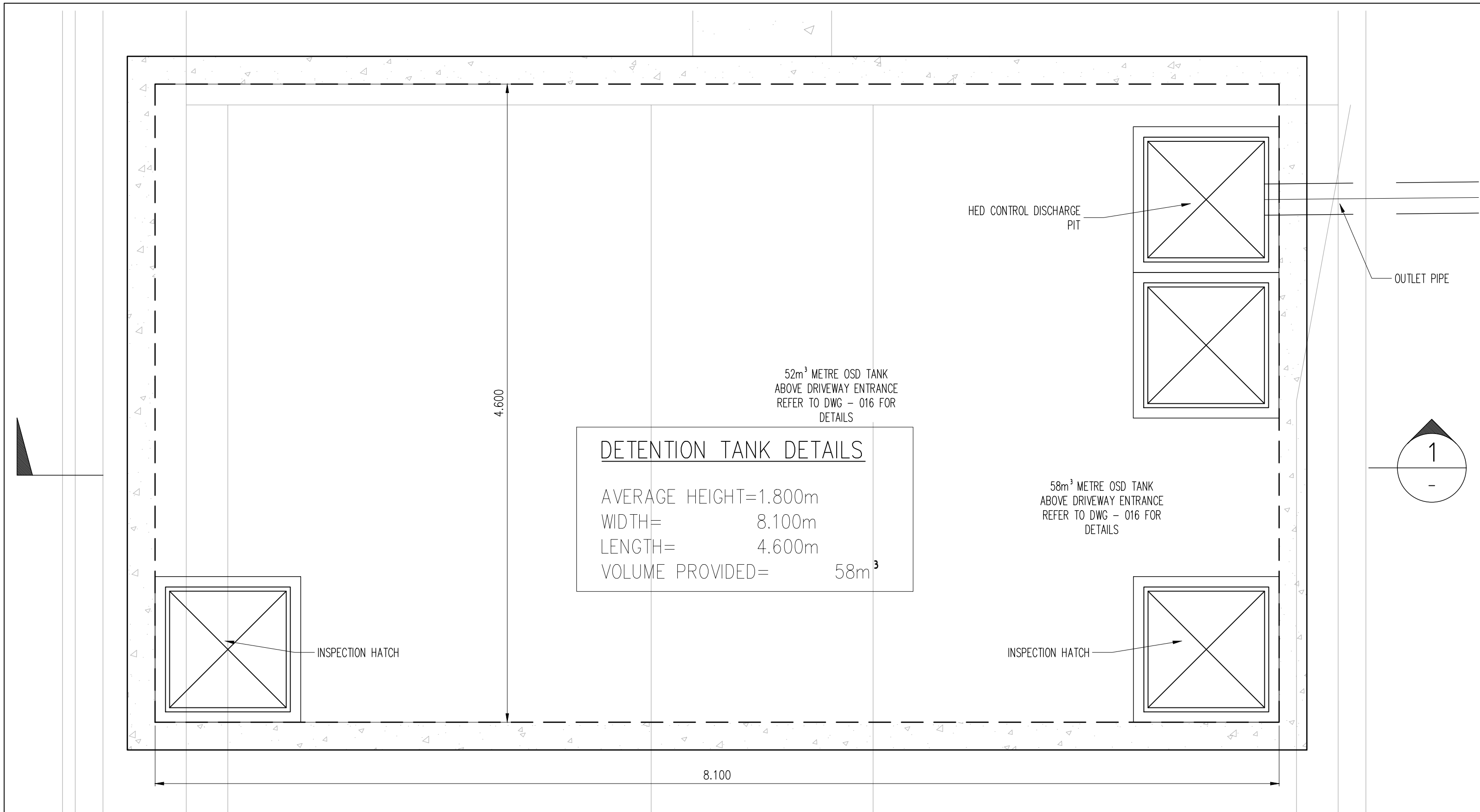
Dec: -

Dwg No: -C

Stage: -015

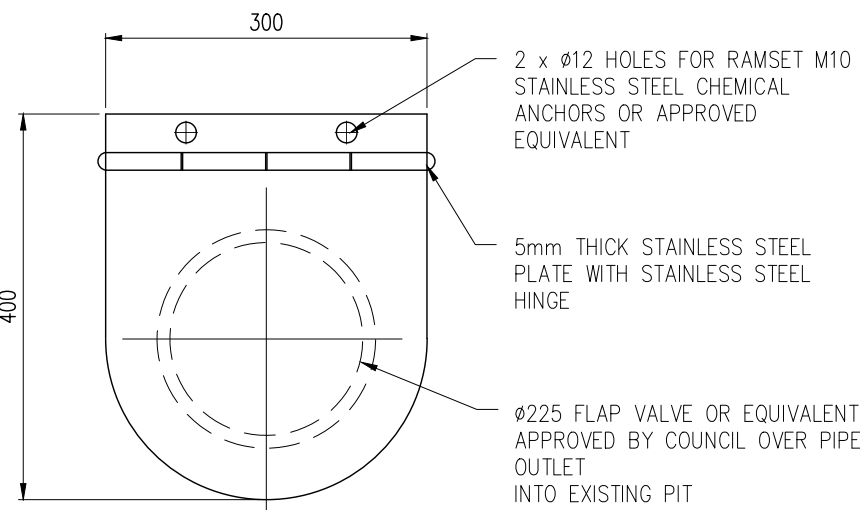
Issue: -1

Original: SET A1



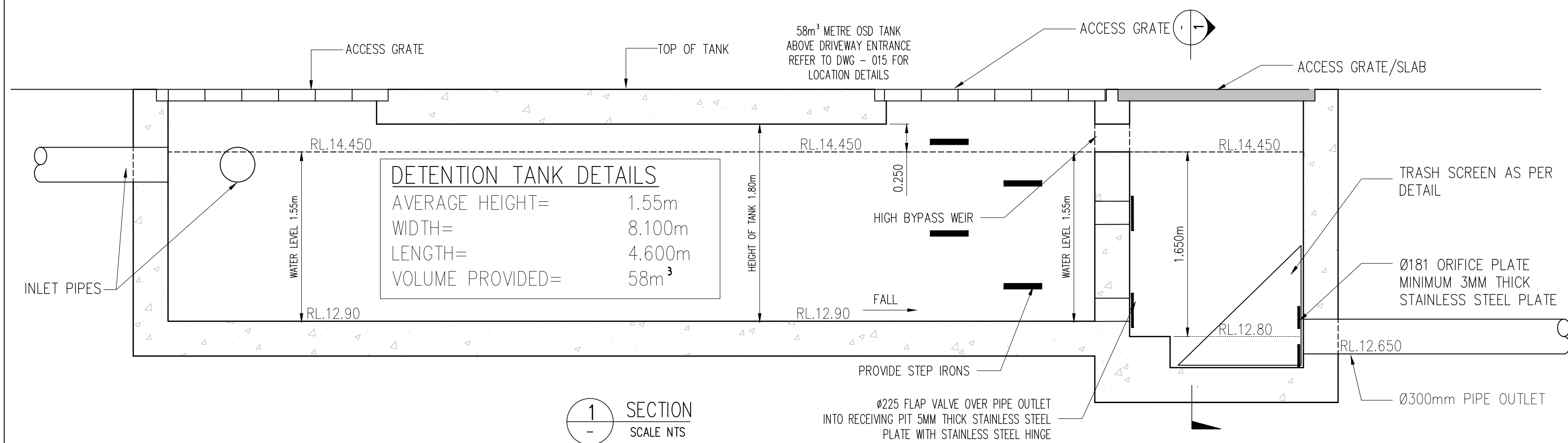
OSD TANK PLAN

SCALE 1:25



FLAP VALVE DETAIL

SCALE NTS



SECTION 1

SCALE NTS

0.5 0 0.5 1 1.5 2.0 2.5
DIMENSIONS ARE IN METRES 1:25 (A1)

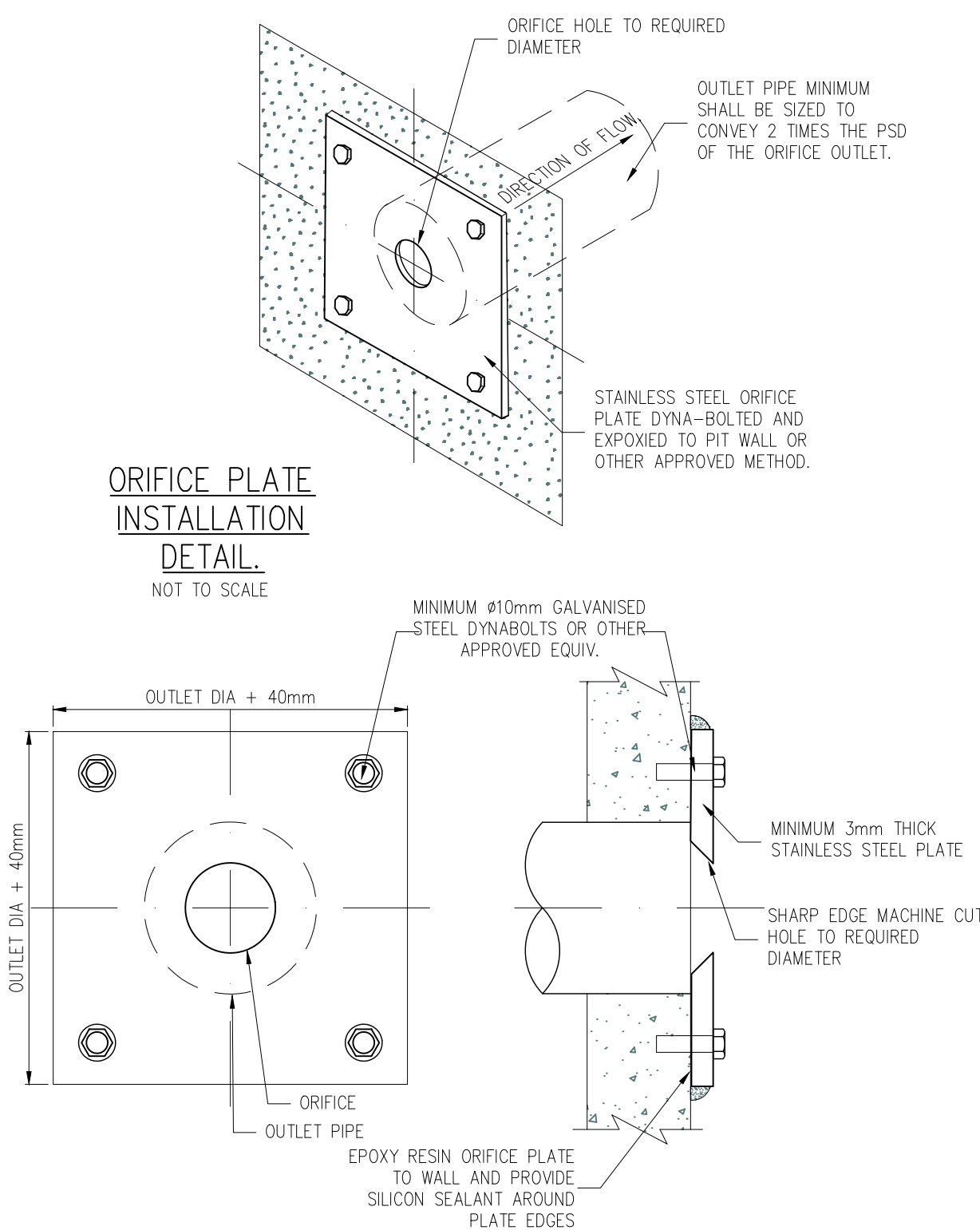


CONFINED SPACE DANGER SIGN

COLOURS - "DANGER" AND BACKGROUND - WHITE
ELLIPTICAL AREA - RED
RECTANGLE CONTAINING ELLIPSE - BLACK
OTHER LETTERING - BLACK

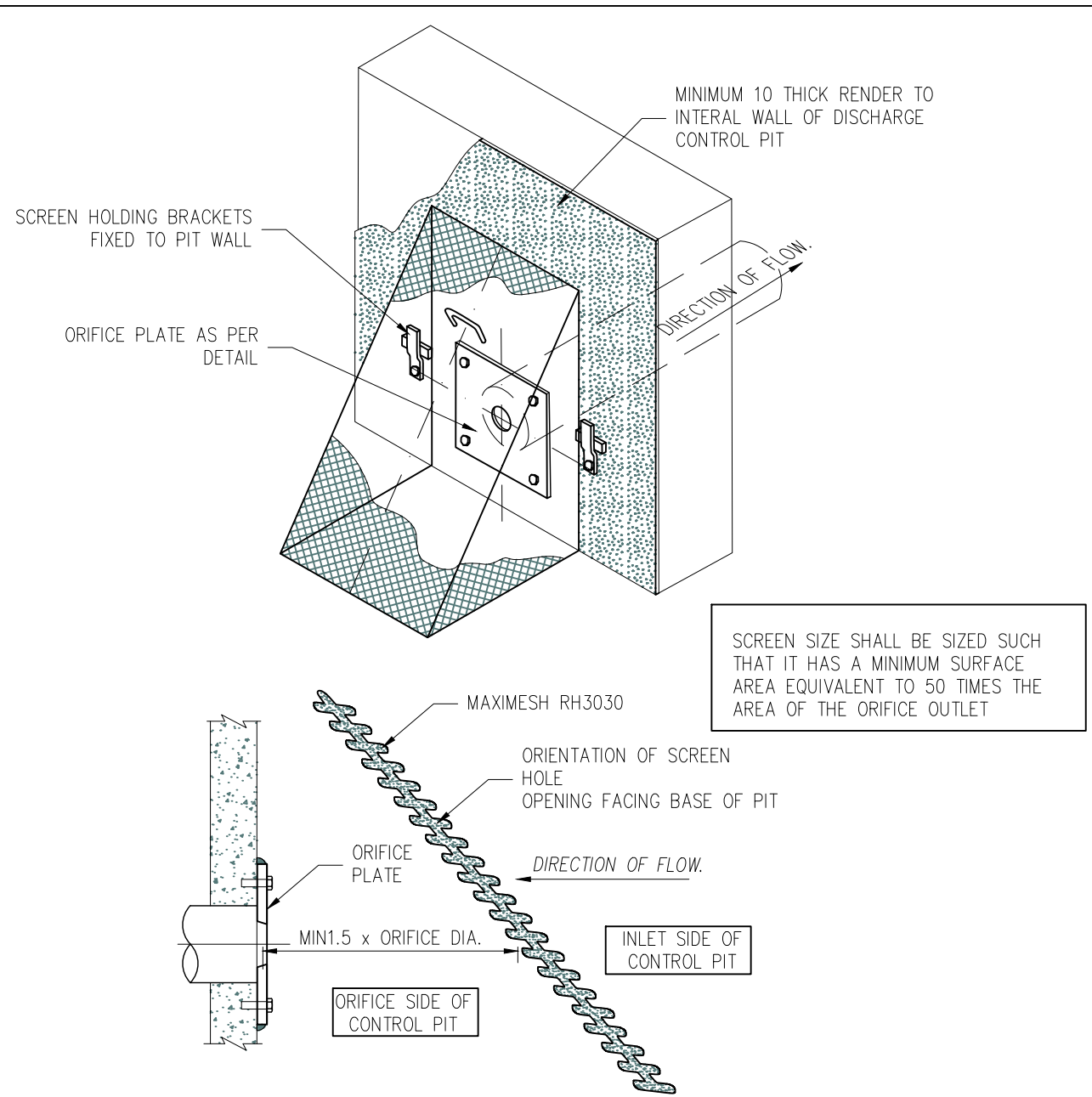
NOTES

- A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE
- MINIMUM DIMENSIONS OF SIGN - SHALL BE 300mm x 450mm (LARGE ENTRIES SUCH AS DOORS). 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)
- THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINIUM OR POLYPROPYLENE
- SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN AND/OR SUITABLE EPOXY GLUE / CEMENT.



ORIFICE PLATE INSTALLATION DETAIL

NOT TO SCALE

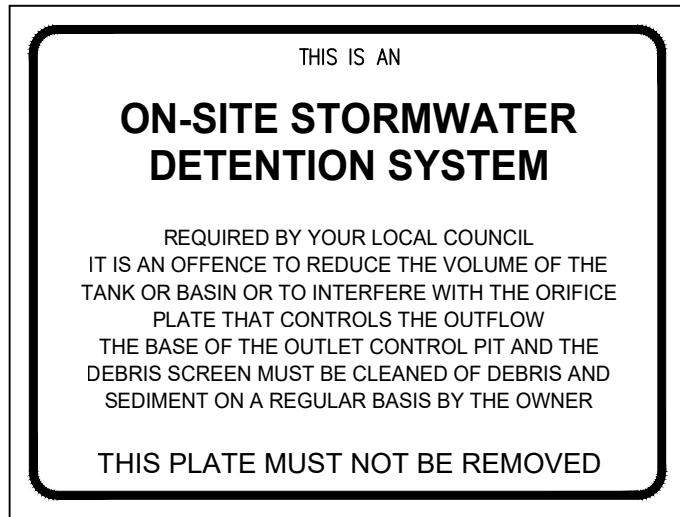


TRASH SCREEN INSTALLATION DETAIL

N.T.S

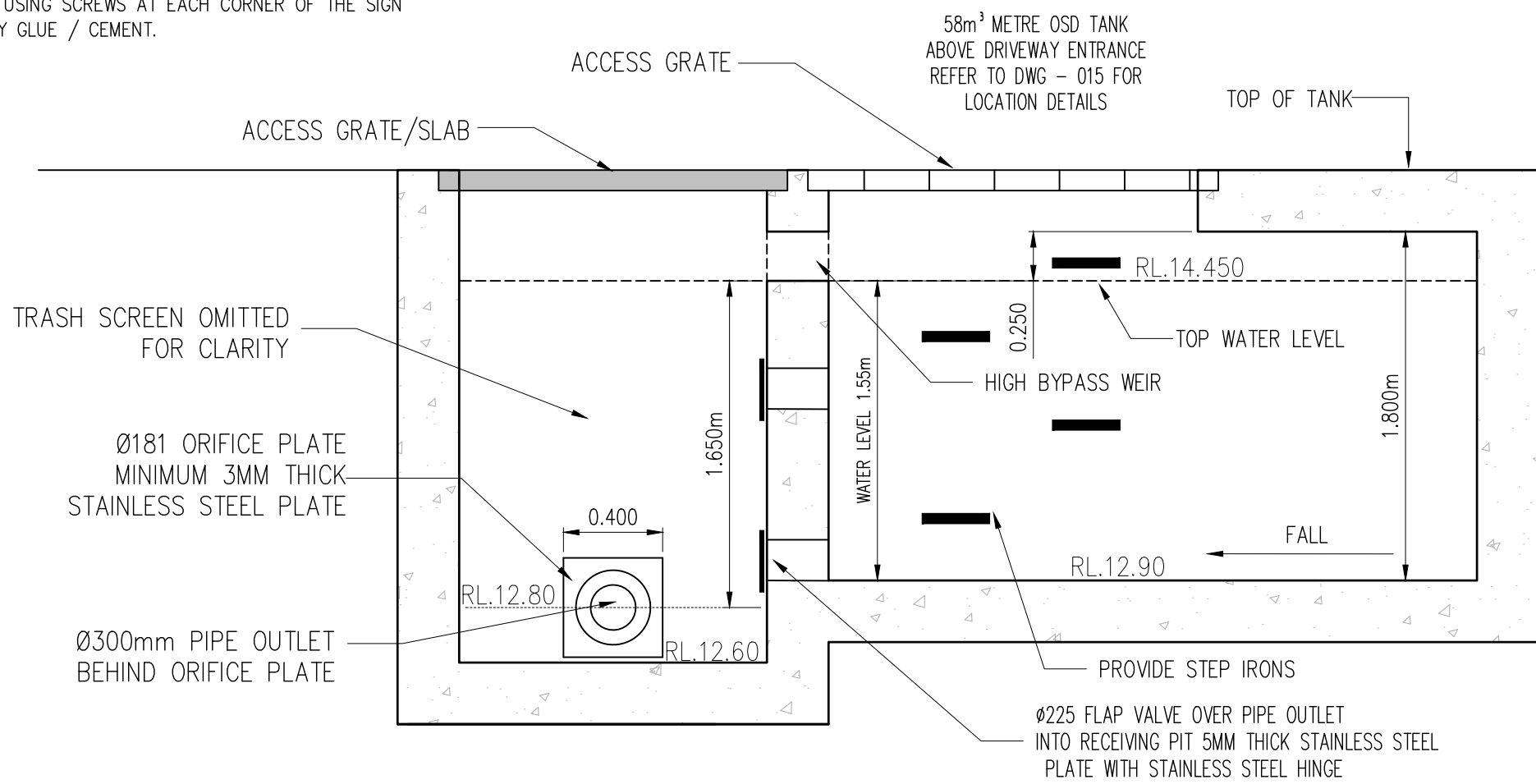
TRASH SCREEN NOTES

- MAXIMESH SCREENS MUST BE PLACED SUCH THAT THE LONG AXIS OF THE OVAL SHAPED HOLES ARE ORIENTATED HORIZONTALLY WITH THE PROTRUDING UP ANGLED UPWARDS AND FACING TOWARDS THE OUTLET.
- THE SCREEN IS TO BE FORMED BY WELDING TWO TRIANGULAR MAXIMESH (OR EQUIVALENT) PANELS TO A RECTANGULAR FRONT MAXIMESH PANEL (OR EQUIVALENT)



NOTES

- SIZE: 110MM X 80MM
CORNERS: SQUARE
COLOUR: ETCHED AND FILLED BLACK LEGEND ON NATURAL SILVER BACKGROUND
CORNERS: SQUARE



SECTION 2

SCALE NTS

FOR DA ONLY

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A	13-09-18	PRELIMINARY ISSUE	LDG	DDG
B	08-11-18	ISSUED FOR DA	LDG	DDG
C	12-06-19	LEVELS ADDED	LDG	DDG

SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH			
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MECH			
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ELEC			
CIVIL	21337 - C		
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bsi ISO 9001 Quality Management

Project:

26 ELIZABETH STREET,
LIVERPOOL, NSW, 2170

Drawing Title:

OSD TANK
DETAILS

North Point:

Date: 14/08/2018

Job No.: 21337

Design: SB

Design Validated: LDG

Amendment Approved: DDG

Drawn: SB

Scale: (A1)

AS SHOWN

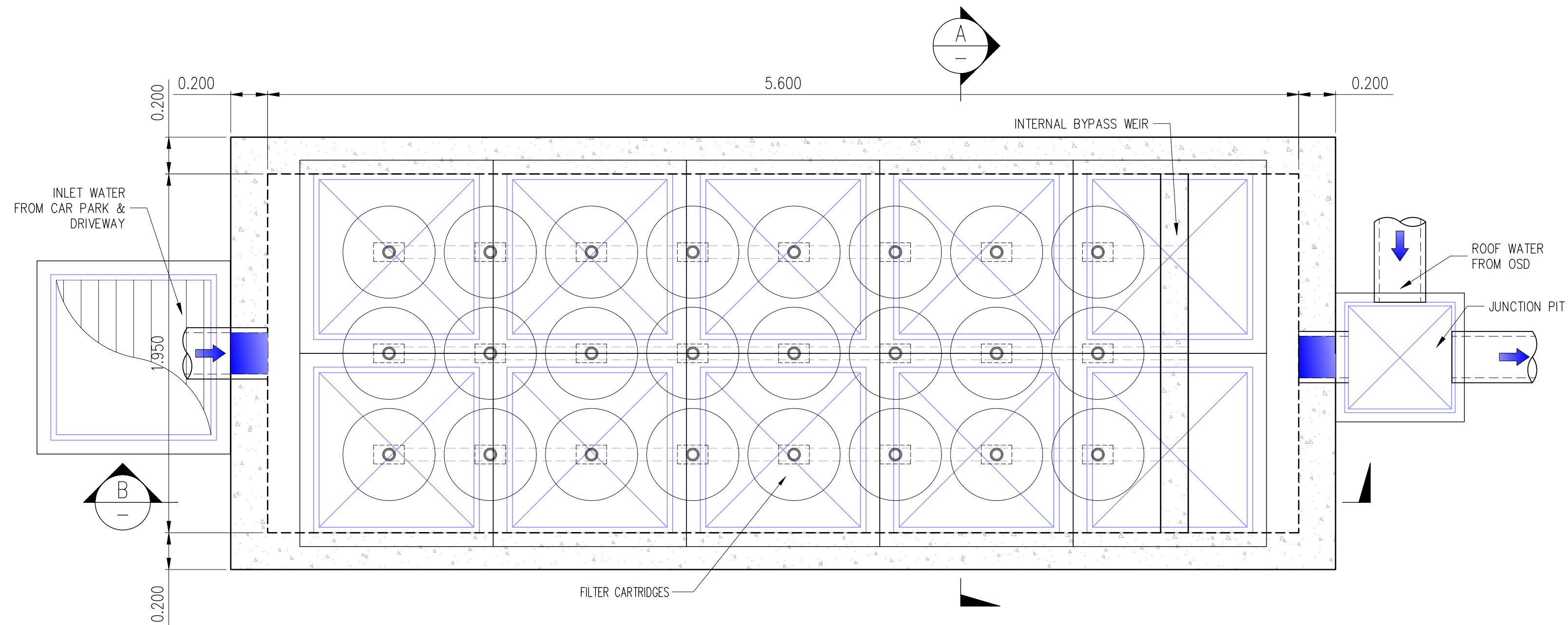
Dec: -

Dwg No.: - C

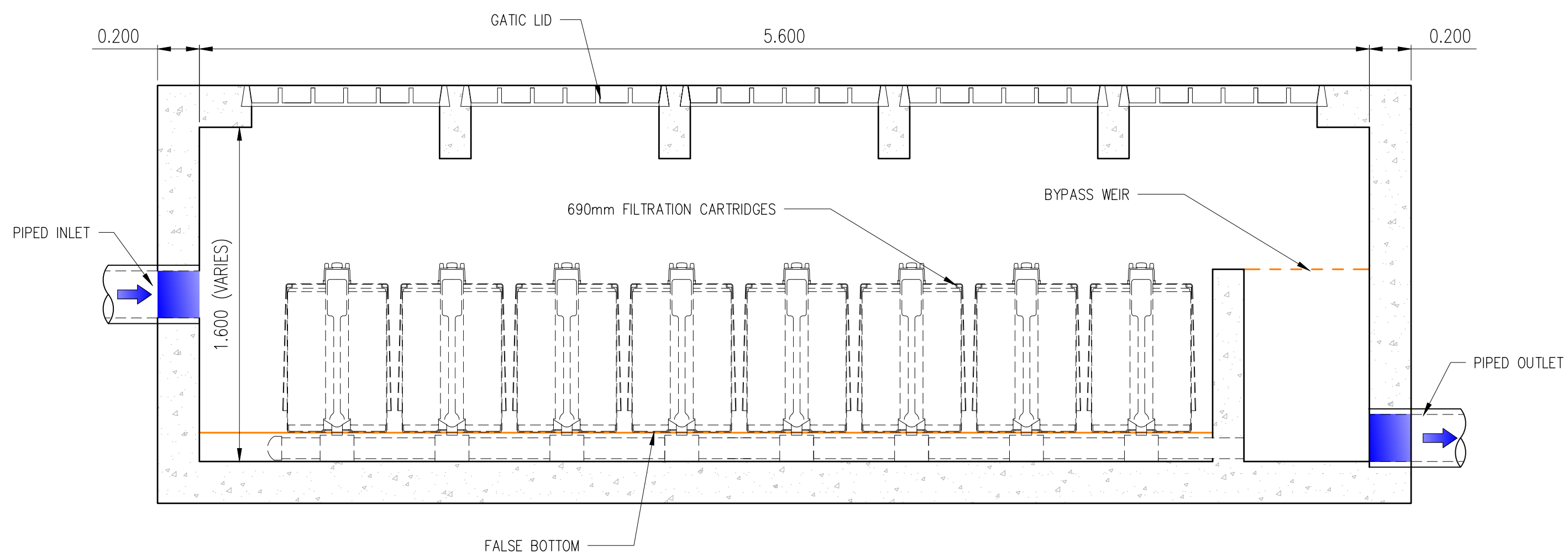
Stage: - 016

Issue: - 1

Issue: - C



OSD TANK PLAN
SCALE 1:20



SECTION B
SCALE 1:20



Issue	Date	Amendment	Int.	App.
A	02-10-19	ISSUED FOR DA	LDG	DDG

CO-ORDINATED REFERENCE DRAWINGS			
SERVICE	DRAWING NUMBER	ISSUE	DATE
ARCH	TP01.04-GROUND PLAN-(J)	Rev J	30-09-19
ARCH			
MECH			
STRUCT			
ELEC			
CIVIL	21337 - C		

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Project:

26 ELIZABETH STREET,
LIVERPOOL, NSW, 2170

Drawing Title:

**WATER QUALITY
TANK DETAILS**

North Point:

Date: 14/08/2018

Job No: 21337

Design: SB

Design Validated: LDG

Amendment Approved: DDG

Drawn: SB

Scale: AS SHOWN (A1)

Disc: Deg No: Stage: Issue:

- C - 017 - 1 - A

STORMFILTER DESIGN TABLE

- STORMFILTER TREATMENT CAPACITY VARIES BY NUMBER OF FILTER CARTRIDGES INSTALLED.
- THE STANDARD CONFIGURATION IS SHOWN. ACTUAL CONFIGURATION OF THE SPECIFIED STRUCTURE(S) PER CERTIFYING ENGINEER WILL BE SHOWN ON SUBMITTAL DRAWING(S).
- FILTER CARTRIDGES SHALL BE MEDIA-FILLED, PASSIVE, SIPHON ACTUATED, RADIAL FLOW, AND SELF-CLEANING. RADIAL MEDIA DEPTH SHALL BE 178mm.

CARTRIDGE NAME / SIPHON HEIGHT (mm)	690	460	310
CARTRIDGE PHYSICAL HEIGHT (mm)	840	600	600
TYPICAL WEIR HEIGHT [H] (mm)	920	690	540
CARTRIDGE FLOW RATE FOR ZPG MEDIA (L/s)	1.6	1.1	0.7
CARTRIDGE FLOW RATE FOR PSORB MEDIA (L/s)	0.9	0.46	0.39

PHYSICAL HEIGHT
SIPHON HEIGHT

STORMFILTER CARTRIDGE DETAIL

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
NUMBER OF CARTRIDGES REQ'D			
SIPHON HEIGHT (310 / 460 / 690)			
MEDIA TYPE (ZPG / PSORB)			
WATER QUALITY FLOW RATE (L/S)			
HYDRAULIC CAPACITY (L/S)			
PIPE DATA:	I.L.	MATERIAL	DIAMETER
INLET PIPE #1			
INLET PIPE #2			
INLET PIPE #3			
OUTLET PIPE			
PRECAST MANHOLE WEIGHT			
PRECAST LID WEIGHT			

GENERAL NOTES

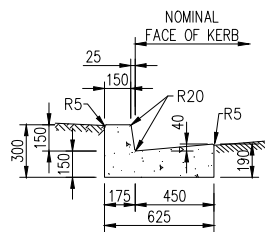
- PRECAST STRUCTURE SUPPLIED WITH CORE HOLES TO SUIT OUTER DIAMETER OF NOMINATED PIPE SIZE / MATERIAL.
- PRECAST STRUCTURE SHALL MEET W80 WHEEL LOAD RATING ASSUMING A MAXIMUM EARTH COVER OF 2.0m AND A GROUND WATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. CERTIFYING ENGINEER TO CONFIRM ACTUAL GROUNDWATER ELEVATION. PRECAST STRUCTURE SHALL BE IN ACCORDANCE WITH AS3600.
- IF THE PEAK FLOW RATE, AS DETERMINED BY THE SITE CERTIFYING ENGINEER, EXCEEDS THE PEAK HYDRAULIC CAPACITY OF THE SYSTEM, AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.
- ALL WATER QUALITY TREATMENT DEVICES REQUIRE PERIODIC MAINTENANCE. REFER TO OPERATION AND MAINTENANCE MANUAL FOR GUIDELINES AND ACCESS REQUIREMENTS.
- SITE SPECIFIC PRODUCTION DRAWING WILL BE PROVIDED ON PLACEMENT OF ORDER.
- DRAWING NOT TO SCALE.

INSTALLATION NOTES

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY CERTIFYING ENGINEER.
- CONTRACTOR TO PROVIDE ALL EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STORMFILTER STRUCTURE (LIFTING DETAIL PROVIDED SEPARATELY).
- CONTRACTOR TO APPLY SEALANT TO ALL JOINTS AND TO PROVIDE, INSTALL AND GROUT INLET AND OUTLET PIPES.

CARTRIDGE DESIGN SHEET (TBC)

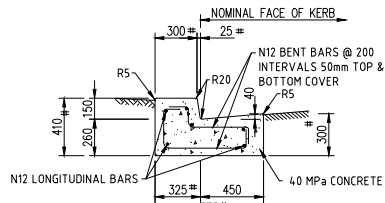
FOR DA ONLY



LOW LEVEL FOOTWAY
VEHICULAR KERB CROSSING (VKC)
SCALE 1:10

- NOTES :**
1. VEHICULAR FOOTWAY CROSSING LEVELS TO BE IN ACCORDANCE WITH DETAILED DRAWINGS.
 2. ROAD BASE MATERIAL IS TO BE COMPACTED FINE GRAINED ROCK DREGG, OR GRAVELLY COMPACT GRADED TO D60/20, OR GRADED RECYCLED ASPHALT WITH MAX. PARTICLE SIZE OF 20.
 3. COMPRESSIVE STRENGTH OF CONCRETE (f'_c) AT 28 DAYS TO BE MIN. 32MPa.
 4. PROVIDE 50% COVER TO STEEL FABRIC REINFORCEMENT AND 75.
 5. STEEL FABRIC TO BE PLACED ON CHAIRS, IN A REGULAR GRID NOT EXCEEDING 1000 SPACING.
 6. EXISTING CONCRETE FOOTPAVING IS TO BE RECONSTRUCTED AS REQUIRED BY THE COUNCIL SUPERVISOR TO MATCH THE CROSSING.
 7. THE FOOTWAY IS TO BE SHAPED AS REQUIRED BY THE COUNCIL SUPERVISOR TO THE CROSSING VELOCITY. DISTURBED AREAS TO BE TURFED.
 8. THIS PLAN DOES NOT APPLY FOR FOOTWAY WIDTHS LESS THAN 2800.
 9. ALL DIMENSIONS ARE IN MILLIMETRES.

NOTE: TO BE USED ON PEDESTRIAN PAVEMENTS ONLY.
DOWELLED JOINTS MAY BE REQUIRED FOR PEDESTRIAN
PAVEMENTS IN SPECIAL CIRCUMSTANCES ie AGED HOMES.



HEAVY DUTY KERB AND GUTTER, TYPE B
SCALE 1:25

PAVEMENT AS SPECIFIED

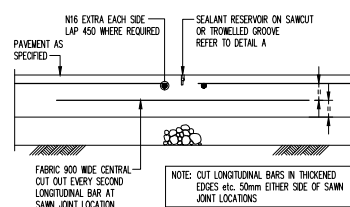
10 THICK EXPANDING CORK FILLER BOARD
REFER TO DET C ON
DWG C-010

EXPANSION JOINT (Ej) -
PEDESTRIAN PAVEMENT

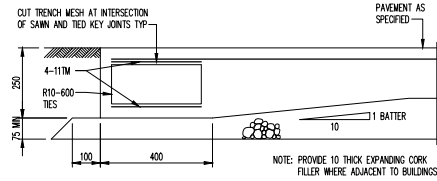
SCALE 1:10

N JOINT (EJ) -
IAN PAVEMENT
SCALE 1:10

- AGAINST PITS OR OTHER HARD SURFACES AND AT BOTH SIDES OF KERB LAYBACKS FOR VEHICULAR OR PEDESTRIAN ACCESS. EXPANSION JOINTS SHALL CONSIST OF PREFORMED JOINTING MATERIAL OF BITUMINOUS FIBREBOARD.
5. DRAINAGE HOLES IN KERBS WHERE REQUIRED ARE TO BE PROVIDED USING APPROVED PROPRIETARY KERB CONNECTORS AND ARE TO BE FINISHED FLUSH WITH KERB FACES. REFER TO BCC STANDARD DWG. S-107.
6. ALL GAPS BETWEEN CONCRETE FACES AND EXISTING ROAD PAVEMENT ARE TO BE FILLED WITH COMPACTED AC & FINISHED WITH 40mm AC10.
7. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES.



SAWN CONTROL JOINT (SJ)
SCALE 1: 10



THICKENED EDGE (TE)
SCALE 1: 10

COORDINATED REFERENCE DRAWINGS			
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ARCH			
HYD			
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STRUCT			
ELEC			
CIVIL	21337 - C		

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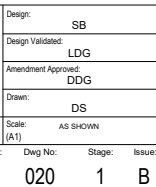
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Engineer

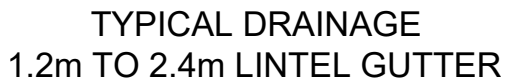


Drawing Title:

North I



ORIGINAL SIZE: A1



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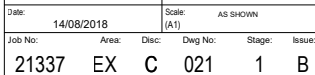
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Engineer



Drawing

North Point



ORIGINAL SIZE: A1