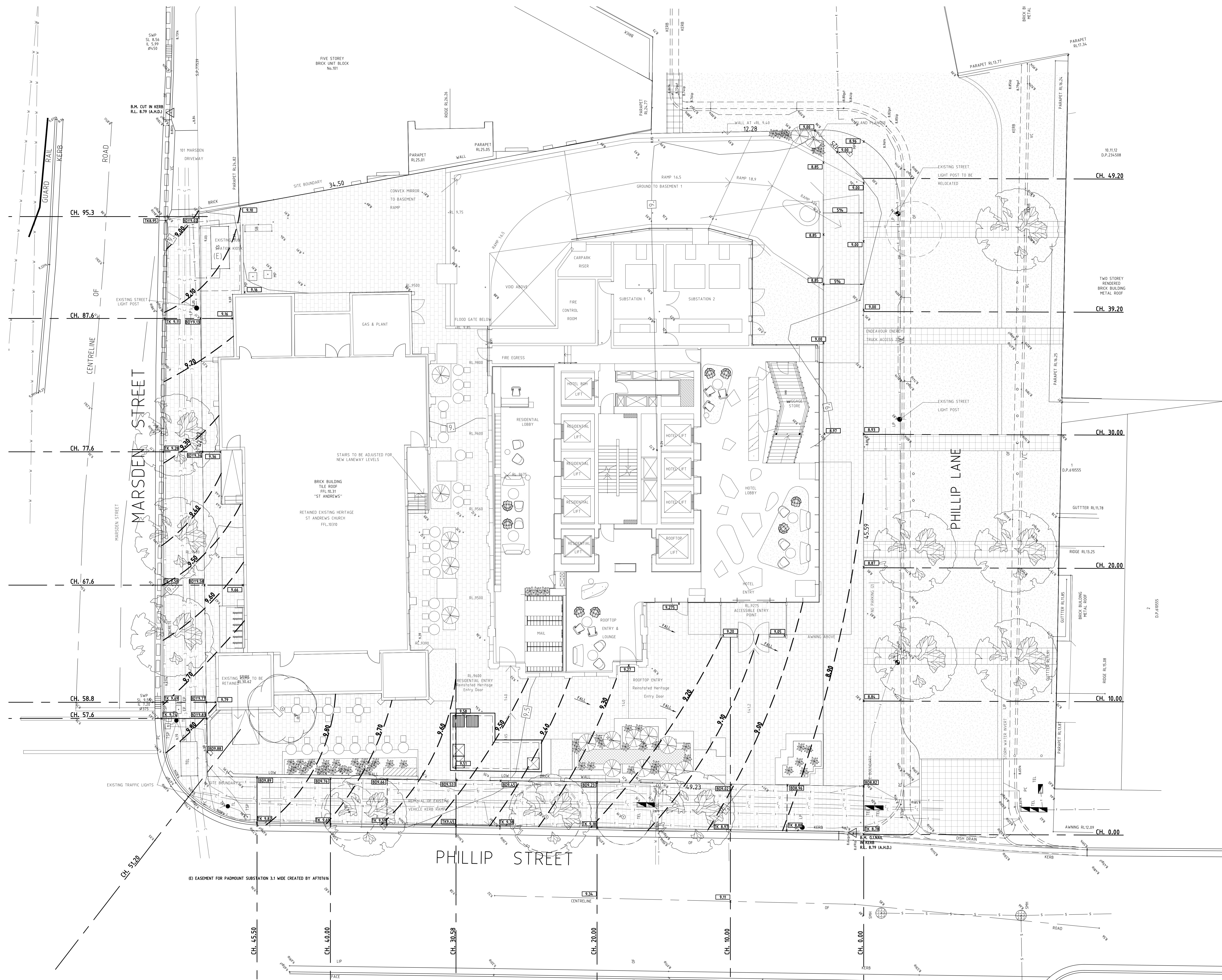
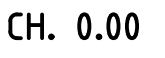
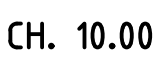
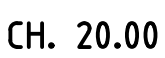
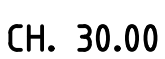
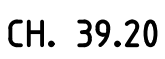
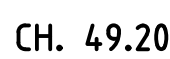
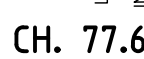
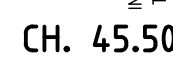
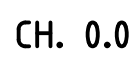
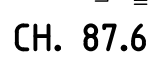
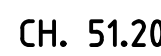
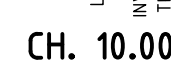
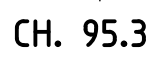
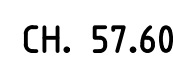
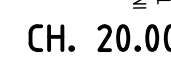
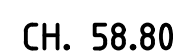
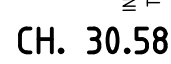
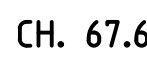
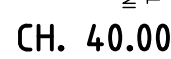


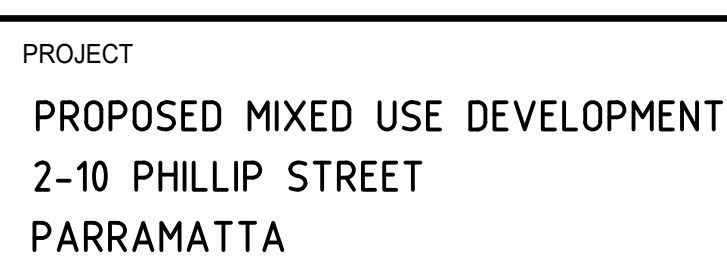
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CROSS-SECTIONS ALONG PHILLIP ST
AND MARSDEN ST FRONTAGE

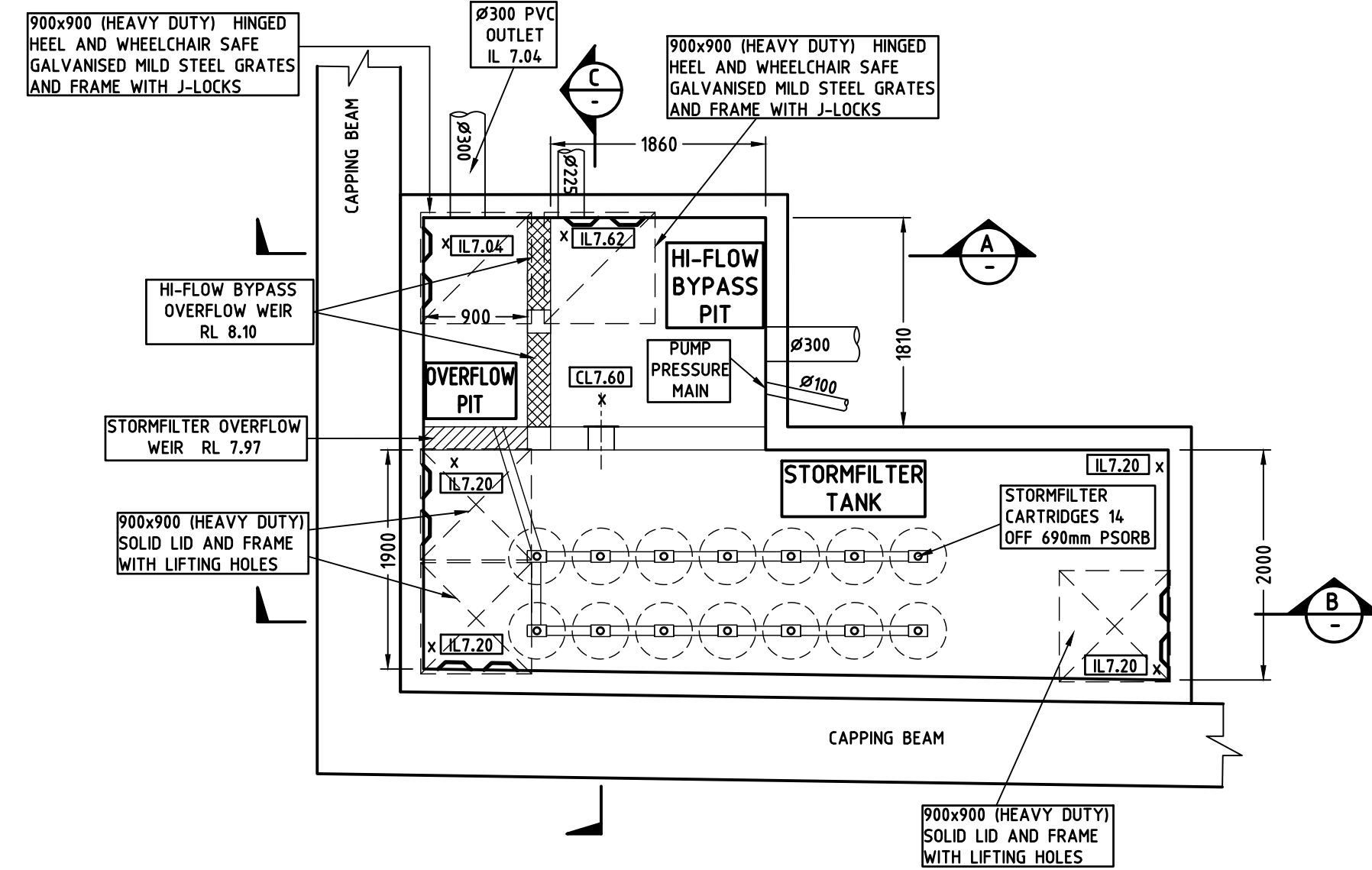
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 **MANCE ARR AJ**
CIVIL & STRUCTURAL ENGINEERS
First Floor, 278-282 Church Street, Parramatta NSW 1500
P.O. Box 2555 North Parramatta NSW 1750
Ph. 02 8897 8800 www.maengineers.com.au

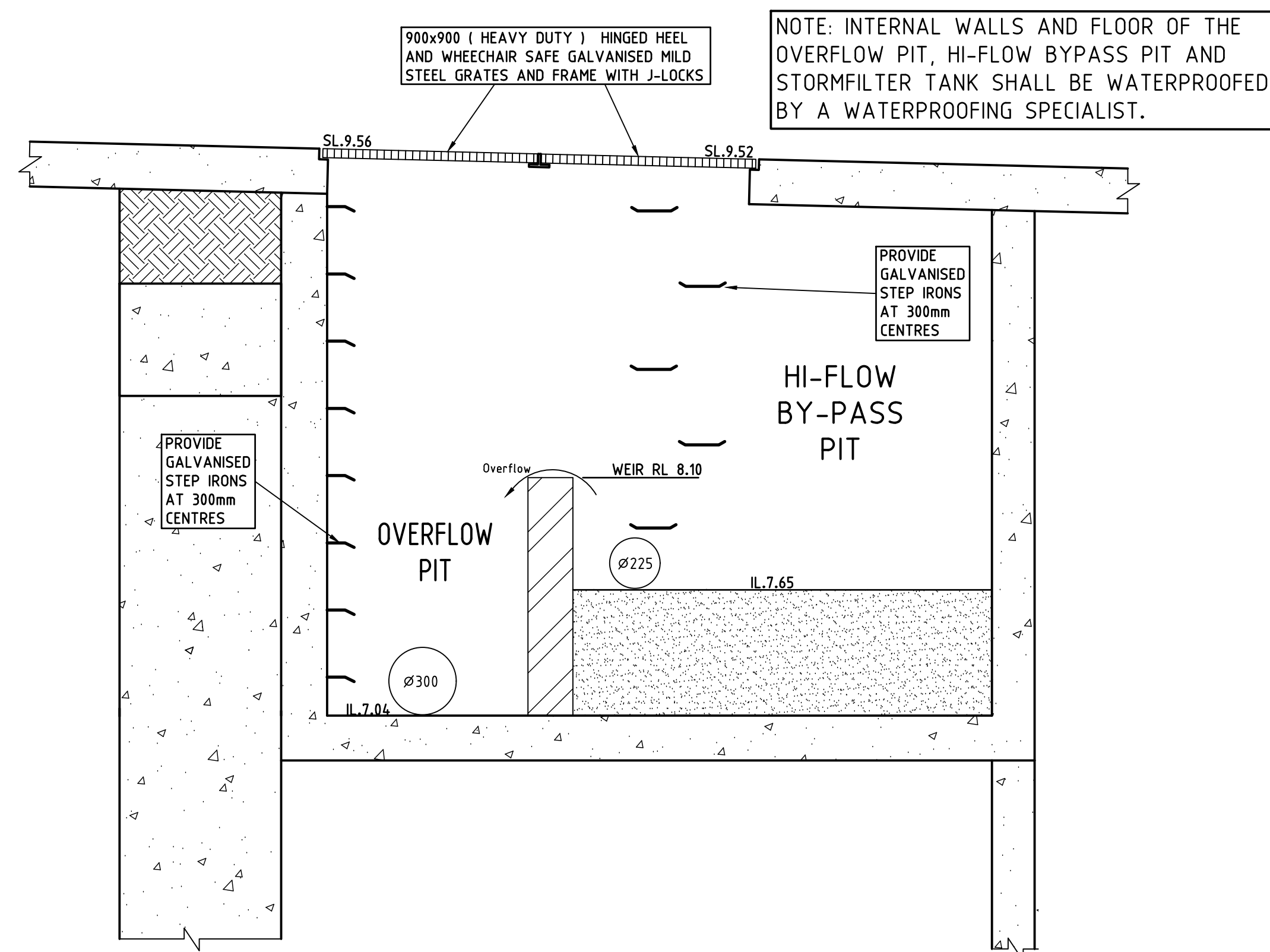


DESIGNED	GB
CHECKED	SA
DATUM	AHD
SCALE	1:100/AS SHOWN

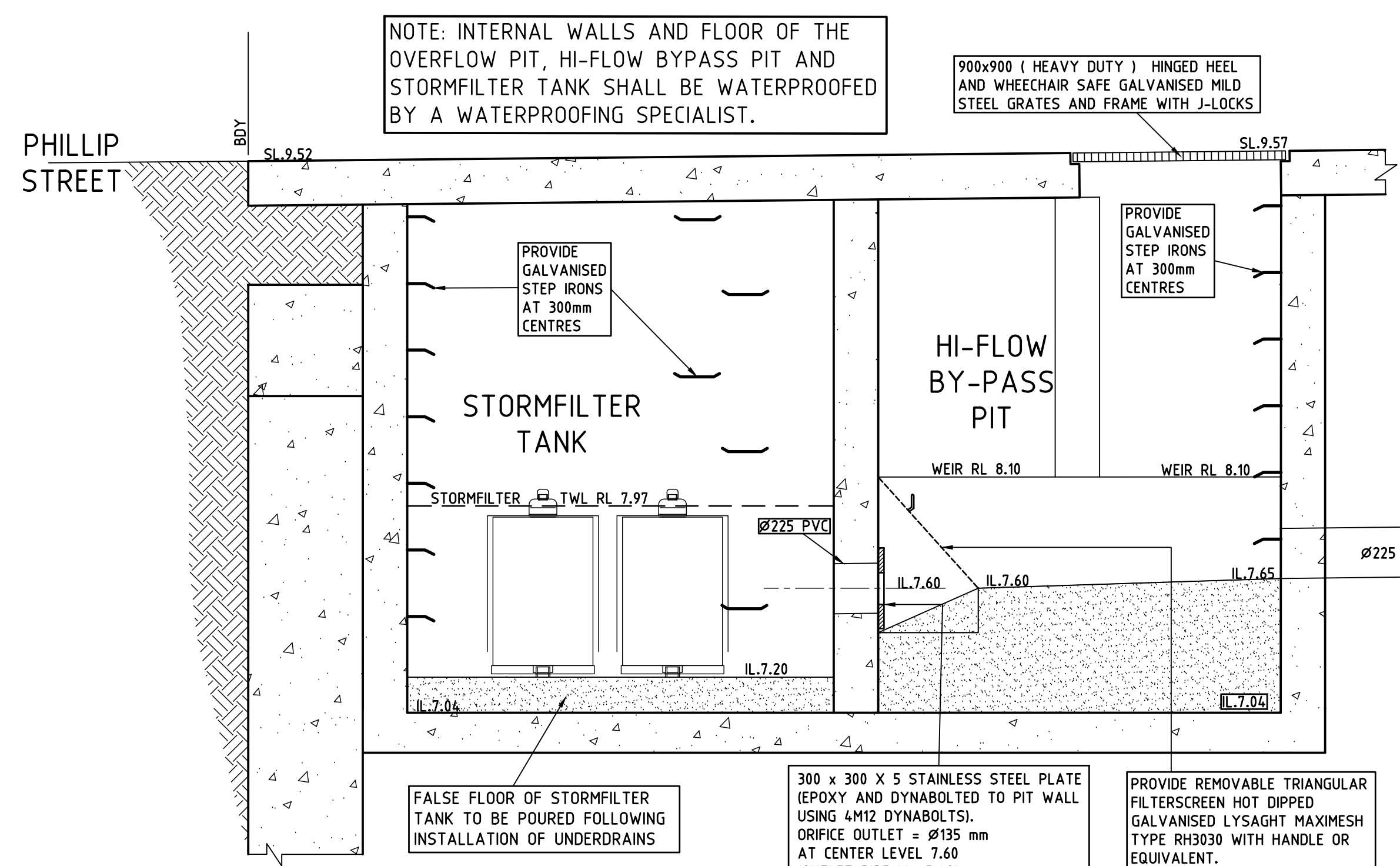
PROJECT NUMBER 2203-DA	ISSUE B
DRAWING NUMBER PD020	AO



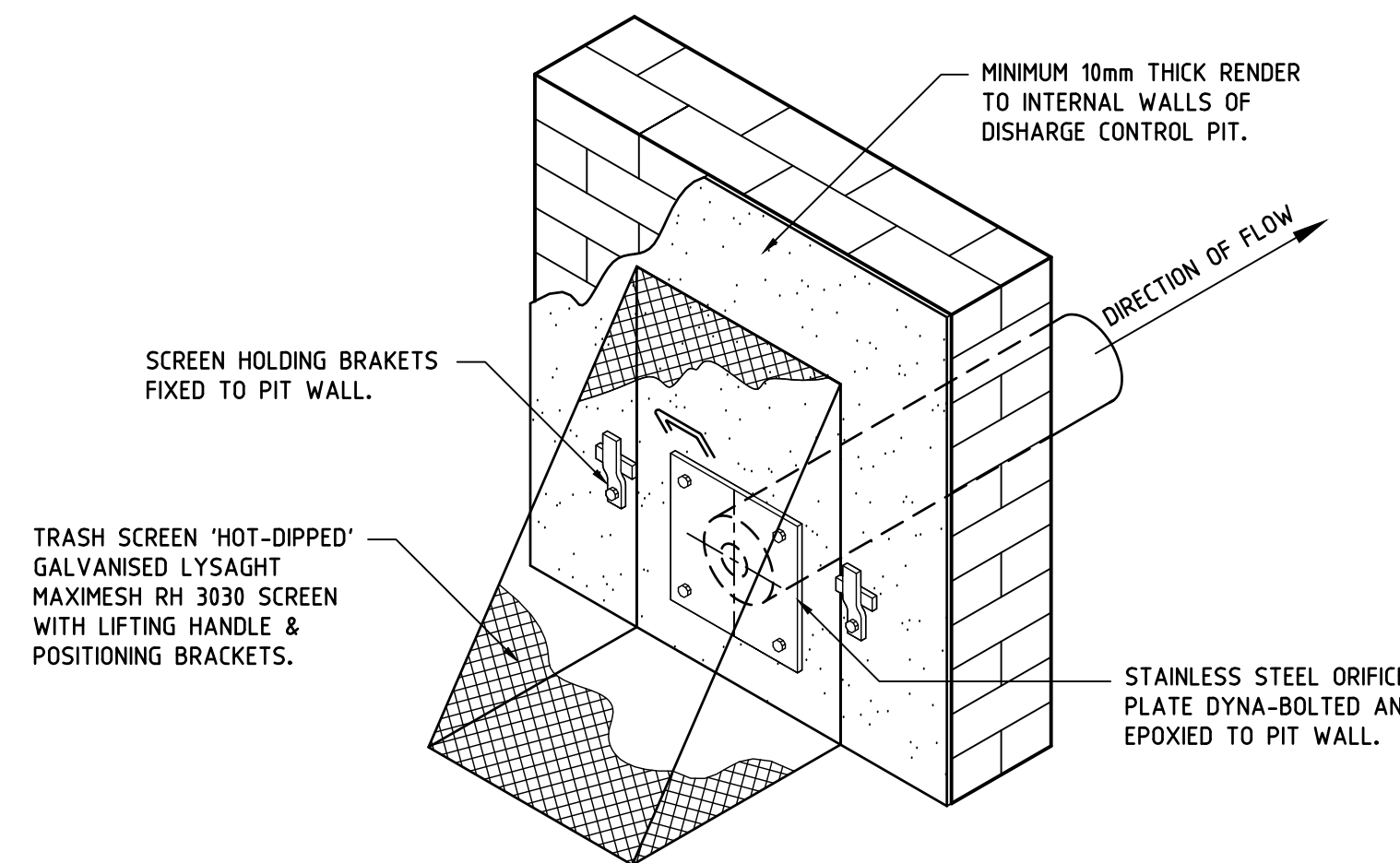
PLAN OF HI-FLOW BYPASS PIT,
STORMFILTER TANK AND OVERFLOW PIT
SCALE 1:50



SECTION THROUGH HI-FLOW
BYPASS AND OVERFLOW PIT
SECTION A
SCALE 1:20



SECTION THROUGH HI-FLOW BYPASS AND
STORMFILTER TANK
SECTION C
SCALE 1:20



TRASH RACK INSTALLATION DETAIL
NOT TO SCALE



CONFINED SPACE DANGER SIGN

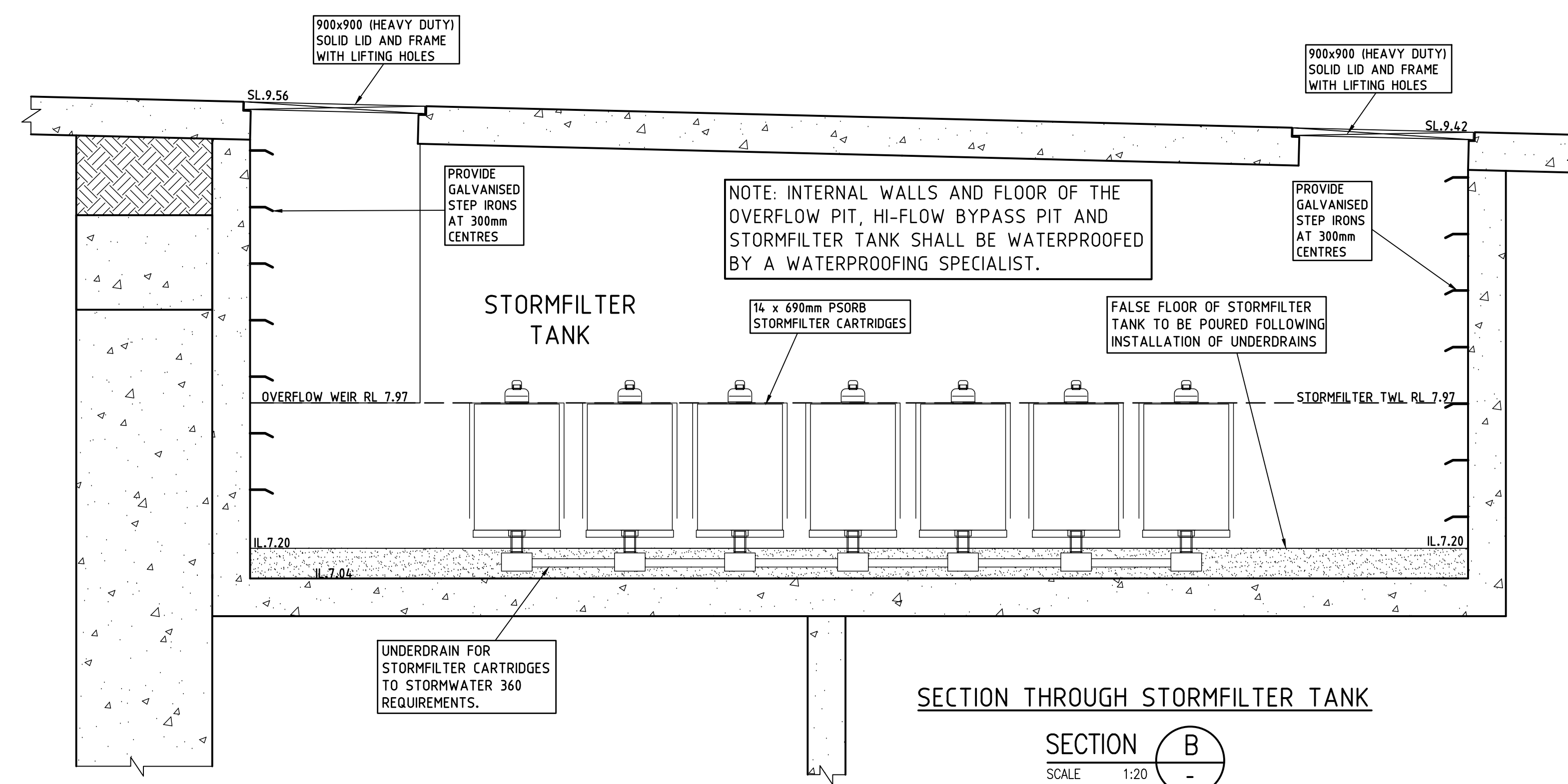
COLOURS - 'DANGER' AND BACKGROUND - WHITE
ELLIPTICAL AREA - RED
RECTANGLE CONTAINING ELLIPSE - BLACK
OTHER LETTERING AND BORDER - BLACK

A) 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.

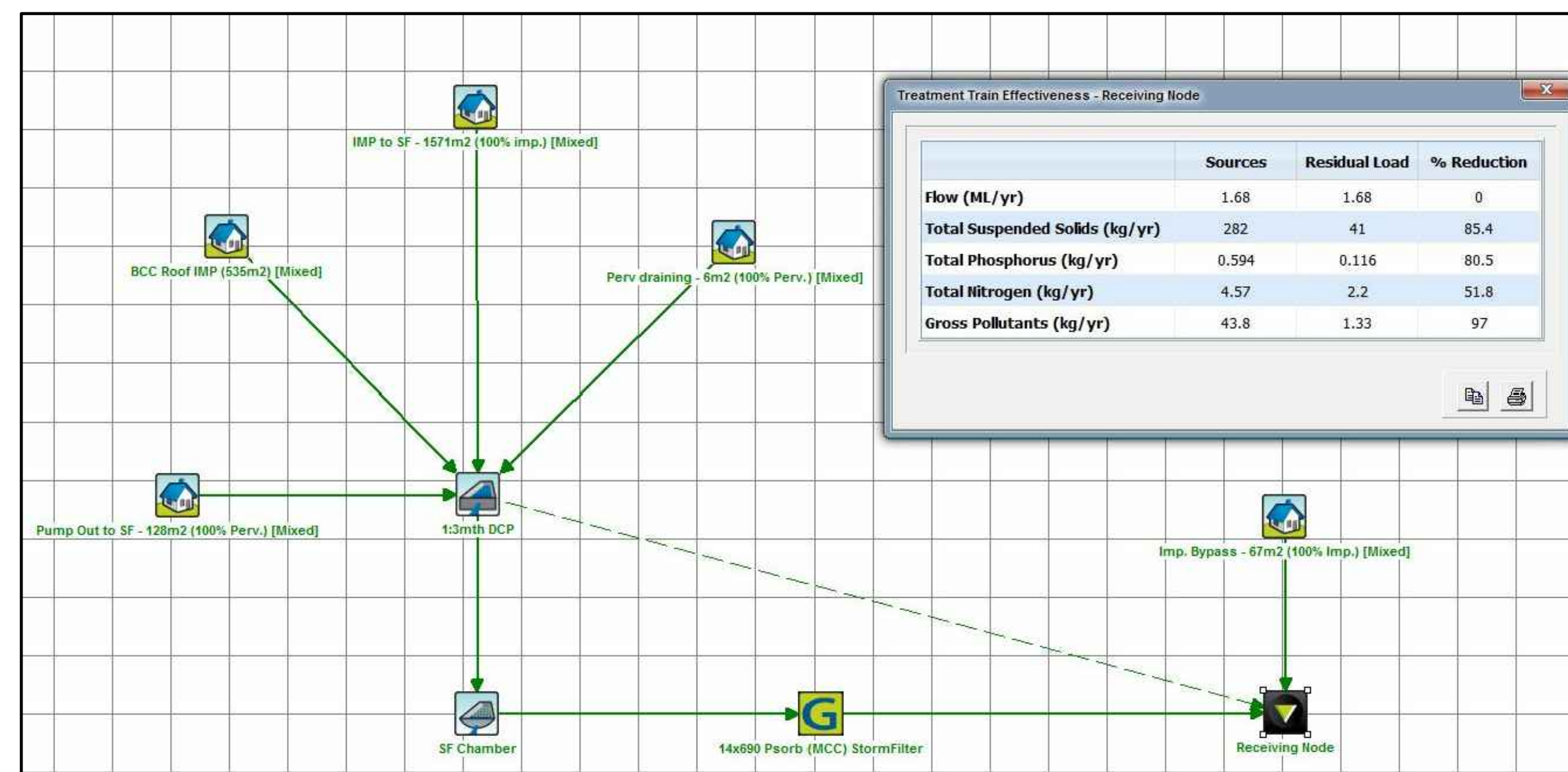
B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
- 250mm x 180mm (SMALL ENTRIES, SUCH AS GRATES & MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINIUM OR POLYPROPYLENE.

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN.



SECTION THROUGH STORMFILTER TANK
SECTION B
SCALE 1:20



MUSIC MODEL DIAGRAM AND RESULTS

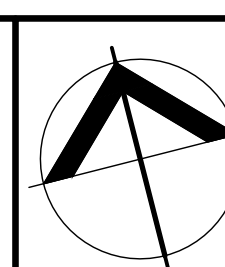
HI-FLOW BYPASS CALCS	
Project:	Proposed Mixed Use Development
Job No:	2203-DA
Location:	2-10 Phillip Street, Parramatta
Run-off Calcs Rational Method	
Q= CAI/3600	
where C=	1
A=	2307 m ²
3mth I=	43.4 mm/hr
Q=	27.81 l/s
Orifice Diameter	
Discharge =	Q
Coefficient of discharge =	C
Orifice area =	A
Depth of water above the CL of the orifice =	h
Acceleration due to gravity =	g
$Q = C A (2gh)^{1/2}$	
C =	0.620
Q =	27.81 l/s
h =	0.5 m
Orifice diameter d = 0.135 m	

REV	AMENDMENT	BY	DATE	REV	AMENDMENT	BY	DATE

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FOR COUNCIL / CONSTRUCTION CERTIFICATE ISSUE	
CHECKED BY Steve Arraj	DATE 09/05/18
STEVE ARRAJ	B.E.(CIVIL)

MANCE ARRAJ CIVIL & STRUCTURAL ENGINEERS First Floor, 278-282 Church Street, Parramatta P.O. Box 2555 North Parramatta NSW 1750 Ph. 02 8897 8800 www.manceengineers.com.au



PROJECT PROPOSED MIXED USE DEVELOPMENT 2-10 PHILLIP STREET PARRAMATTA
--

DRAWING TITLE STORMWATER LAYOUT DRAWING OSD AND STORMFILTER TANK DETAILS AND SECTIONS
--

DESIGNED GB CHECKED SA DATE AHD

PROJECT NUMBER 2203-DA DRAWING NUMBER SW021
--

ISSUE C AO

[illegible]