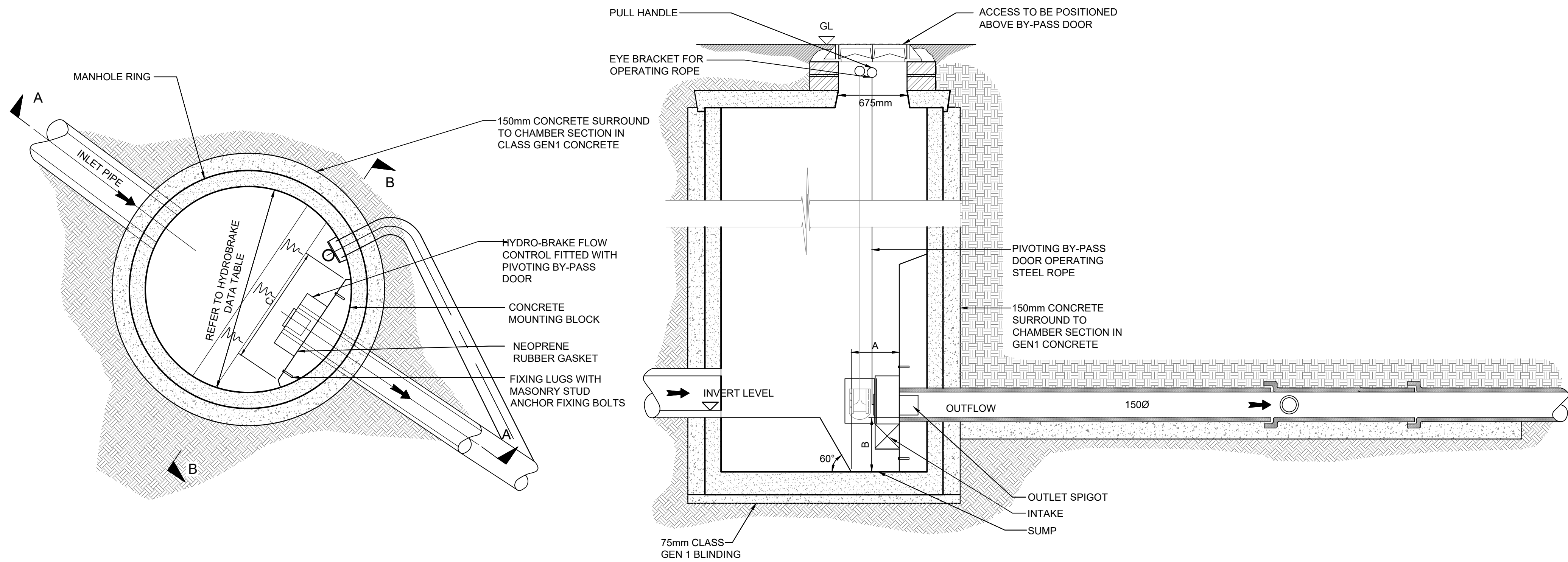


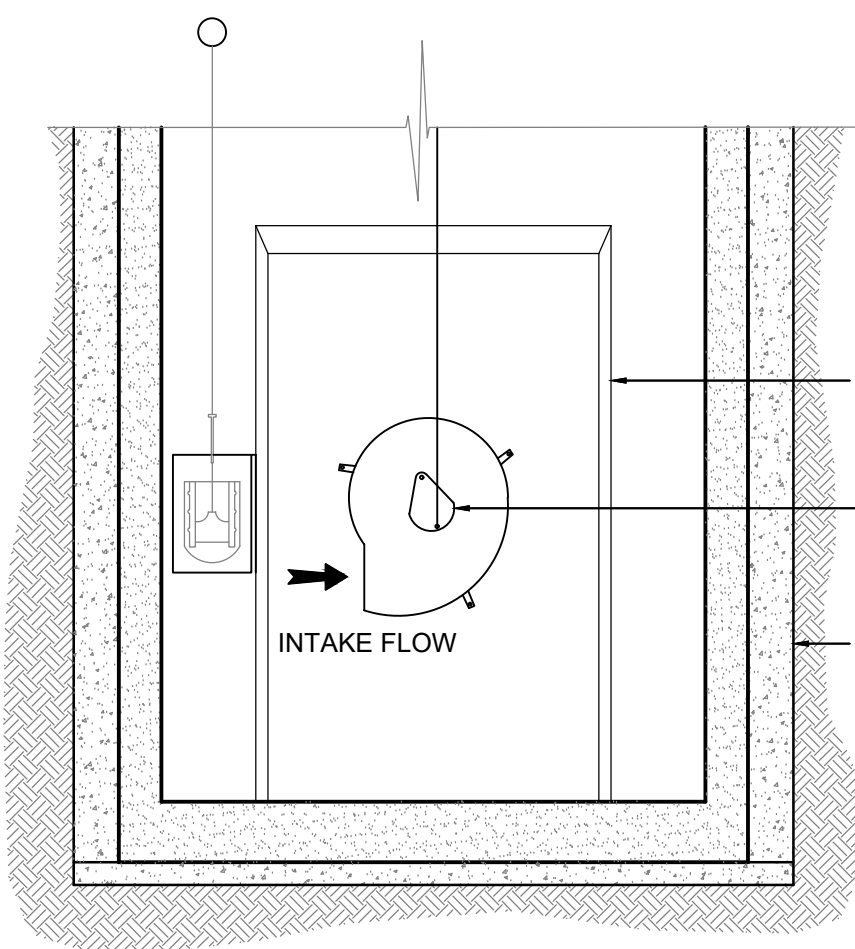
NOTES

1. TO BE READ IN CONJUNCTION WITH ALL RELEVANT KENNEDY REDFORD DRAWINGS AND SPECIFICATION.
2. TO BE READ IN CONJUNCTION WITH EXTERNAL ARCHITECTURAL, MEP, AND LANDSCAPE DESIGN DRAWINGS.
3. ALL DIMENSIONS ARE IN mm UNLESS STATED OTHERWISE.
4. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWINGS UMRF-KRD-XX-XX-DR-C-00501 & 00502.
5. ANY DISCREPANCIES IN THE DESIGN INFORMATION OR CONDITIONS FOUND ON SITE SHOULD BE RAISED TO THE ENGINEER IMMEDIATELY.
6. PRIVATE DRAINS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS.
7. NO CONNECTION TO BE MADE TO THE PUBLIC SEWER UNTIL APPROVAL HAS BEEN RECEIVED FROM THE UNITED UTILITIES AND MANCHESTER CITY COUNCIL.
8. FOR LOCATIONS OF POROUS PAVING REFER TO KENNEDY REDFORD EXTERNAL WORKS LAYOUT.
9. REFER TO THE MANUFACTURER'S INSTALLATION GUIDANCE FOR ALL SPECIFIED PRODUCTS.



PLAN

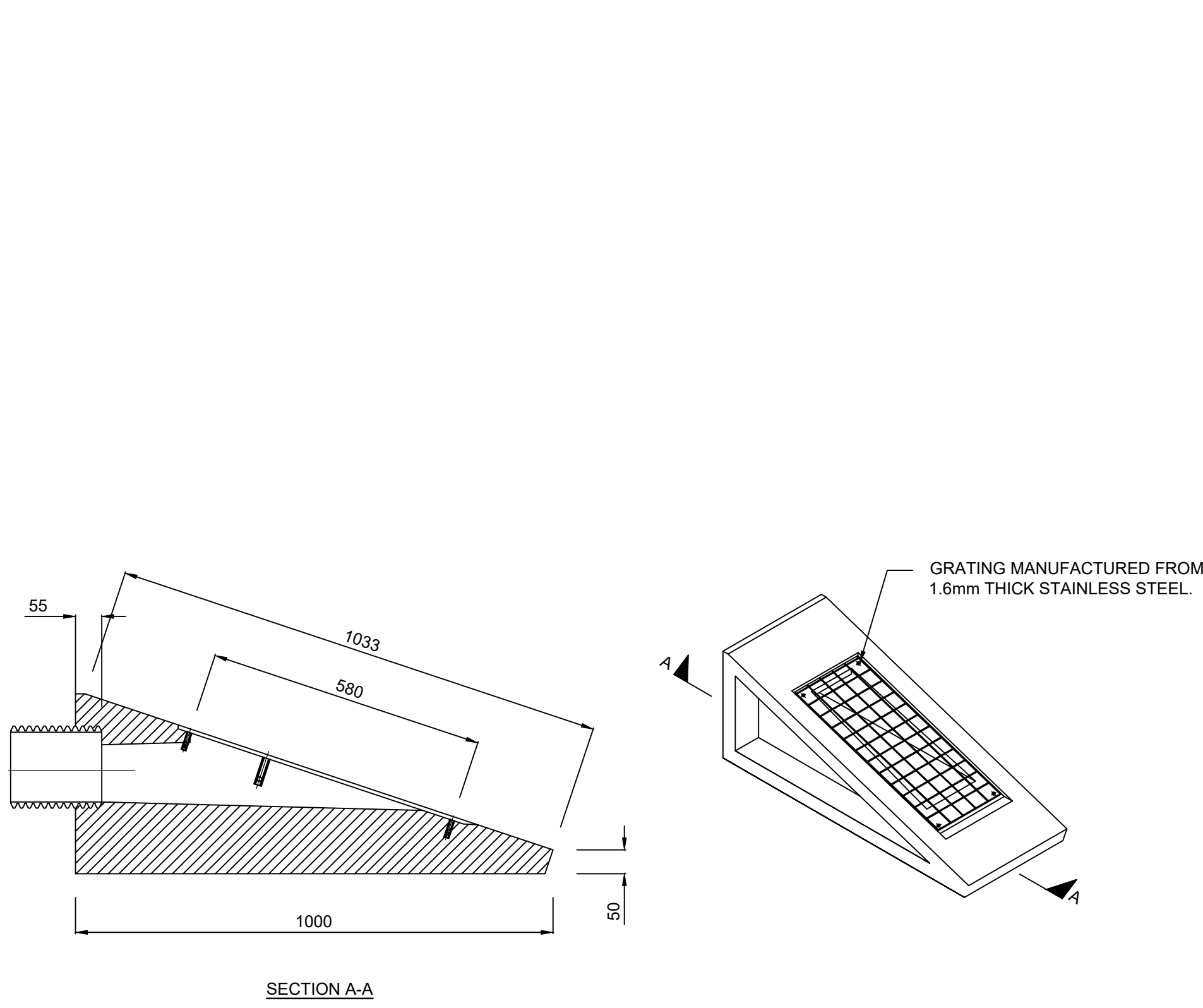
SECTION A-A

TYPICAL
HYDRO-BRAKE DETAIL
SCALE 1:25

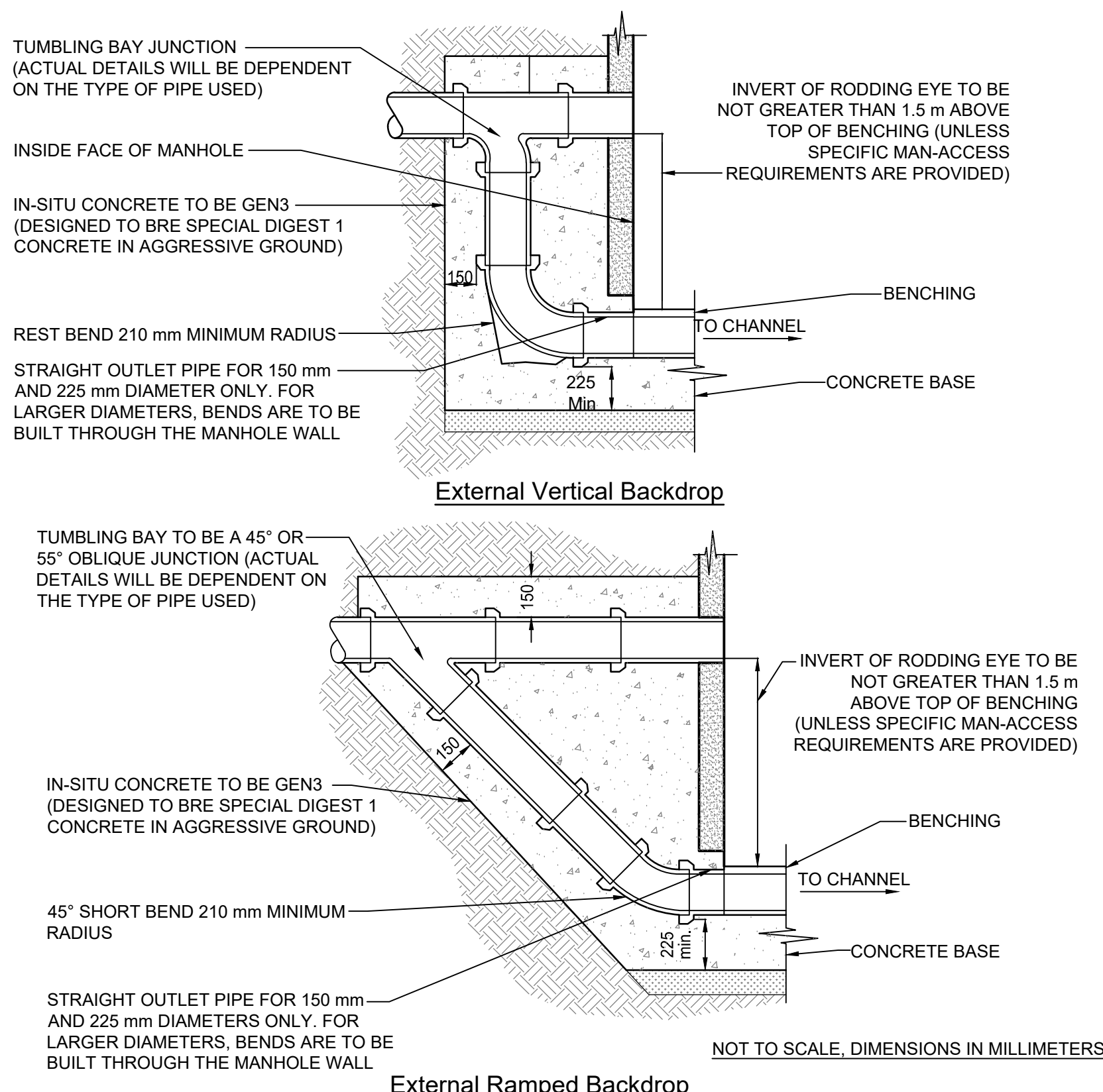
SECTION B-B

HYDROBRAKE DATA TABLE

MH REF	LOCATION	PLAN	DESIGN INFORMATION	CHAMBER DIMENSIONS
SW008	PHASE 1		FLOW 7.2l/s DESIGN HEAD 1.9m HYDROBRAKE UNIT OUTLET DIA 112mm MINIMUM OUTLET PIPE DIA 150mm UNIT REF: SHE-0112-7200-1900-7200	CHAMBER DIA 1500mm A = 240mm B = 410mm C = 905mm
SW013	PHASE 1		FLOW 6.7l/s DESIGN HEAD 1.6m HYDROBRAKE UNIT OUTLET DIA 112mm MINIMUM OUTLET PIPE DIA 150mm UNIT REF: SHE-0112-6700-1600-6700	CHAMBER DIA 1200mm A = 240mm B = 405mm C = 895mm
SW020	PHASE 2		FLOW 70l/s DESIGN HEAD 1.35m HYDROBRAKE UNIT OUTLET DIA 335mm MINIMUM OUTLET PIPE DIA 375mm UNIT REF: SHE-0335-7000-1350-7000	CHAMBER DIA 2700mm A = 690mm B = 545mm C = 1715mm
SW028	PHASE 3		FLOW 63l/s DESIGN HEAD 1.776m HYDROBRAKE UNIT OUTLET DIA 316mm MINIMUM OUTLET PIPE DIA 375mm UNIT REF: SHE-0316-6300-1776-6300	CHAMBER DIA 2700mm A = 690mm B = 590mm C = 1790mm

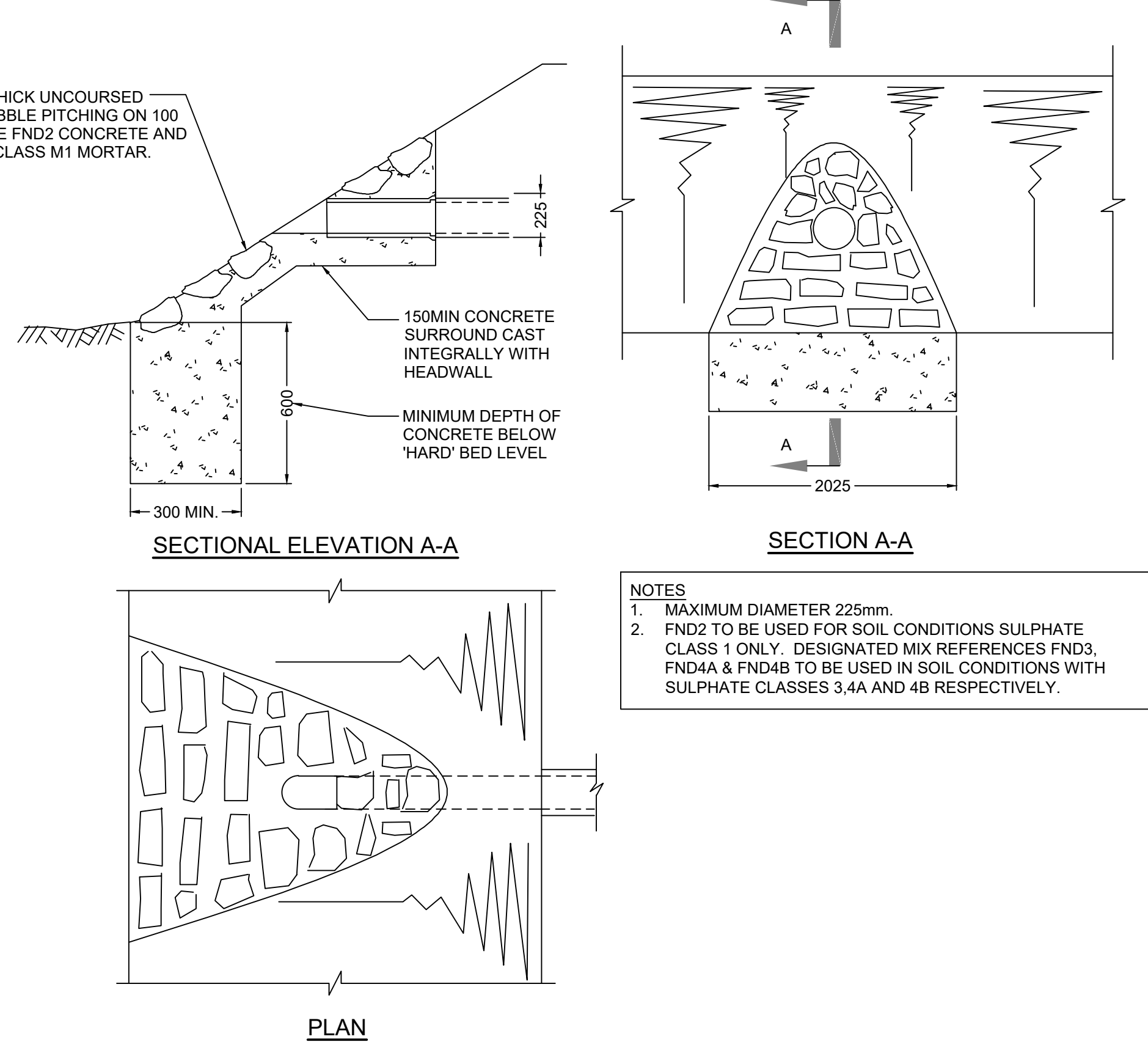


SECTION A-A

ALTHON SWALE INLET HEADWALL
SCALE N.T.S

External Vertical Backdrop

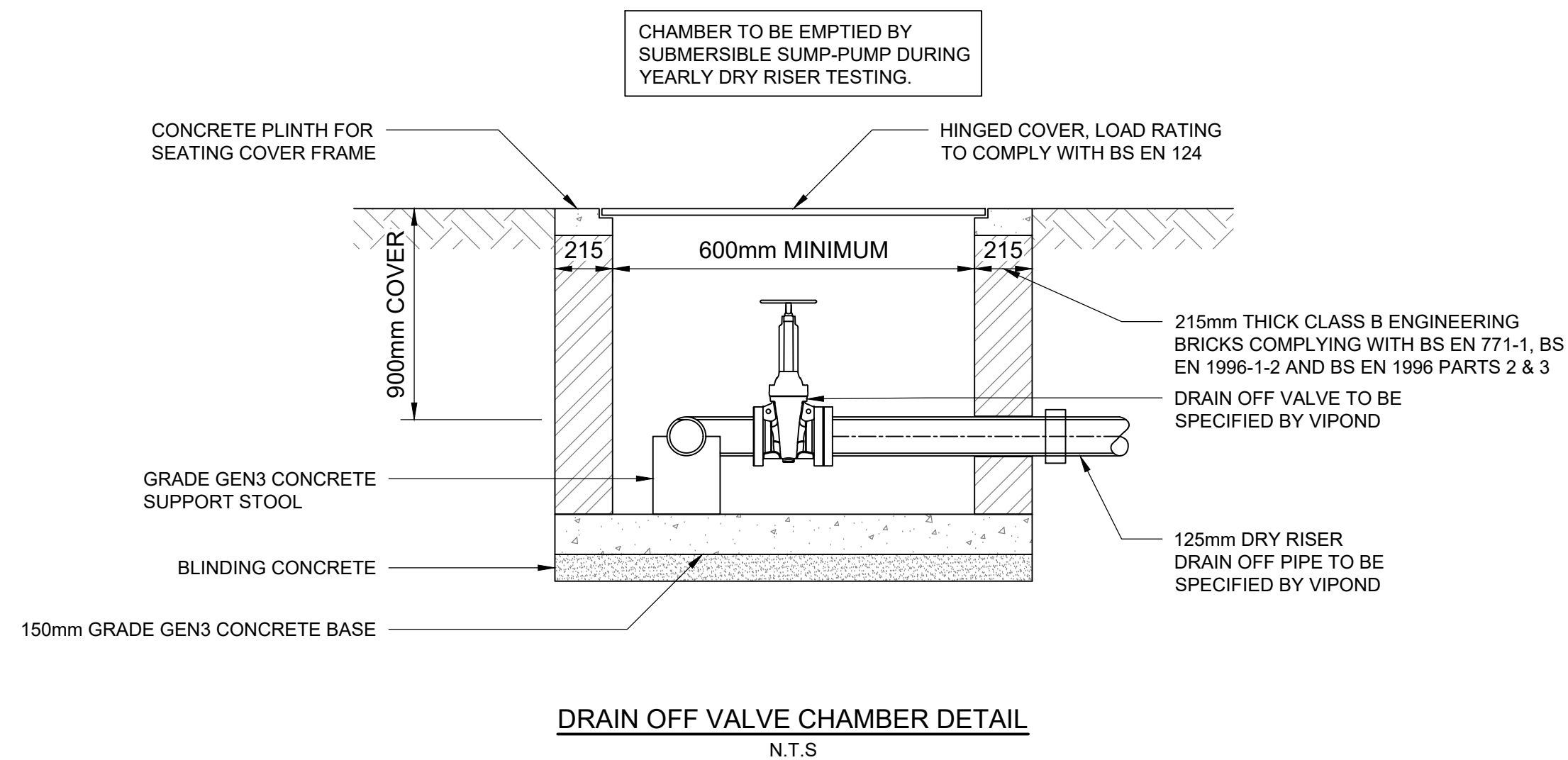
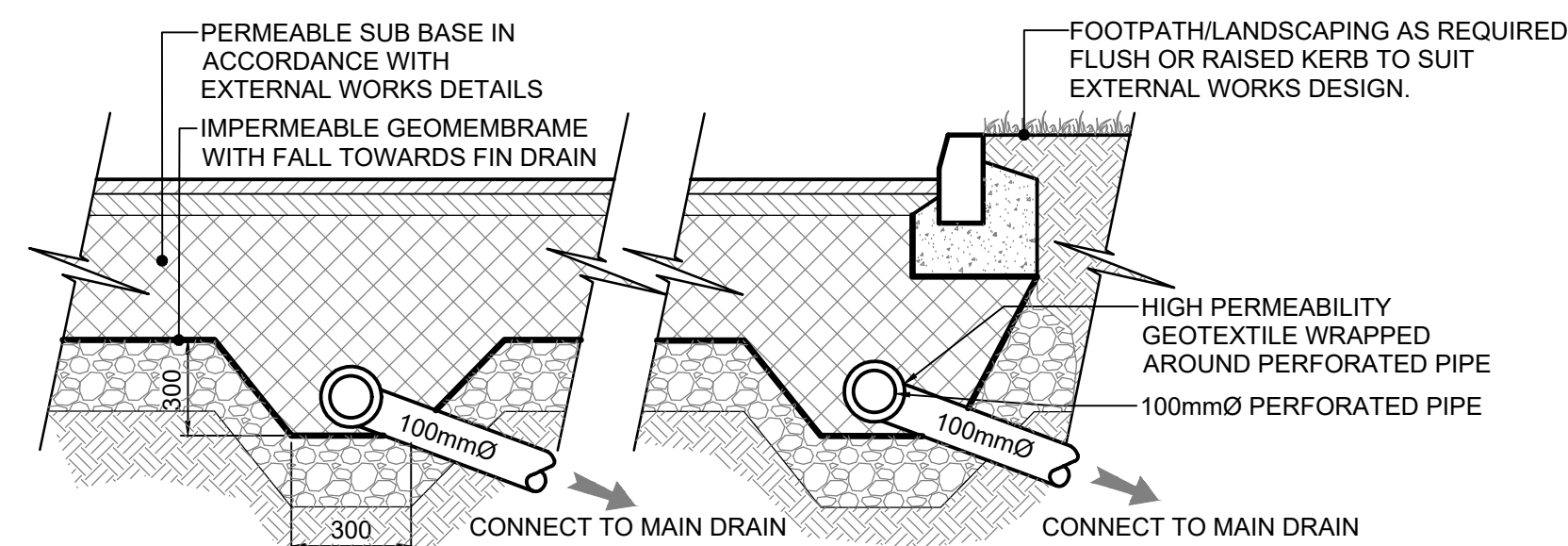
External Ramped Backdrop

TYPICAL VERTICAL AND RAMPED BACKDROP DETAIL
TYPE OF BACKDROP TO BE USED TO BE AGREED WITH UNDERTAKER
NOTE: STEEPER GRADIENTS ARE PREFERRED TO THE USE OF BACKDROPS.
NOT TO SCALE

SECTIONAL ELEVATION A-A

SECTION A-A

PLAN

STONE HEADWALL DETAIL
(N.T.S)DRAIN OFF VALVE CHAMBER DETAIL
N.T.STYPICAL FIN DRAIN FOR
POROUS PAVING
SCALE 1:10

REV	DATE	DESCRIPTION	ORIN	CHK	APP
C04	20.04.25	HYDROBRAKE DETAIL UPDATED	N/R	J/H	P/V
C03	03.03.25	DRAIN OFF VALVE CHAMBER DETAIL ADDED	N/R	J/H	P/V
C02	20.02.25	HYDROBRAKE DETAIL UPDATED	N/R	J/H	P/V
C01	03.02.25	CONSTRUCTION ISSUE	N/R	J/H	P/V
P03	23.05.25	DRAWING STATUS UPDATE	N/R	J/H	P/V
P02	19.02.25	PLANNING ISSUE (DRAWING STATUS UPDATE)	N/R	J/H	P/V
P01	13.02.25	FIRST ISSUE	N/R	J/H	P/V

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Kennedy Redford
MANAGING VISION

CLIENT

GRAHAMPROJECT NAME
UoM RESIDENCES DBFODRAWING TITLE
**DRAINAGE DETAILS
SHEET 2**DATE
13.02.25
SCALE
AS SHOWN
SHEET SIZE
A0
REV
C04

DRAWING STATUS

FOR CONSTRUCTION

DRAWING NUMBER
UMRF - KRD - XX - XX - DR - C - 00541