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 2. ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATION SABS 1200 AND THE STANDARDS REFERRED TO THEREIN.

A	FOR APPROVAL	CAL	10-11-23	NA
No	Description	Dwn	Date	App
REVISIONS				
		Initials	Date	
Designed		CAL	28-06-23	
Drawn		CAL	28-06-23	
Project Eng		NA	28-06-23	
Approved		NA	28-06-23	

SCALE 1 : 750				
		Initials	Date	
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Approved		NA	28-06-23	

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CONSULTING ENGINEERS
Engineering Vision Development

Client	PIETER KOEN TRUST
Project	PIETER KOEN ESTATE DEVELOPMENT

Title	INTERNAL SERVICES LAYOUT PLAN WITH TEMPORARY SEWER OPTION
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Drawing No	G5215BA-CE-101
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Rev No	A
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LEGEND

STAND BOUNDARY

SEWER:

- Ø UPVC
- UPVC CLASS 34 SEWER LINE WITH ERF CONNECTION - Ø AS INDICATED
- UPVC CLASS 12 RISING MAIN - Ø AS INDICATED

WATER SUPPLY:

- Ø MPVC
- MPVC CLASS 12 WATER LINE WITH ERF CONNECTION - Ø AS INDICATED

WATER NUMBER - REFER TO DWG FOR DETAILS

END CAP

VALVE

FIRE HYDRANT

SCOUR VALVE

AIR VALVE

TELKOM:

- 2 X 110mm Ø SLEEVES - GREEN + BLACK
- TELKOM JOINTING PIT - LARGE
- TELKOM JUNCTION BOX - SMALL
- ELECTRICAL:**
- 2L = 2 x 110mm DOUBLE WALL HDPE DUCT
- 1H = 1 x 160mm DOUBLE WALL HDPE DUCT
- STORMWATER NETWORK:**
- CLASS 1000 CONCRETE PIPES - SPIGOT & SOCKET - SIZE AS INDICATED
- HEADWALL
- STORMWATER DROP INLET
- CATCHPIT
- STORMWATER MANHOLE
- STORMWATER FIELD INLET
- SUBSOIL DRAIN

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PIETER KOEN TRUST

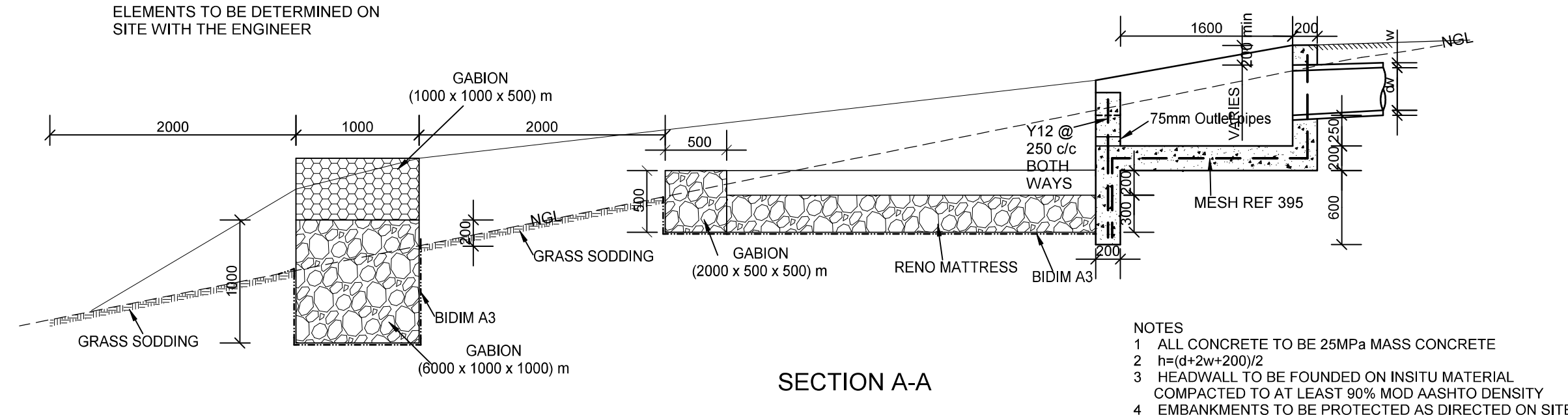
Project
PIETER KOEN ESTATE
DEVELOPMENT

INTERNAL SERVICES
LAYOUT PLAN WITH
LONGTERM SEWER OPTION

Drawing No	G5215BA-CE-102
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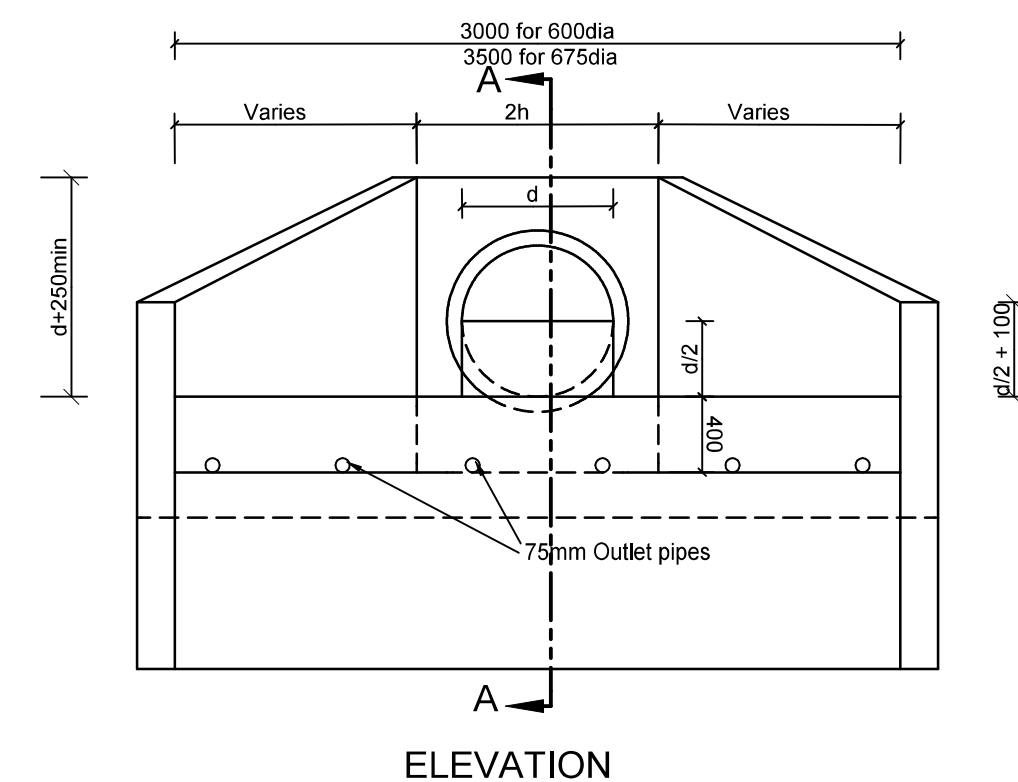
Rev No 1

1. EMBANKMENTS TO BE PROTECTED AS DIRECTED ON SITE
2. GEOTEXTILE BIDIM A3 UNDERNEATH RENO MATRESS AND GABIONS AS INDICATED.
3. ALL FINAL STEP HEIGHTS OF ELEMENTS TO BE DETERMINED ON SITE WITH THE ENGINEER

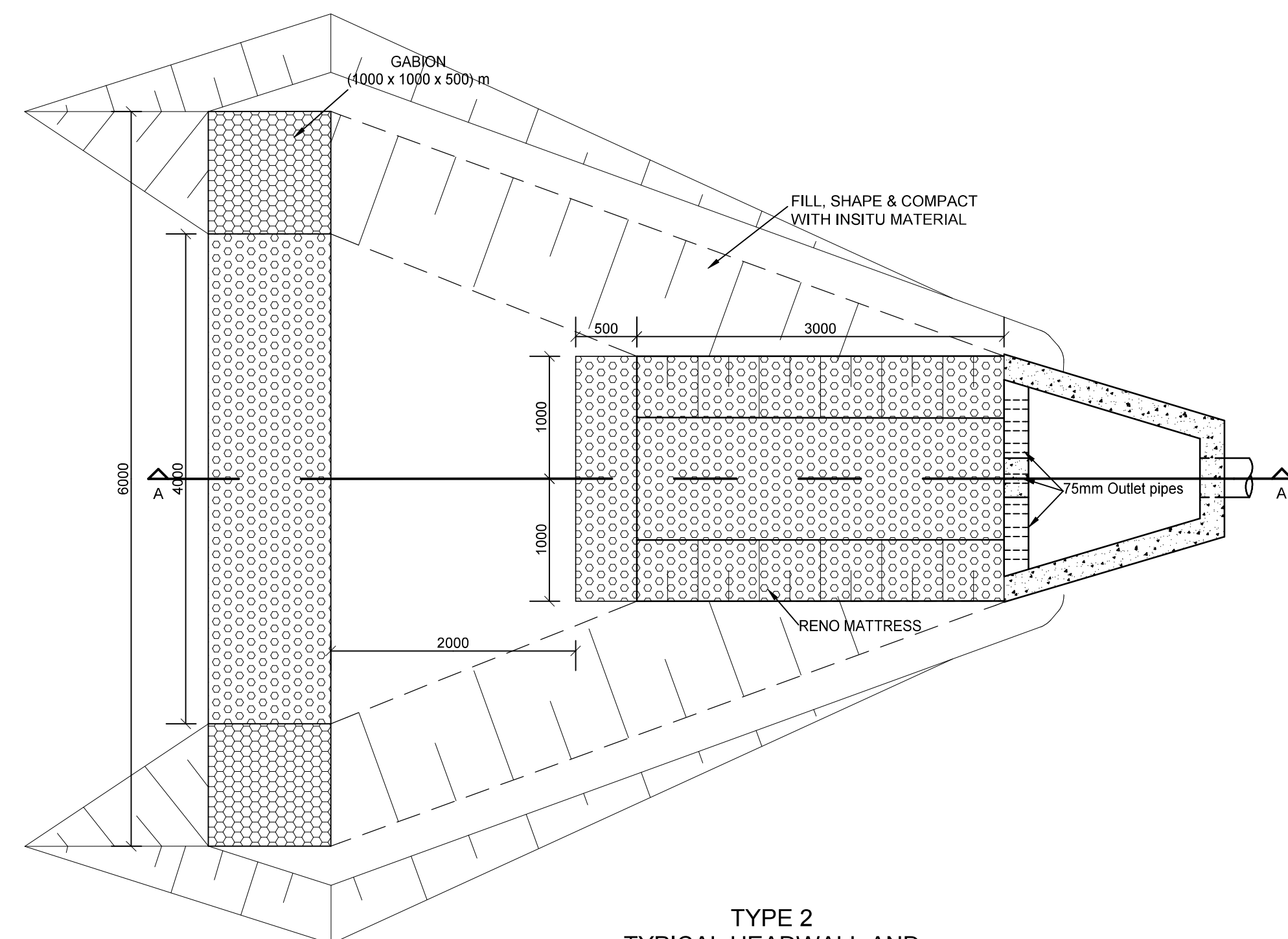


SECTION A-A

- NOTES
1 ALL CONCRETE TO BE 25MPa MASS CONCRETE
2 $h=(d+2w^2/200)/2$
3 HEADWALL TO BE FOUNDED ON INSITU MATERIAL
4 EMBANKMENTS TO BE PROTECTED AS DIRECTED ON SITE

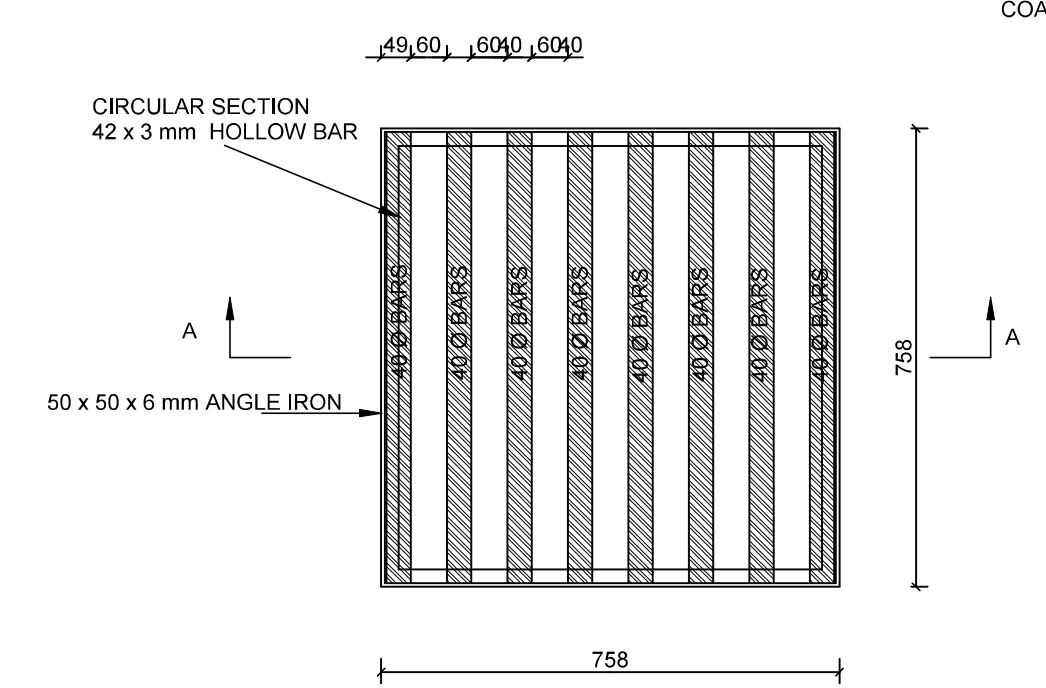


ELEVATION

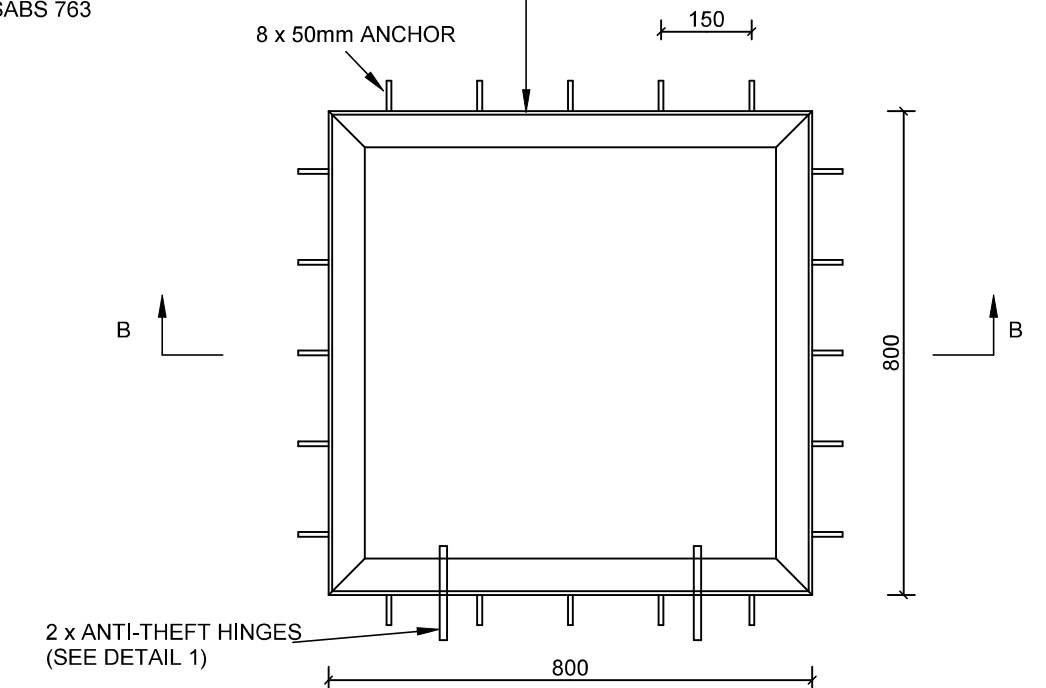


TYPE 2
TYPICAL HEADWALL AND
STILLING BASIN DETAIL.
N.T.S.

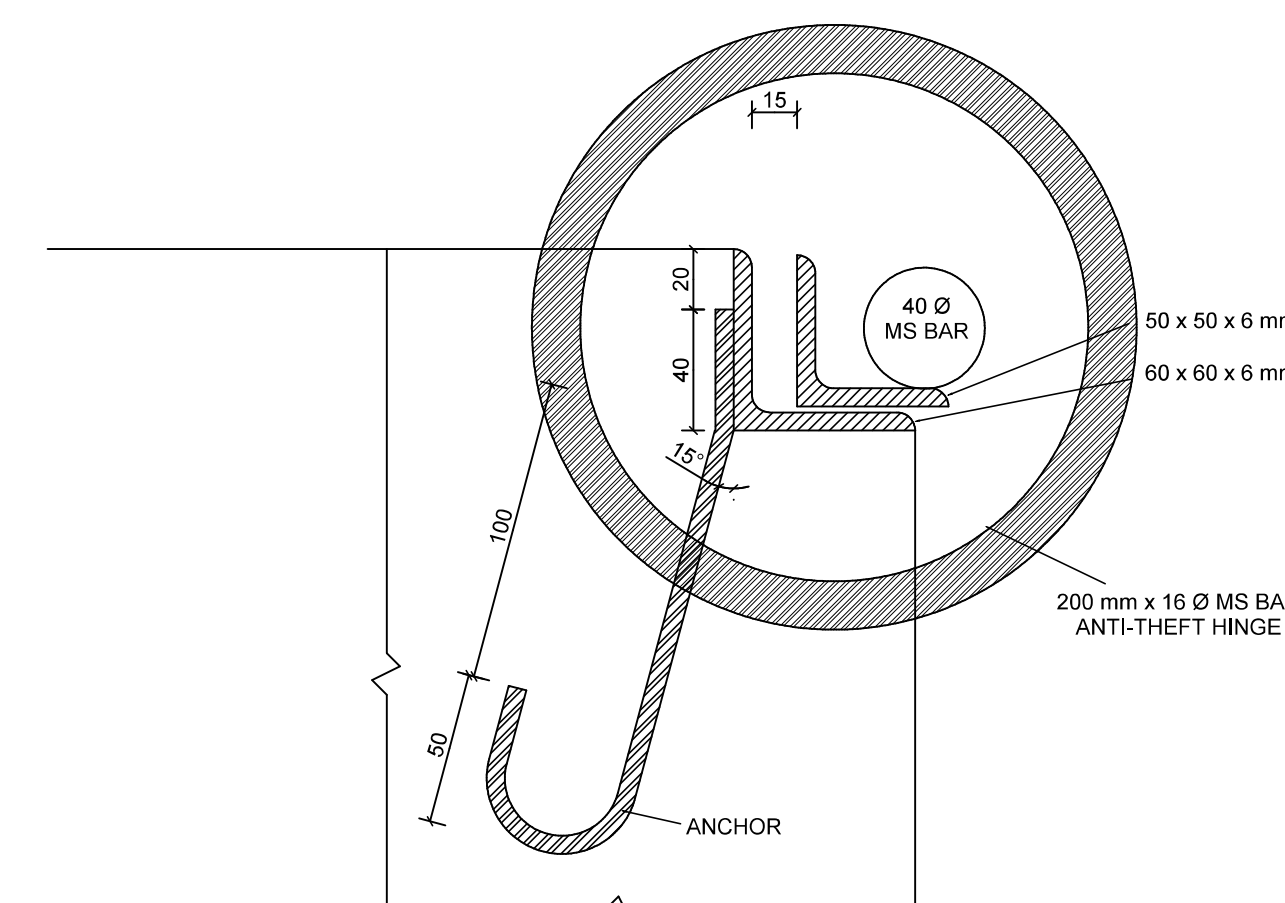
- NOTES:
- 1) GRID AND FRAME SHALL BE HOT - DIP GALVANISED WITH AN 85 MICROMETER COATING IN ACCORDANCE WITH SABS 763



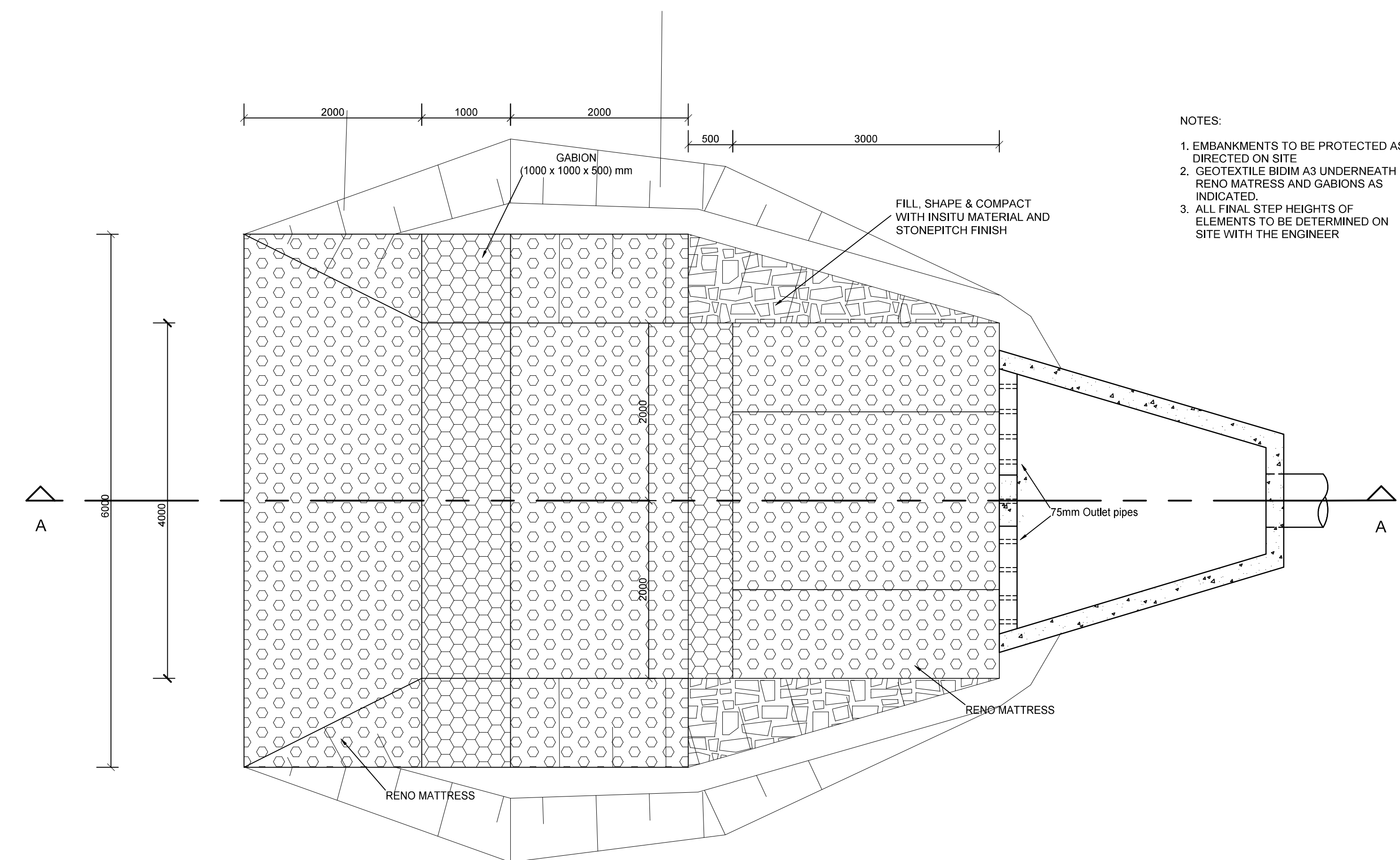
GRID DETAILS



FRAME DETAIL

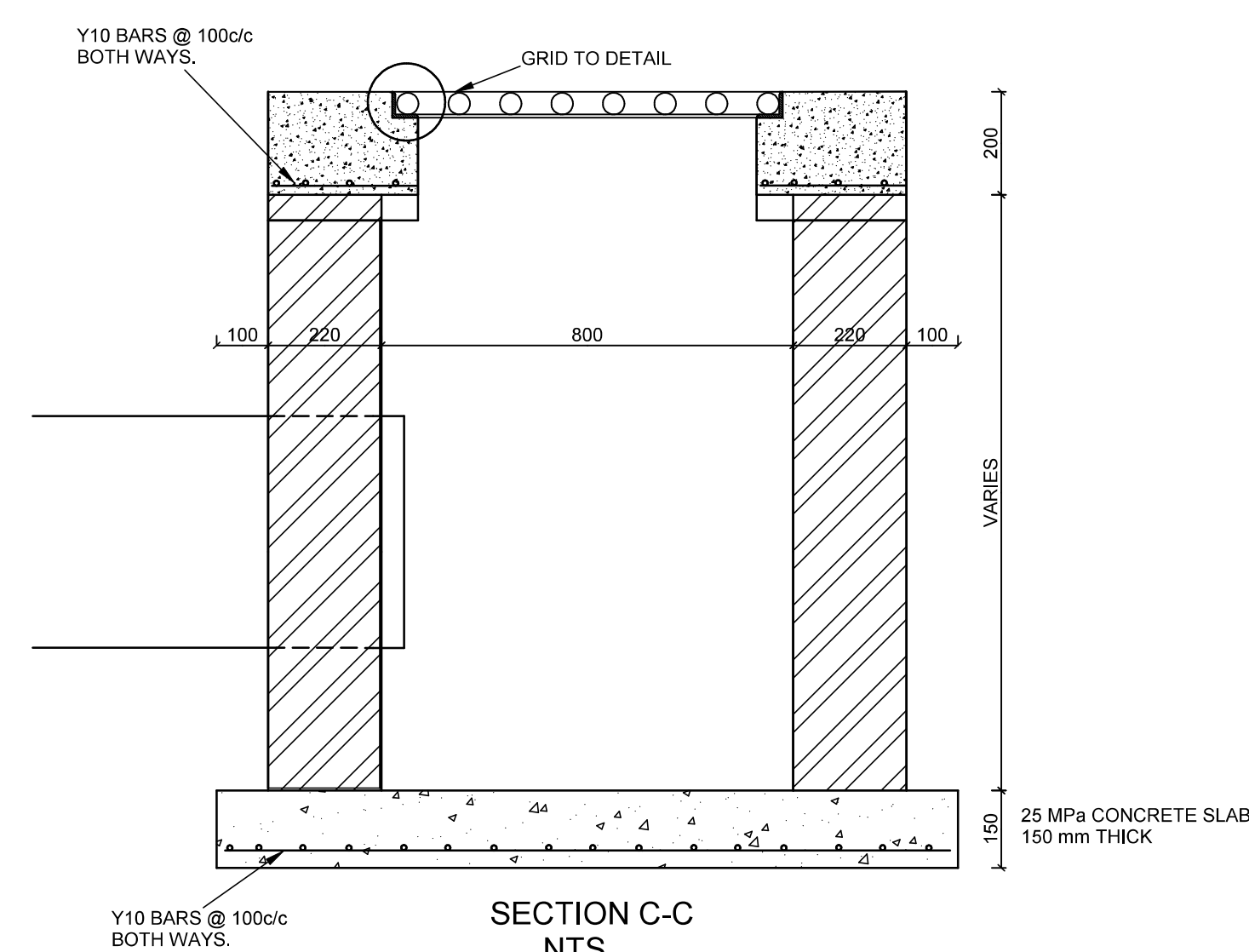


DETAIL 1
NTS

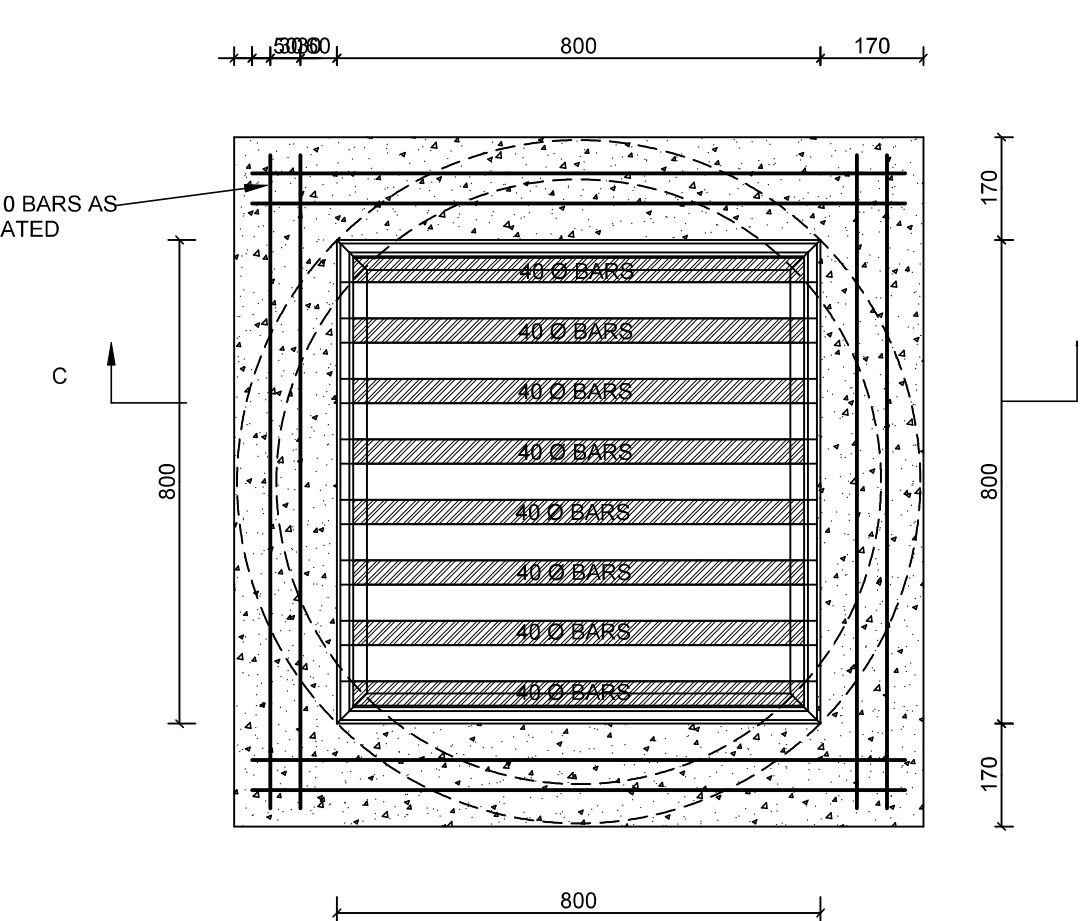


TYPE 1
TYPICAL HEADWALL AND
STILLING BASIN DETAIL.
N.T.S.

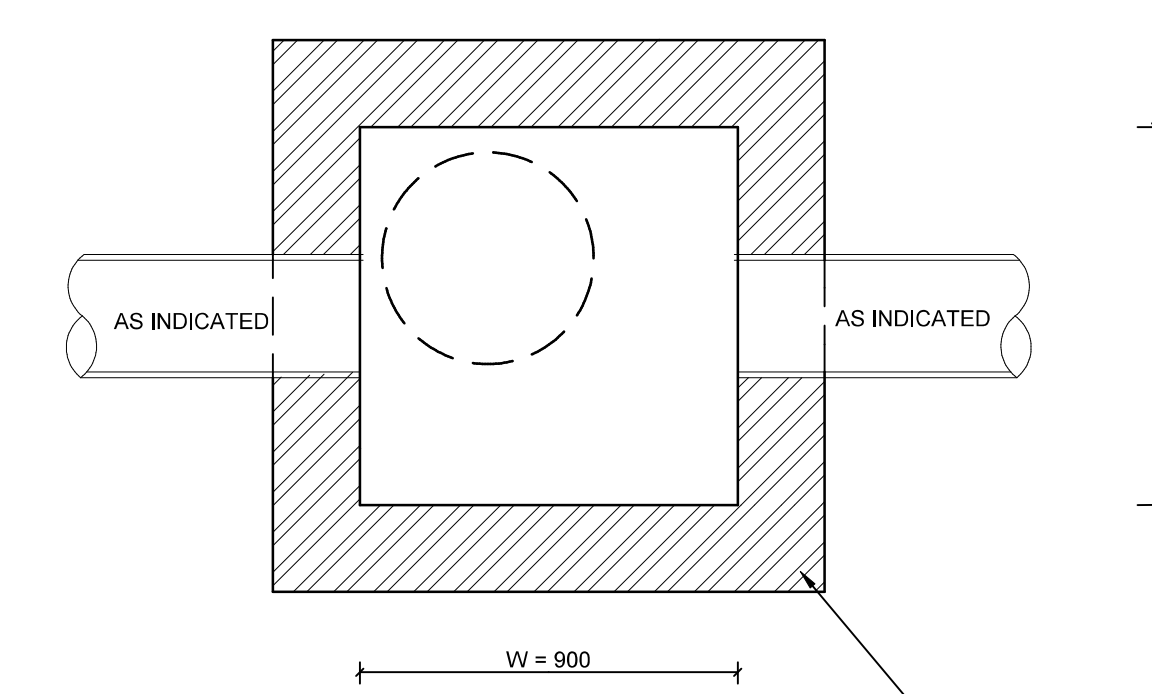
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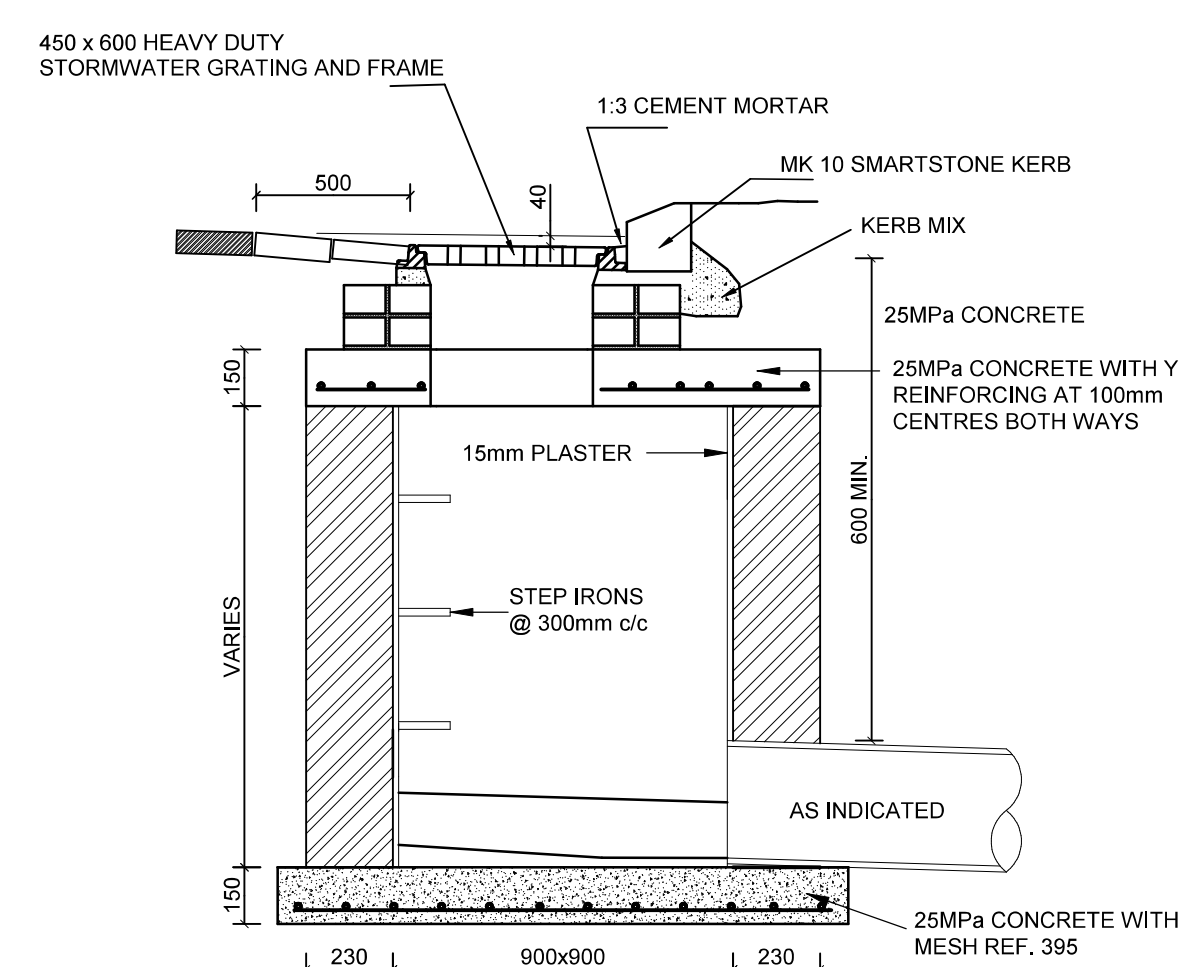
SECTION NTS



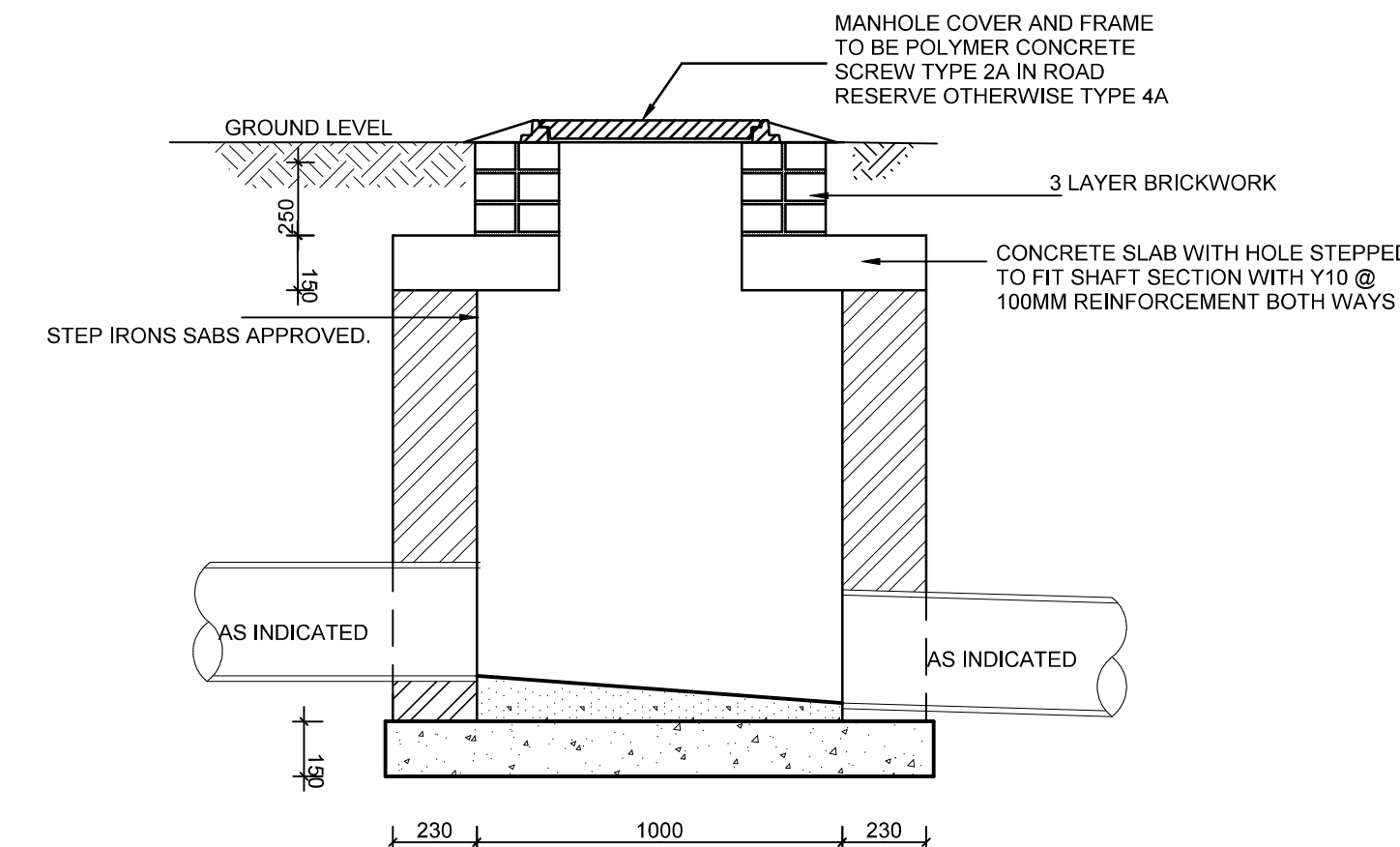
GRID PLAN DETAIL
NTS



1 : 20
SECTIONAL PLAN: STORMWATER MANHOLE



SECTION A-A
SCALE: 1 : 20



1 : 20
TYPICAL SECTION THROUGH STORMWATER MANHOLE

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SCALE 1 : 500

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Client **PIETER KOEN TRUST**

Project
PIETER KOEN ESTATE
DEVELOPMENT

Title

STORMWATER
DETAILS 1

Drawing No G5215BA-CE-110

Rev No A

1:20 PLAN OF DROP INLET CATCHPIT WITH HEAVY DUTY INLET

1 : 20
TYPICAL SECTION THROUGH STORMWATER CATCHPIT

1 : 20
SECTIONAL PLAN: STORMWATER MANHOLE

1 : 20
TYPICAL SECTION THROUGH STORMWATER MANHOLE

PIPE PROTECTION
STRUCTURE
PLAN
SCALE 1" = 50'

SECTION D-D
PIPE PROTECTION
STRUCTURE DETAIL
SCALE 1 : 50

SECTION E-E
PIPE PROTECTION
STRUCTURE DETAIL
SCALE 1 : 50

NTS
TYPICAL SWALE LAYOUT PLAN

NTS

SECTION A-A

PLAN: CATION STRUCTURE: OHS^+

SECTION B-B

PLAN

ELEVATION

OUTLET HEADWALL - OHS 1

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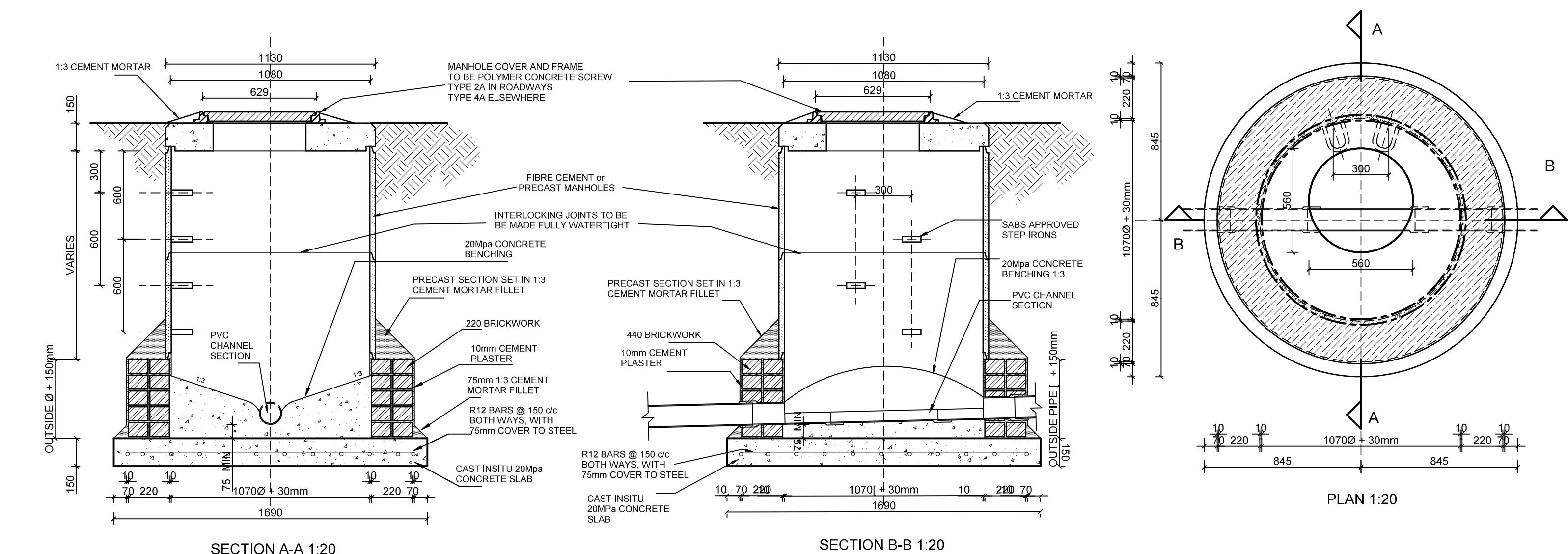
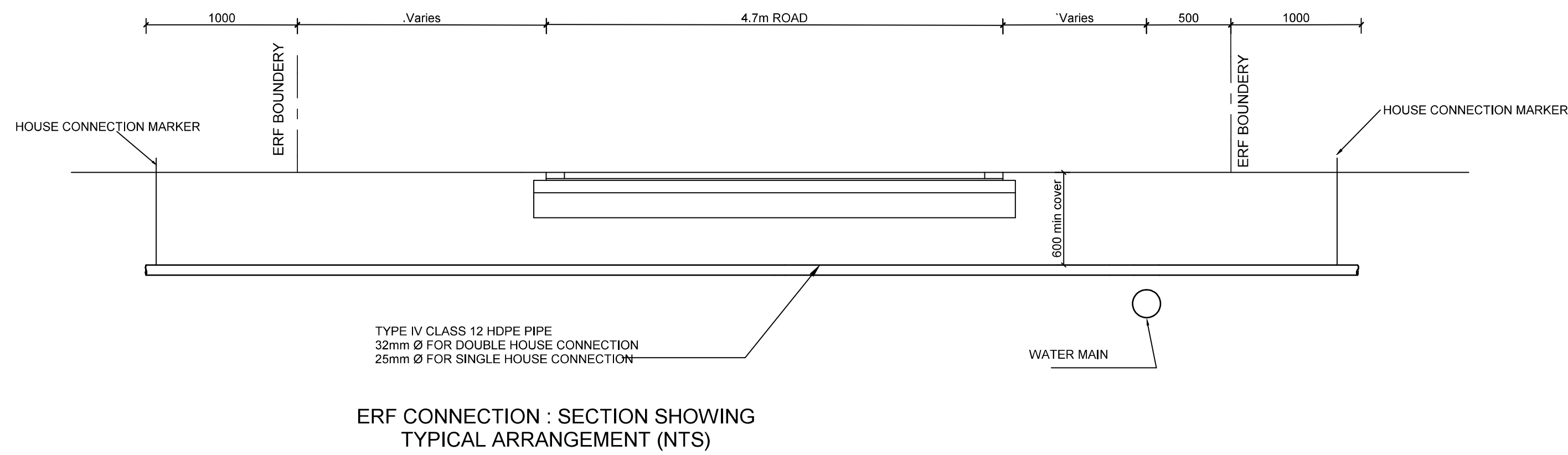
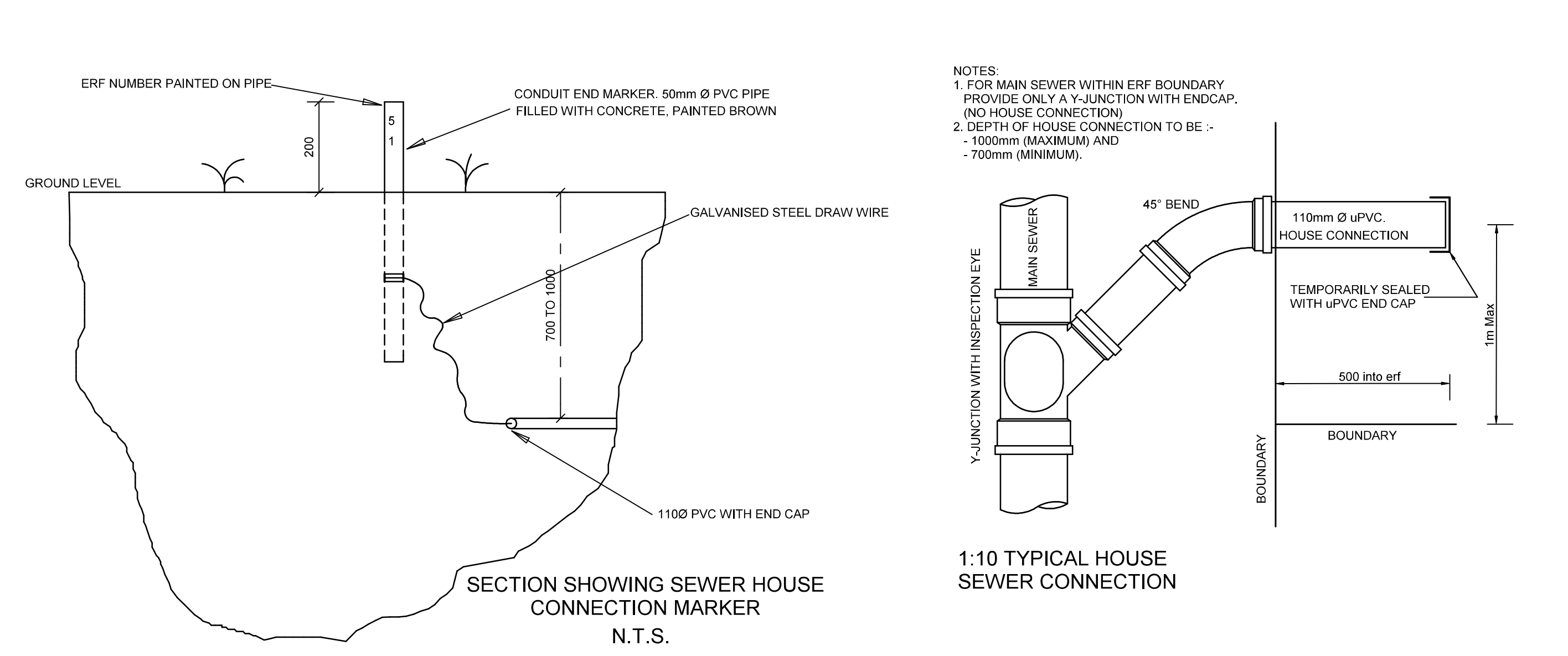
Project

PIETER KOEN ESTATE
DEVELOPMENT

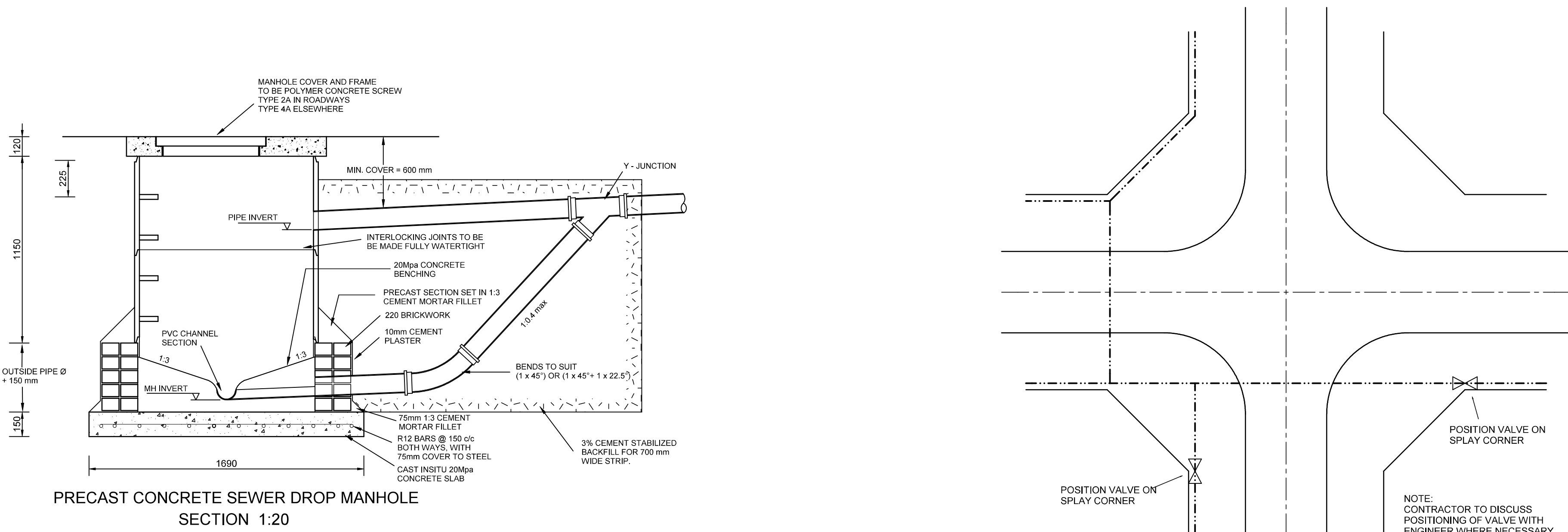
Title	
STORMWATER DETAILS 2	

Drawing No G5215BA-CE-211

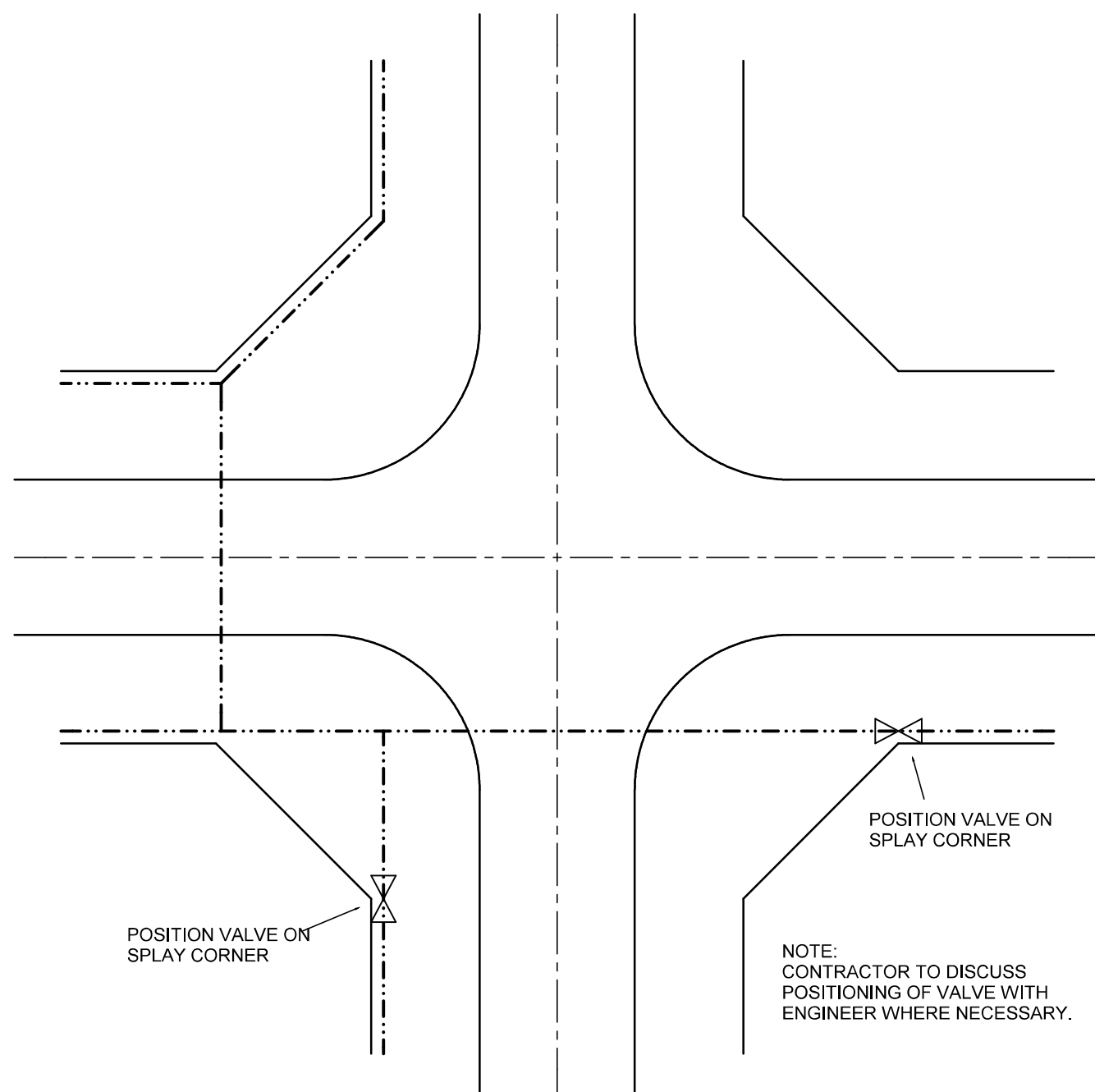
Rev No A



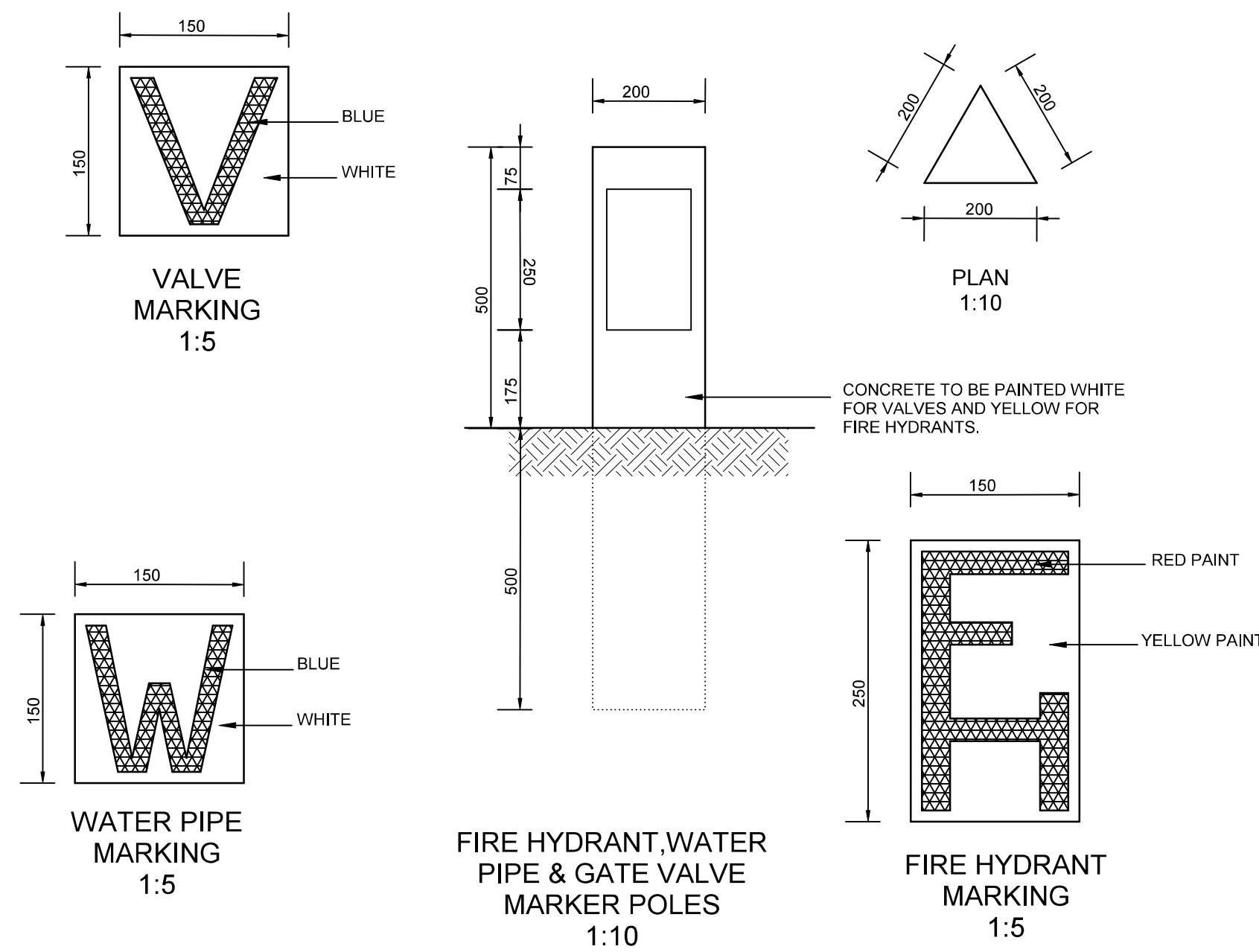
FOUL SEWER MANHOLE: SHALLOW TYPE - PC (MANHOLES UP TO 3.0m DEEP)



PRECAST CONCRETE SEWER DROP MANHOLE SECTION 1:20

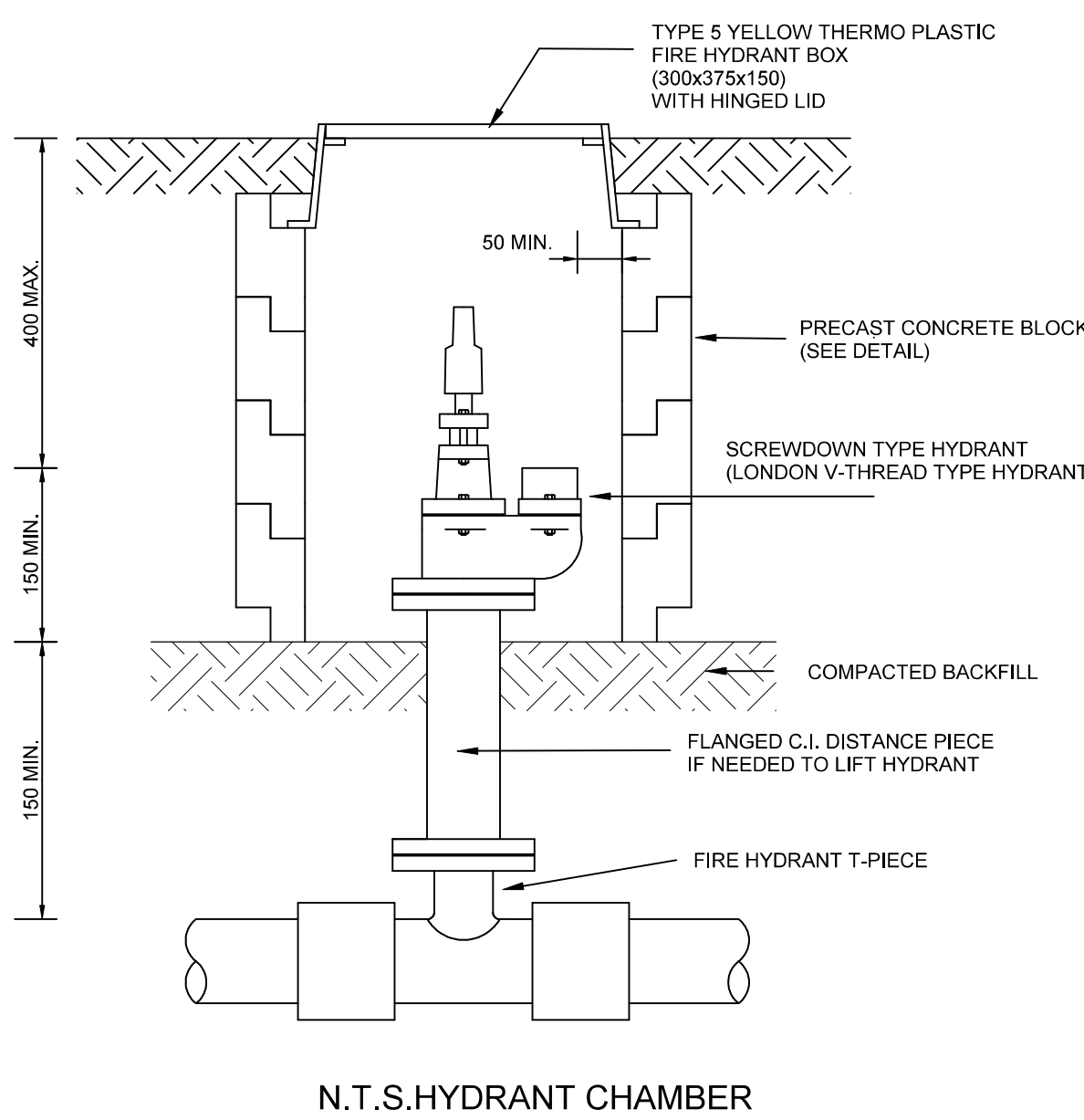


TYPICAL DETAIL SHOWING POSITION OF VALVES IN ROAD RESERVE 1:200

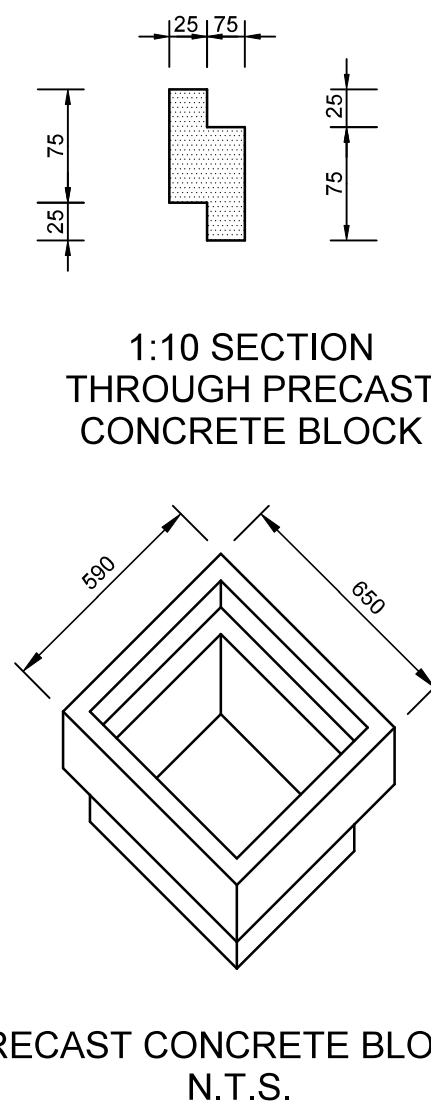


FIRE HYDRANT WATER PIPE & GATE VALVE MARKER POLES 1:10

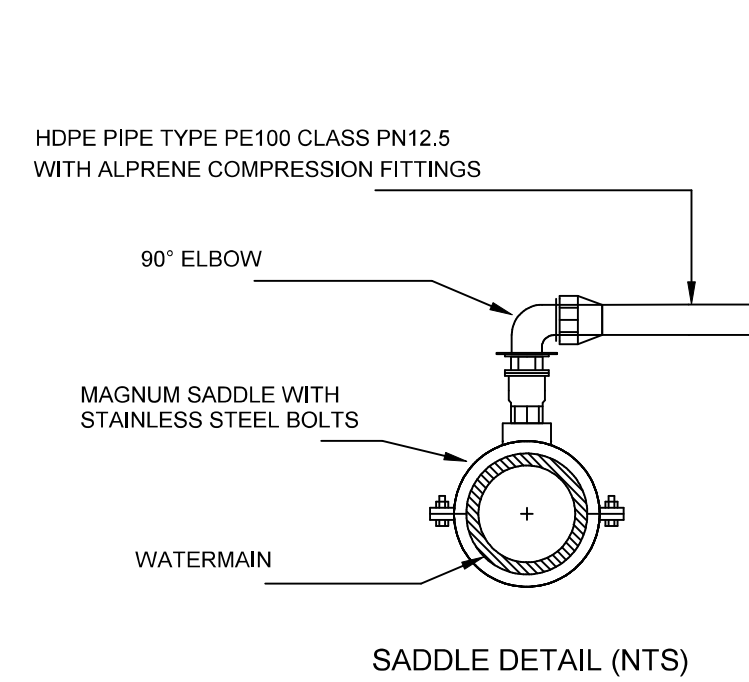
FIRE HYDRANT MARKING 1:5



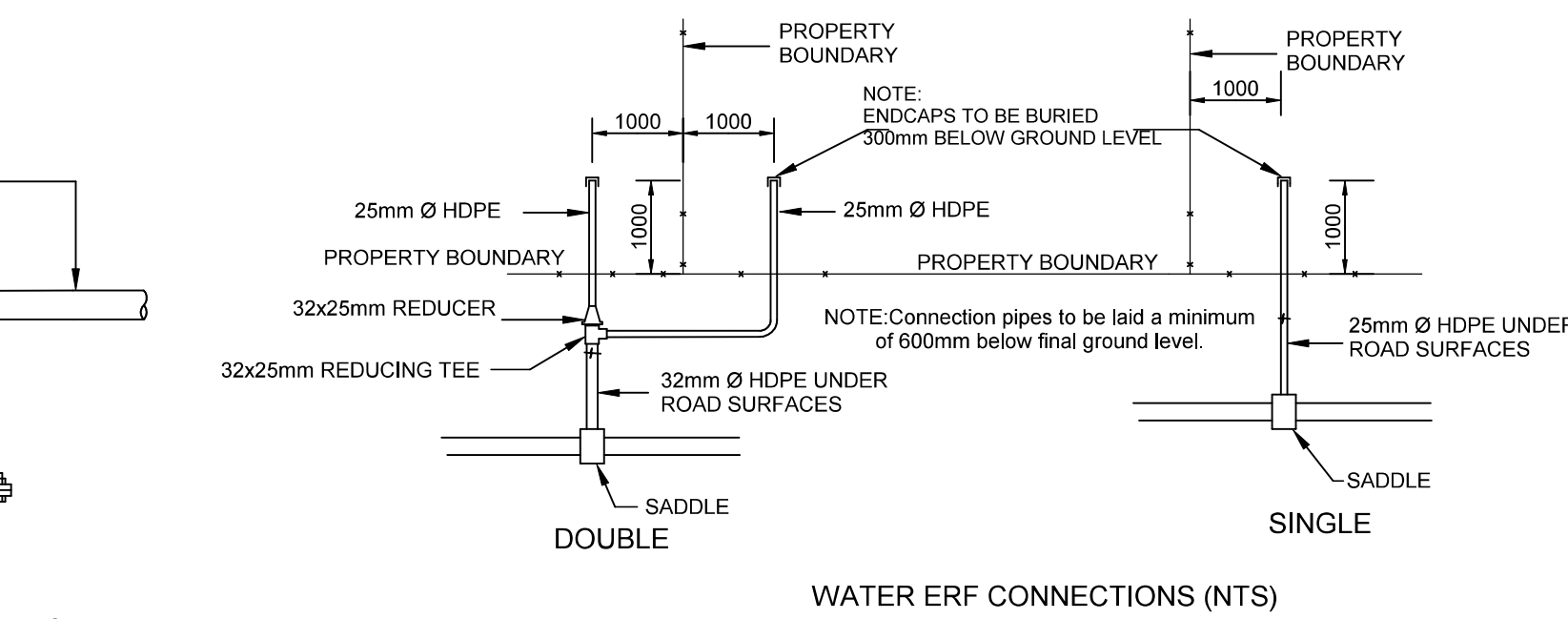
N.T.S. HYDRANT CHAMBER



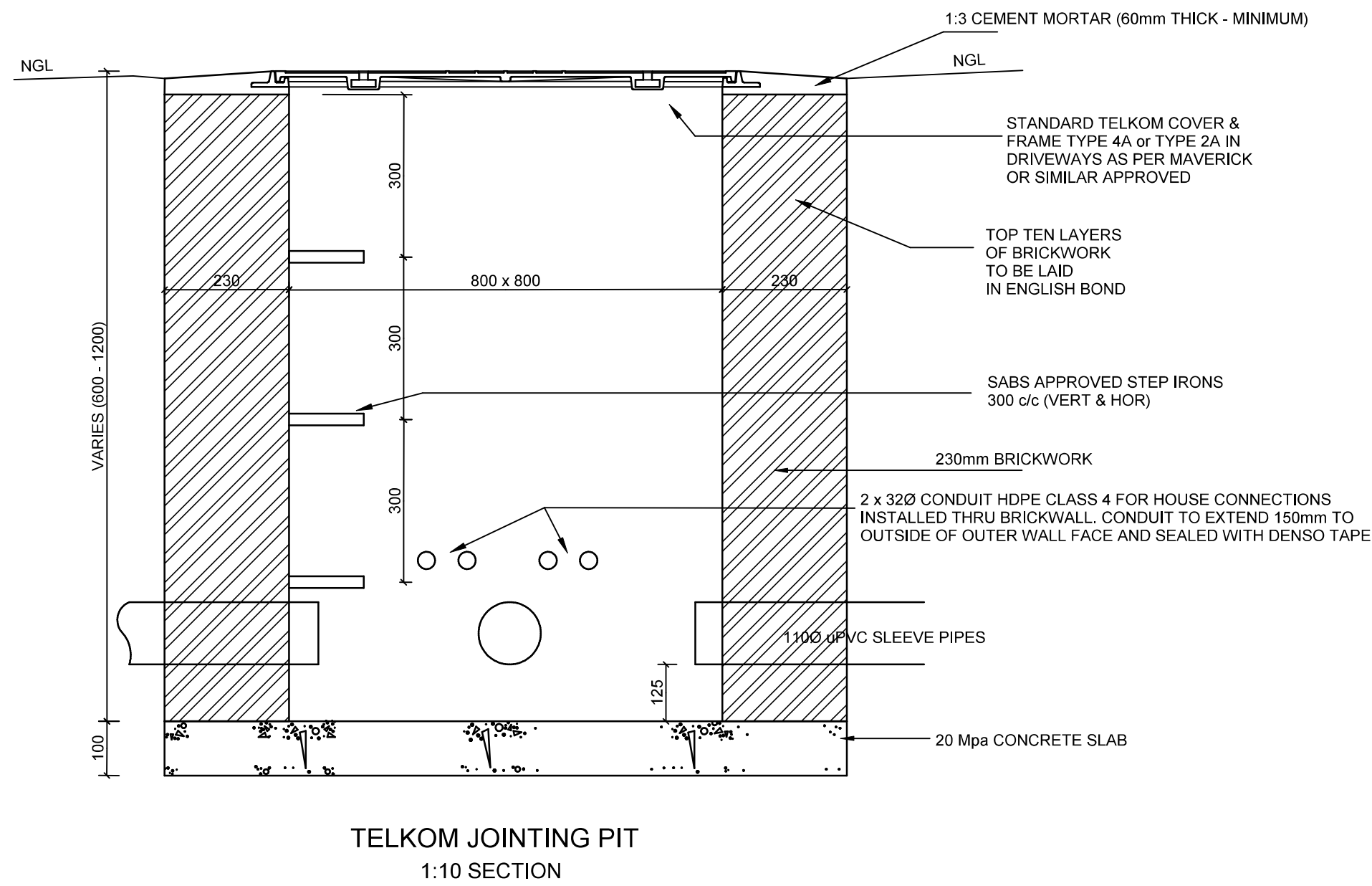
PRECAST CONCRETE BLOCK N.T.S.



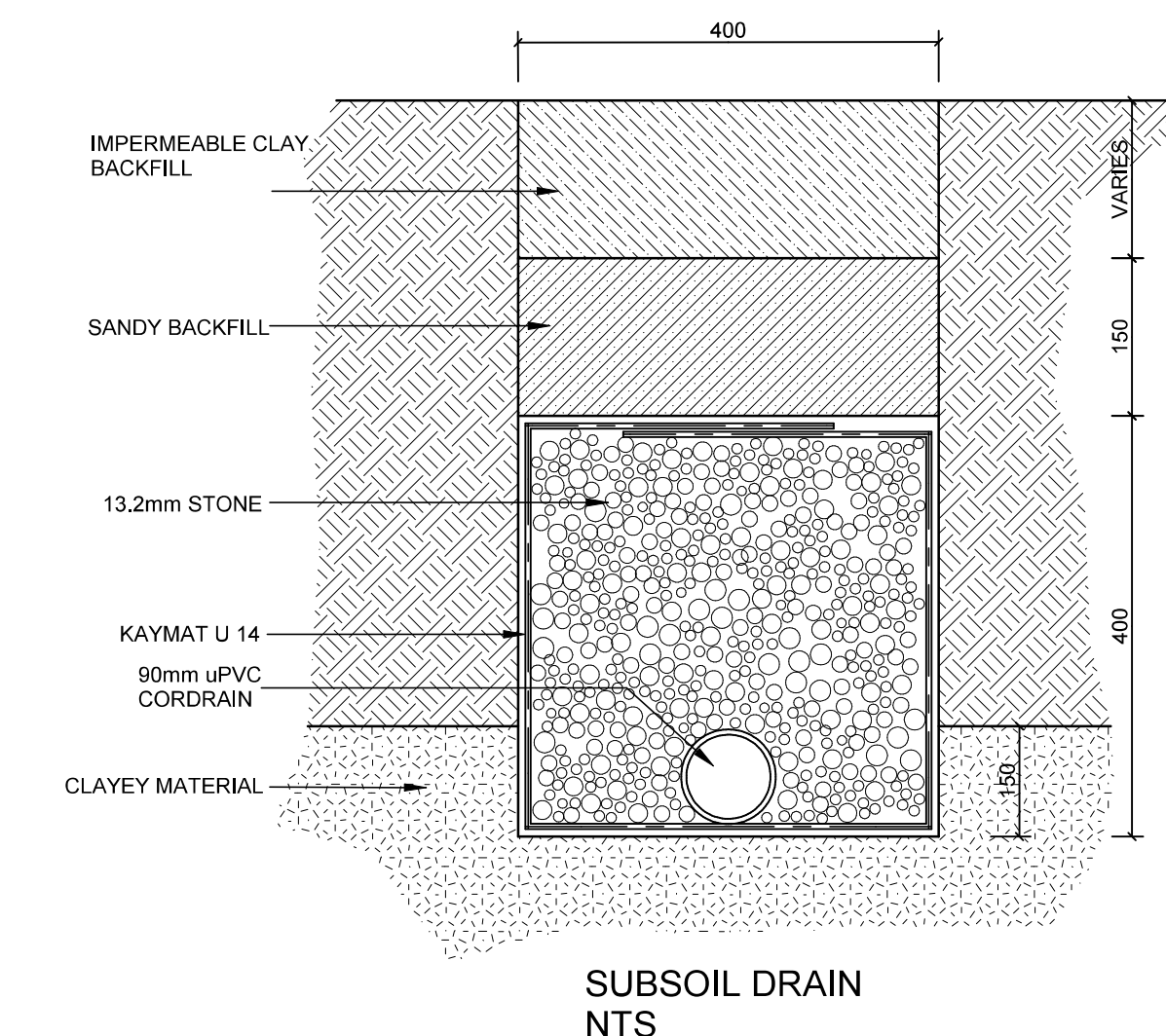
SADDLE DETAIL (NTS)



WATER ERF CONNECTIONS (NTS)



TELKOM JOINTING PIT 1:10 SECTION



SUBSOIL DRAIN NTS

PIPE DIA. (Ø mm)	50	75	100	125	150	200	250	300
FOR BENDS & TEES								
DEPTH (Ø1 mm)	170	255	340	425	510	680	850	1020
WIDTH (Ø1 mm)	230	345	460	575	690	920	1150	1380
CAP, TEE & 90° BEND	180	275	370	460	550	730	920	1100
45° BEND	85	140	185	230	275	370	460	550
22½° BEND	85	70	95	115	140	185	230	275
FOR GATE VALVES								
BLOCK DEPTH (Ø1 mm)	100	100	250	350	450	600	700	900
KEY DEPTH (Ø1 mm)	100	100	150	150	150	200	200	300

TYPICAL DETAILS FOR WATER MAINS

CONSULT PRODUCT SPECIFICATIONS FOR REQUIREMENTS

FOR WORKING PRESSURES UP TO 100 METRES
HALF THE BLOCK DEPTH (Ø1) TO BE BELOW THE
PIPE NEUTRAL AXIS

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Client
**CAPE ESTATE PROPERTIES
OUTENIQUA (PTY) LTD.**

Project
KRAAIBOSCH PARK

Title
GENERAL DETAILS

Drawing No
G5215BA-CE-212

Rev No
A