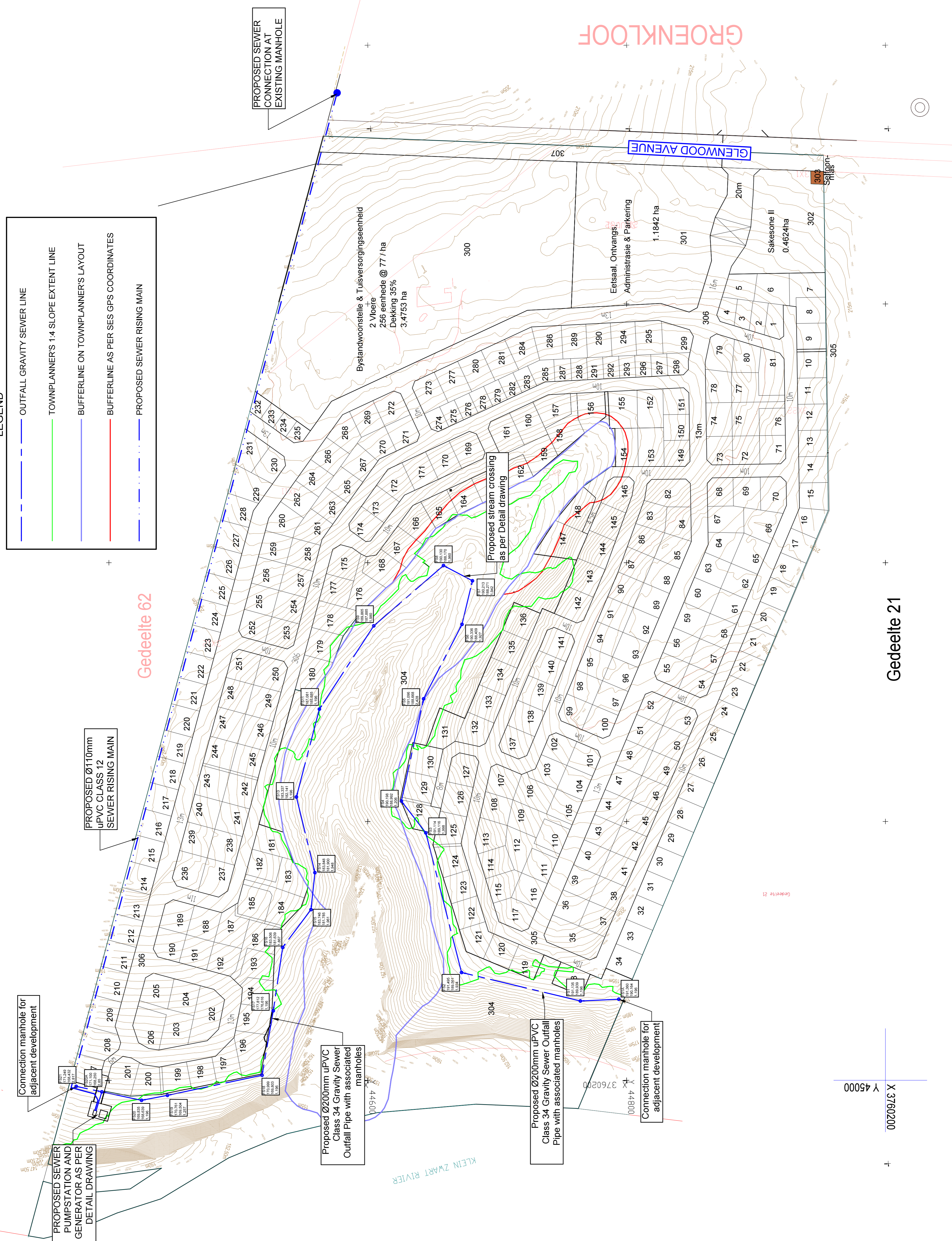


**LEGEND**

	OUTFALL GRAVITY SEWER LINE
	TOWNPLANNER'S 1:4 SLOPE EXTENT LINE
	BUFFERLINE ON TOWNPLANNER'S LAYOUT
	BUFFERLINE AS PER SES GPS COORDINATES
	PROPOSED SEWER RISING MAIN

Gedeelte 62

Gedeelte 21



SCALEBAR

DATE	BY	CHKD
17/08/2019	IWO	F/E
DESCRIPTION		
A. PRELIMINARY DESIGN		

REVISIONS

DESIGNED	W/O	08/2019
DRAWN	W/O	08/2019
CHECKED	F/E	08/2019

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CONSULTING ENGINEERS:	DATE:
SIGNATURE:	
APPROVED	DATE:
CLIENT REPRESENTATIVE:	SIGNATURE:
	DATE:

CLIENT  
**Greenkloof Ontwikkelings (PTY) LTD**

PROJECT  
**C:19109G Kraalbosch 195-3 - Groenkloof Ontwikkeling**

TITLE  
**OUTFALL SEWER LAYOUT PLAN**

SCALE  
 1:1250

CONTRACT No.  
 C19109G

PROJECT No.  
 C19109G

DRAWING No.  
 C19109G - 01

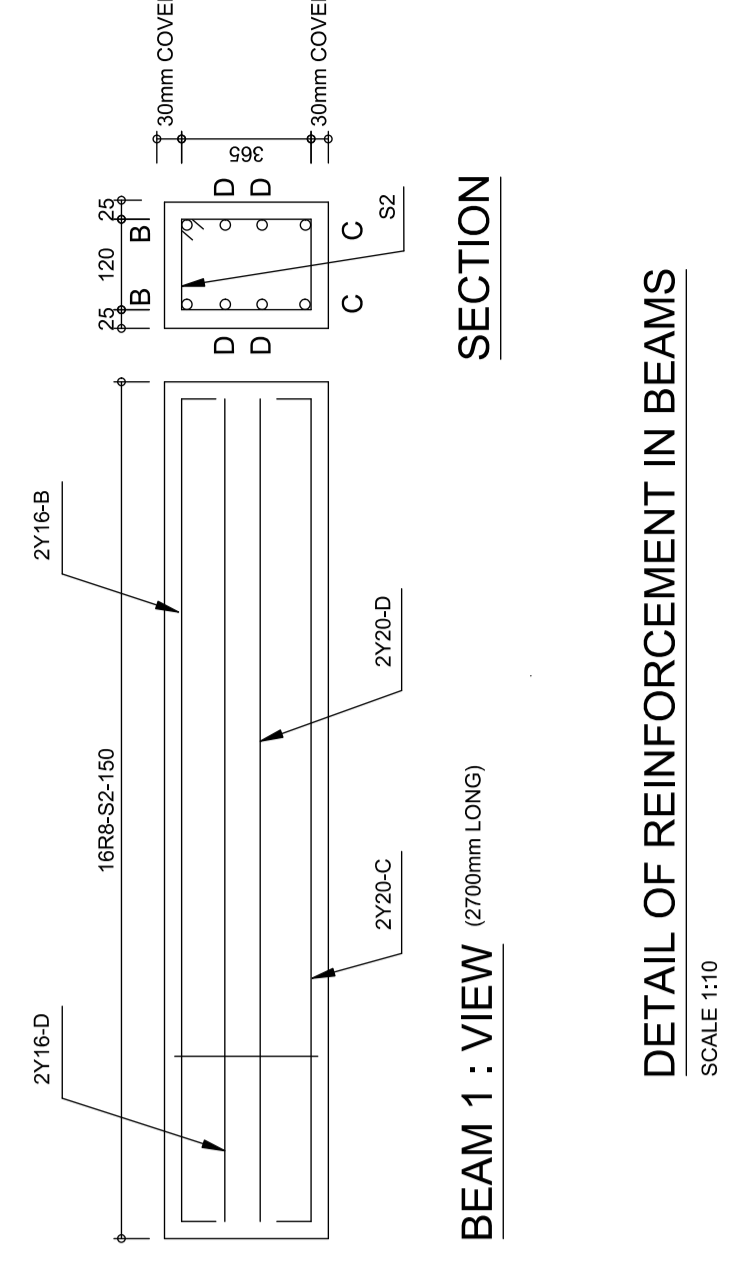
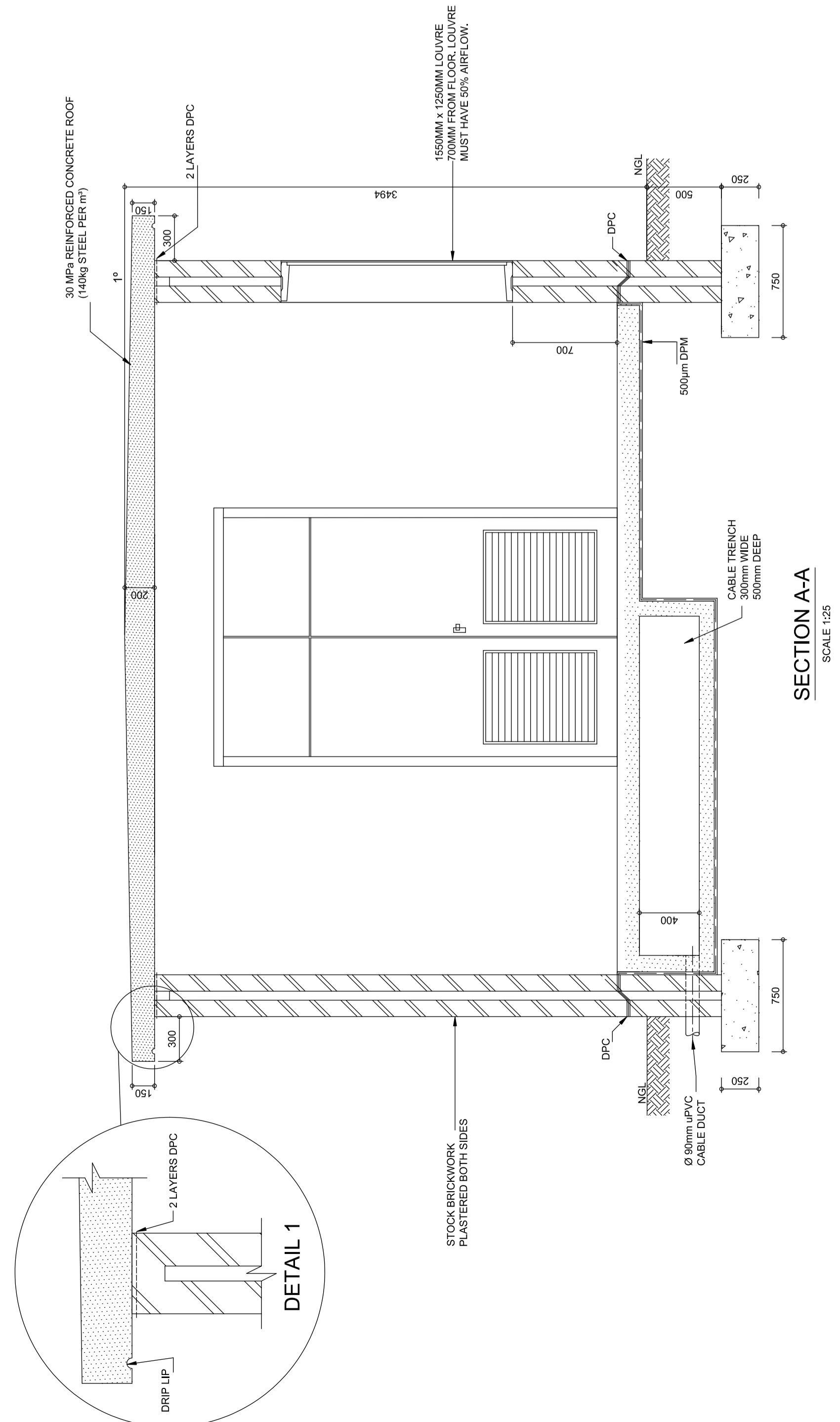
DATE OF FIRST ISSUE: 01/12/14

REVISIONS

REV	
1	

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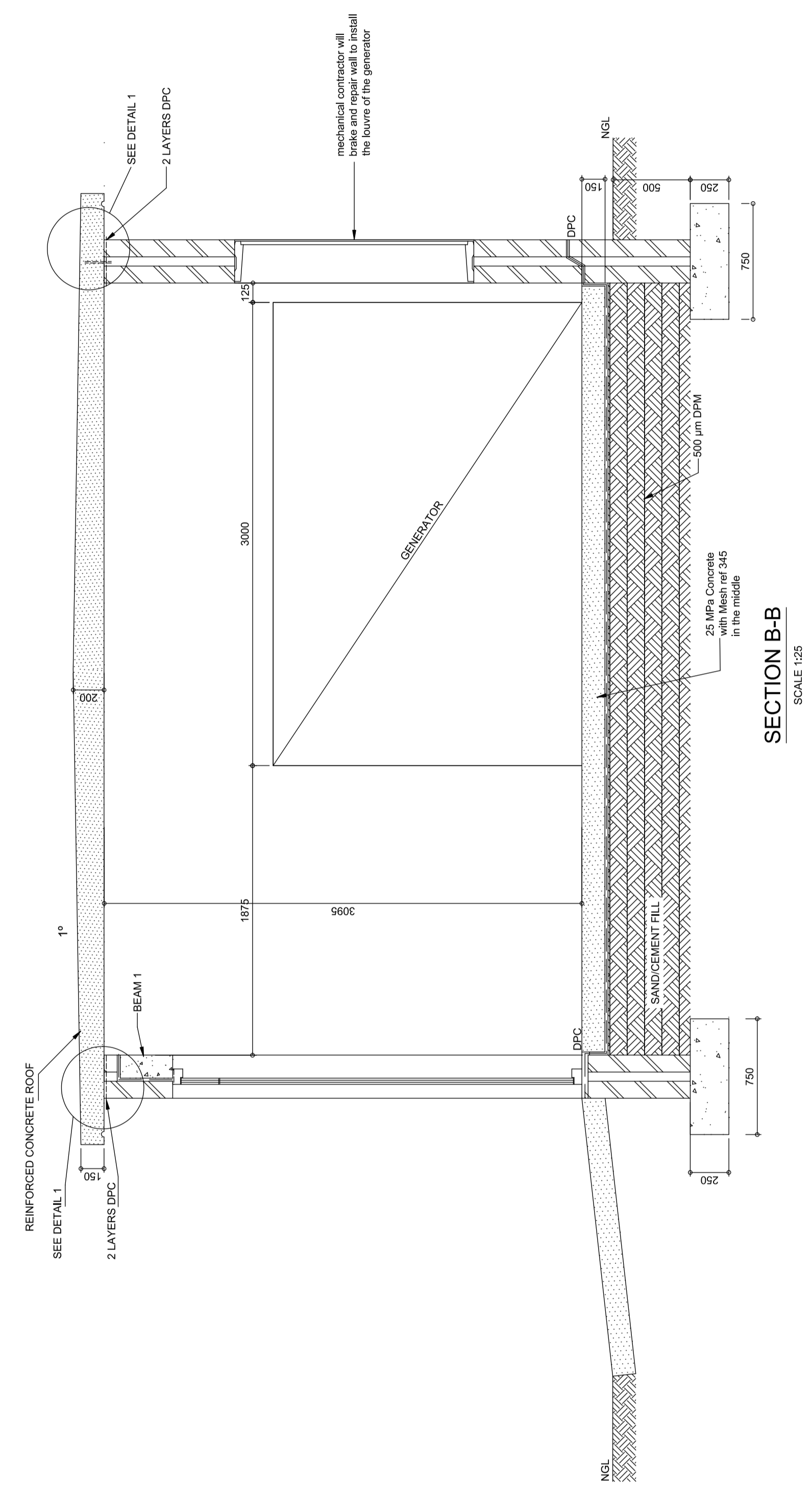
All dimensions must be verified on site before the works commence. Refer any discrepancies to the Engineer.



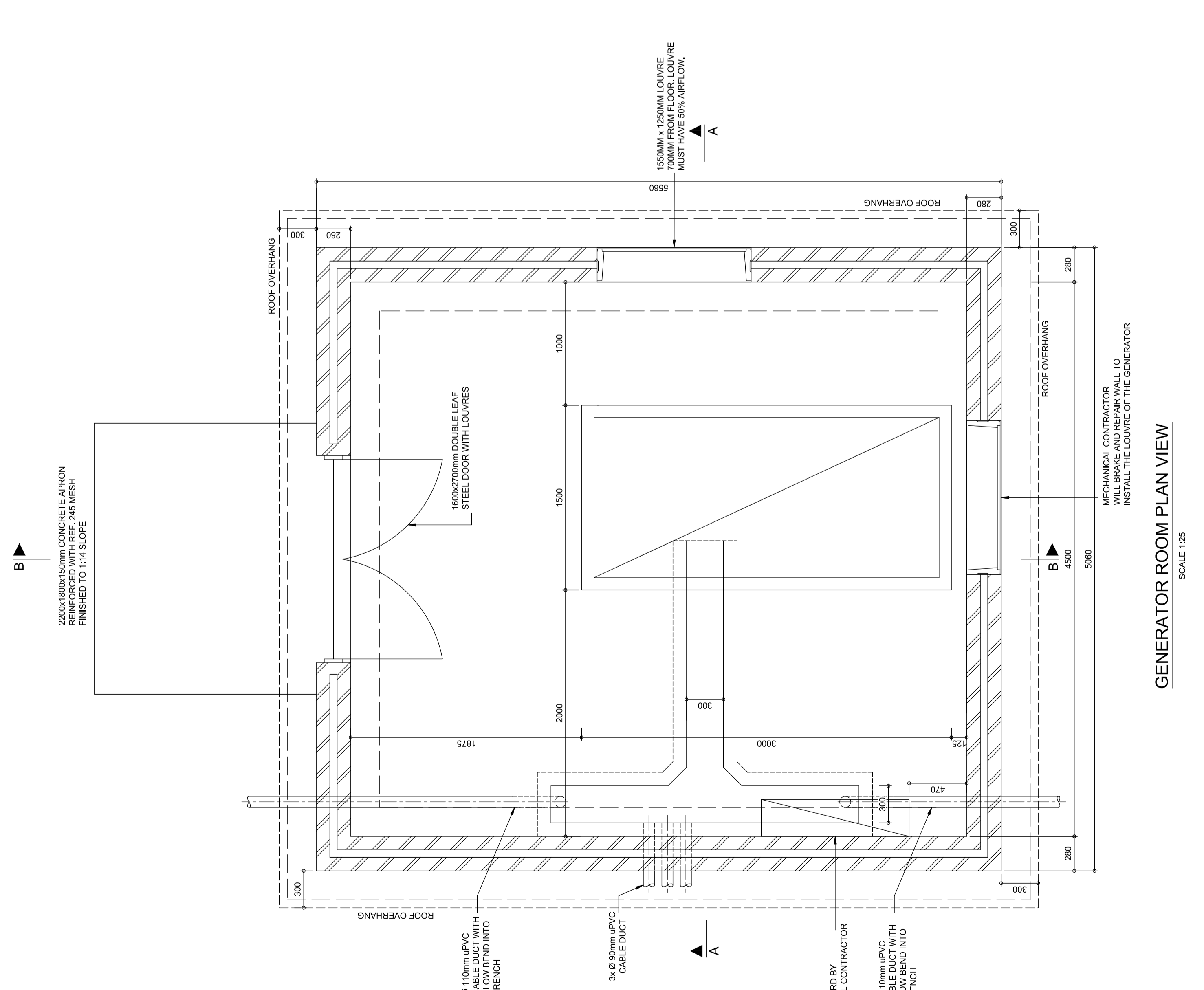
DETAIL OF REINFORCEMENT IN BEAMS  
SCALE 1:10

PART	MARK	TYPE	NUMBER IN EACH	TOTAL NUMBER	LENGTH IN EACH	CODE	A	B
BEAM 1	B	18	2	2	2000	18	2000	2000
	C	18	2	2	2000	18	2000	2000
	D	18	2	2	2000	18	2000	2000
	E	18	2	2	2000	18	2000	2000

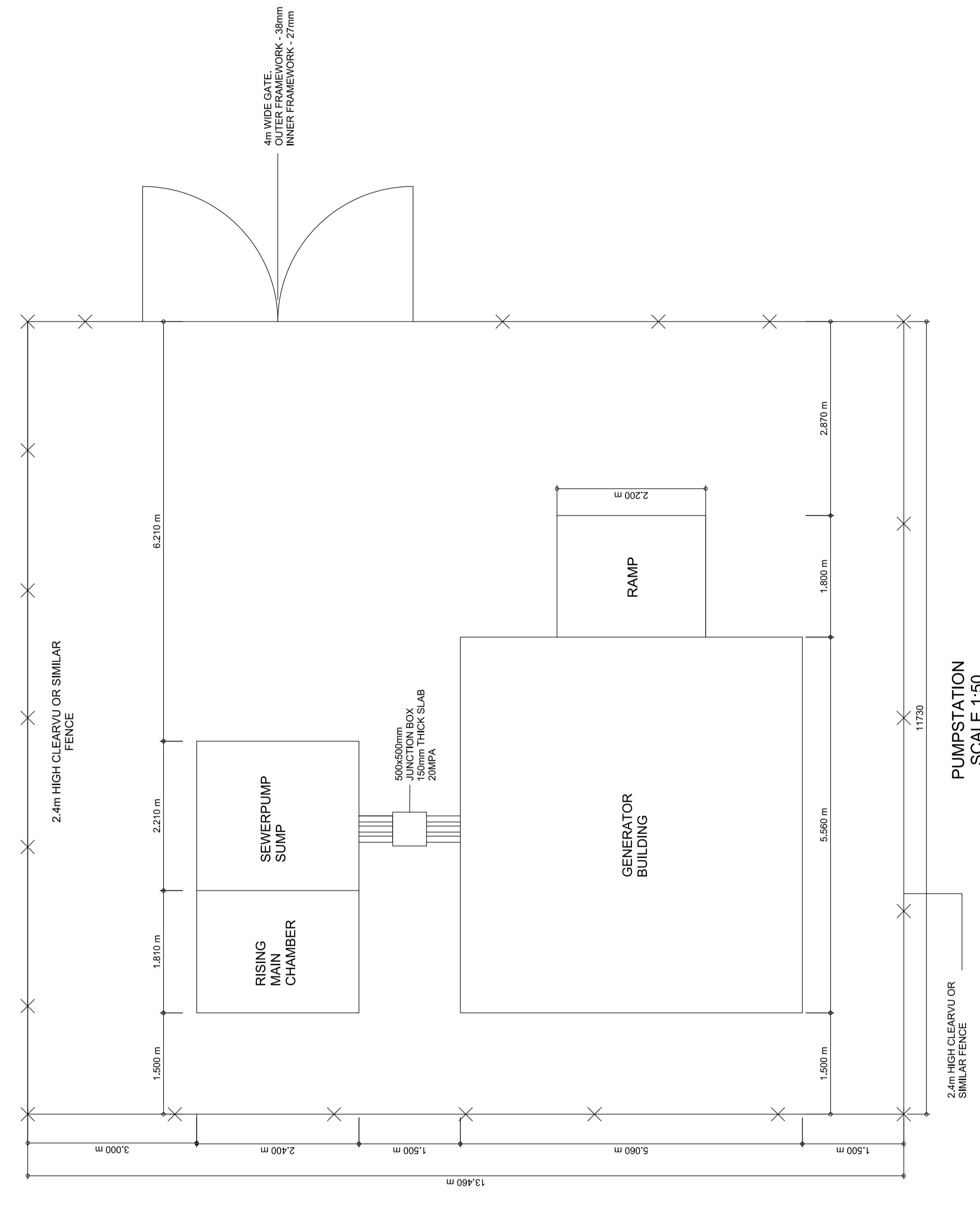
BENDING SCHEDULE



SECTION B-B  
SCALE 1:25



GENERATOR ROOM PLAN VIEW  
SCALE 1:50



PUMPSTATION  
SCALE 1:50

The reference made to Engineer will also refer to Employer's Agent for GCC 2015 Contracts

PROJECT	C19109G Kraaibosch 195-3 - Groenloof Ontwikkeling
TITLE	SWITCH AND GENERATOR ROOM BUILDING
SCALE	on A1 SHEET
CONTRACT No.	PROJECT No.
DRAWING No.	REV
C19109G-02	△

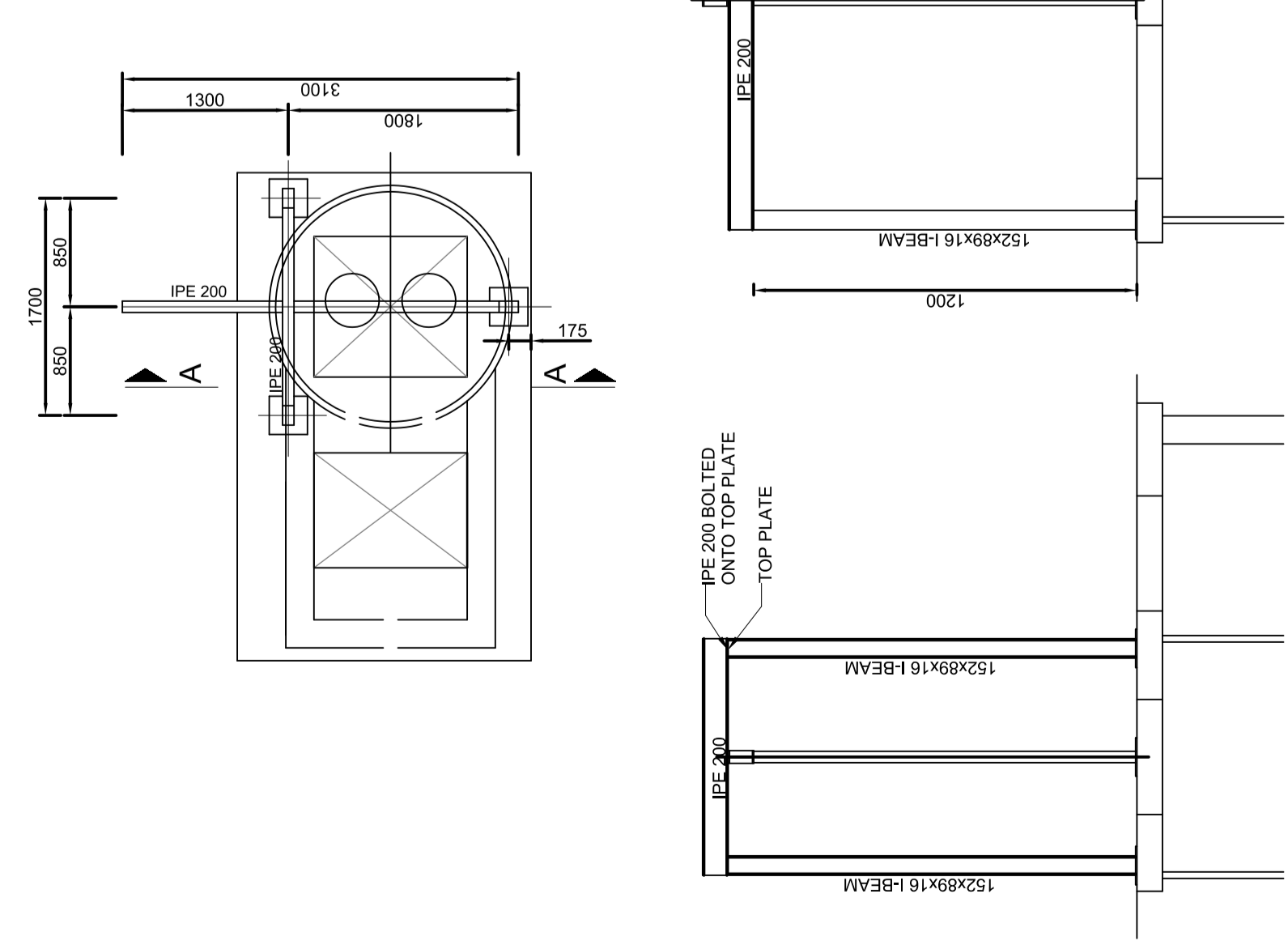
APPROVED	ENGINEERS:
DATE:	
APPROVED	CLIENT:
DATE:	

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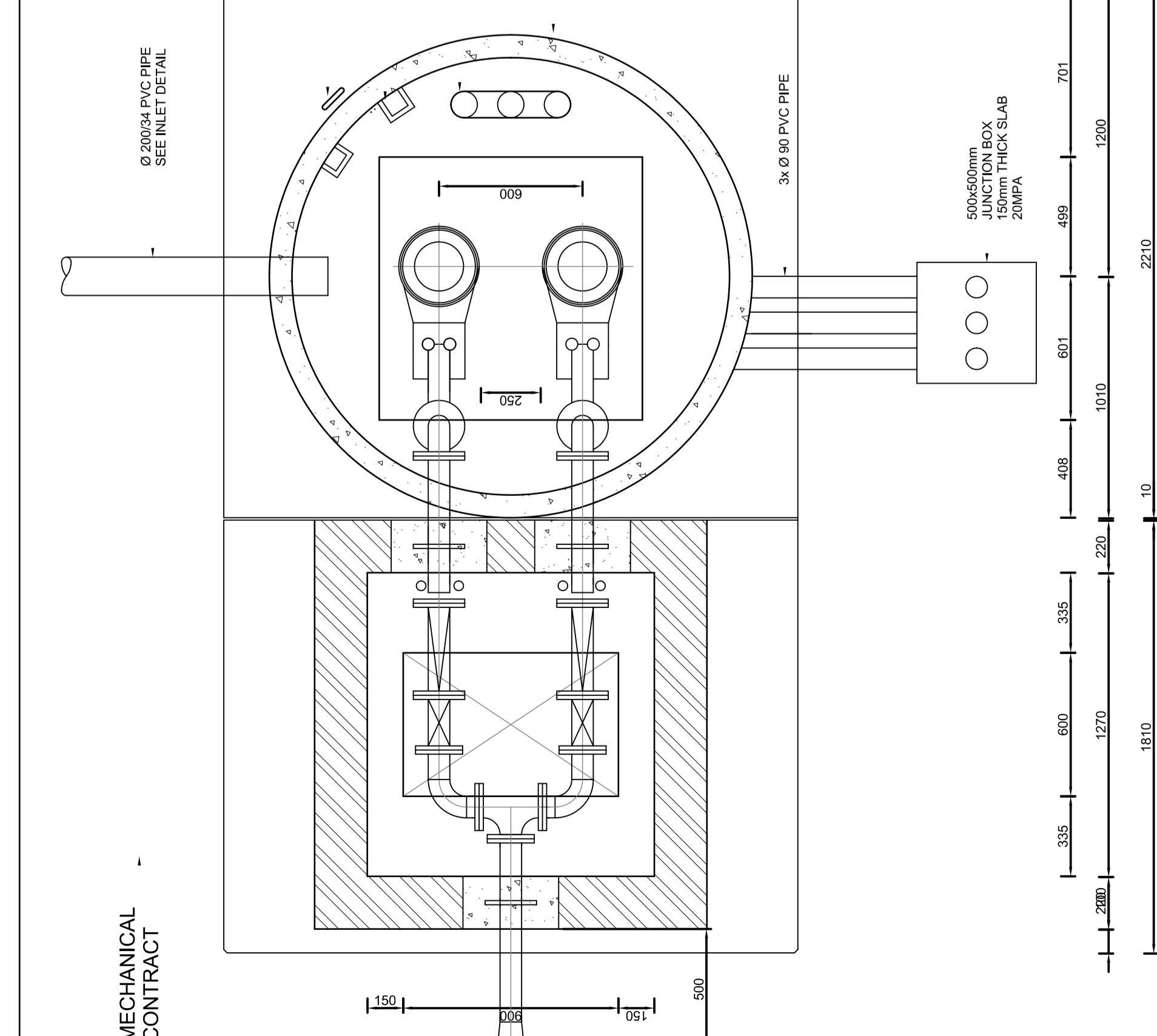
DESIGNED			
DRAWN			
CHECKED			
REV	DESCRIPTION	DATE	REV BY / CHKD

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PLAN HOIST BEAM STRUCTURE  
SCALE 1:50



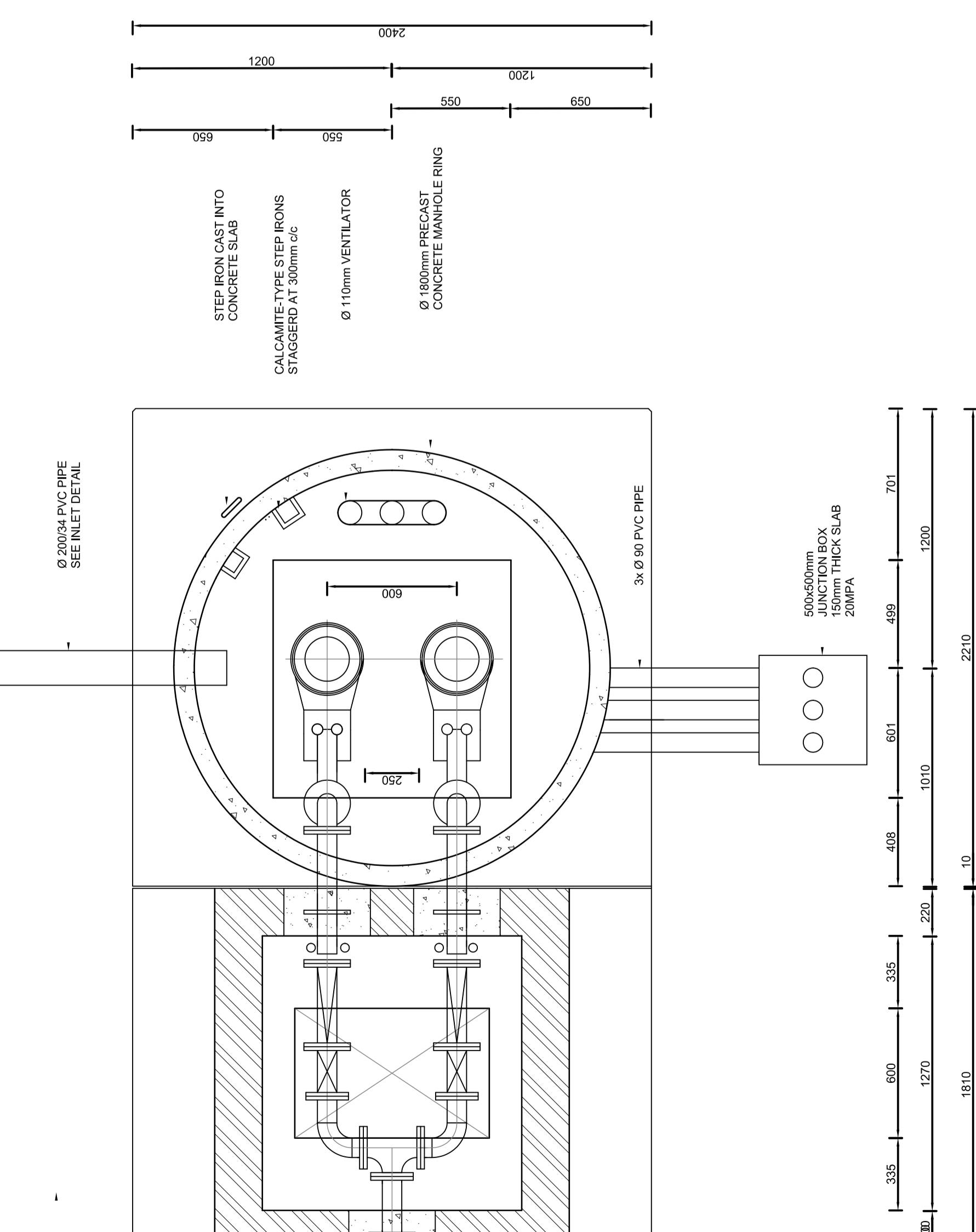
SECTION A-A  
SCALE 1:50



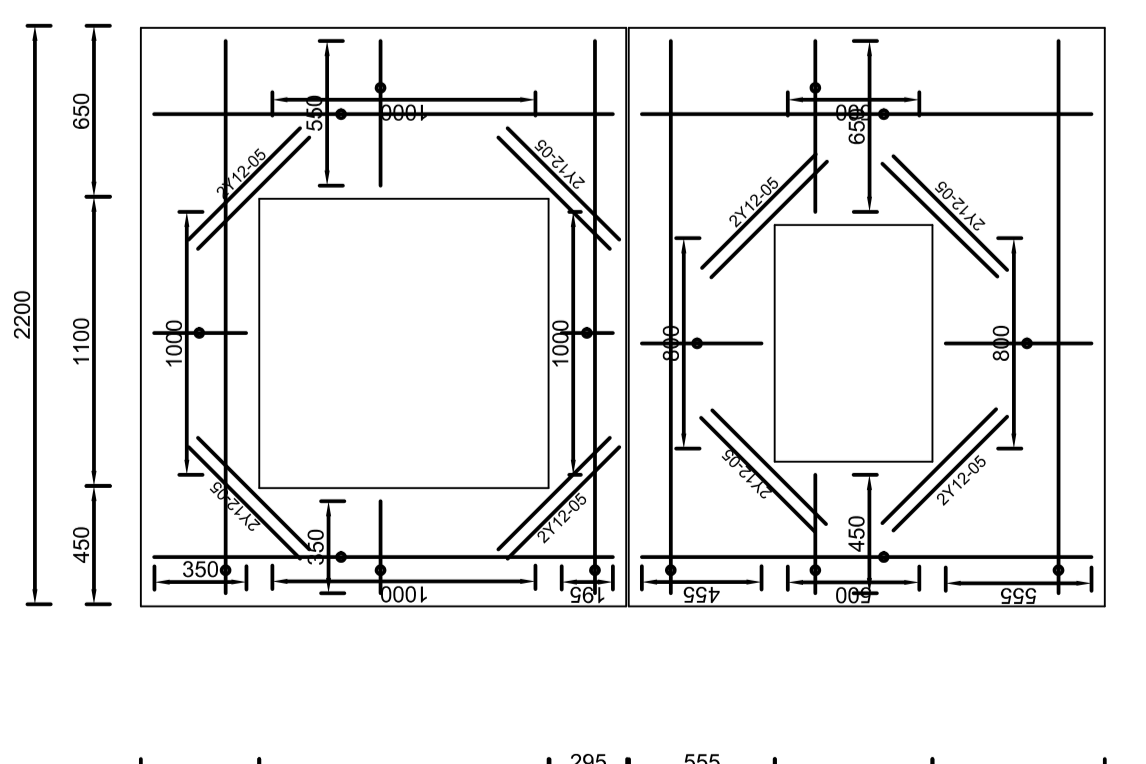
FRONT ELEVATION  
SCALE 1:50

CIVIL CONTRACT

MECHANICAL CONTRACT



PUMP STATION PLAN  
SCALE 1:25



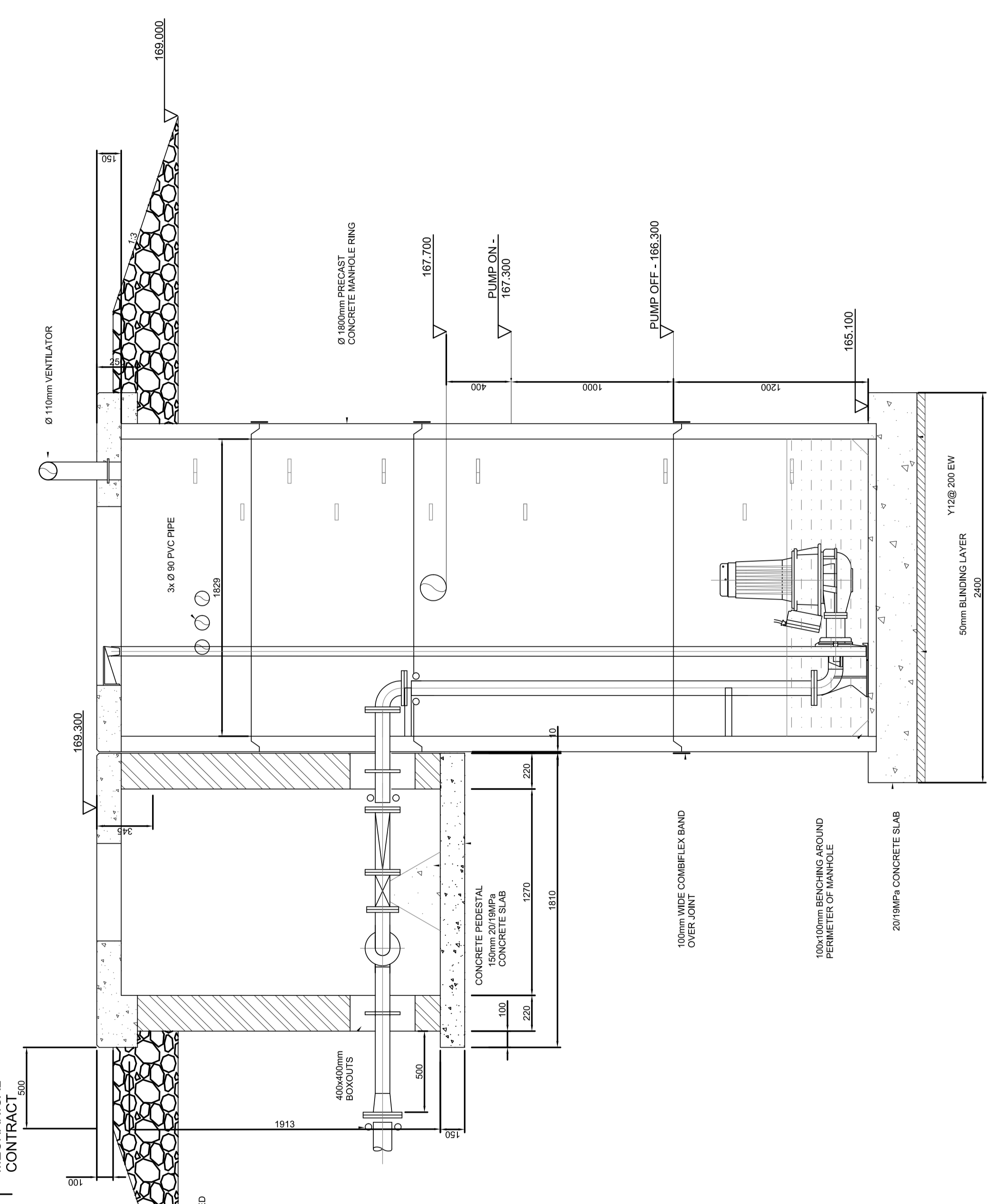
PLAN OF PUMP MANHOLE SLAB  
(STEEL REINFORCEMENT)  
SCALE 1:25

\* Areas not filled with approved grouting concrete or similar shall be sealed with thick lead or similar.

STEELWORK TO BE NOT DIPPED GALVANISED

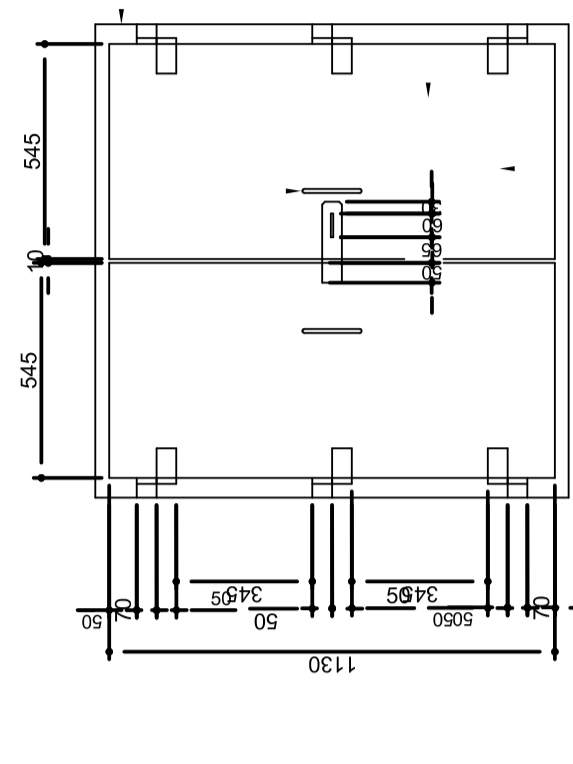
BEND	BENDING SCHEDULE					
	CODE	A	B	C	D	E
TOTAL PER UNIT						
TOTAL UNITS						
TOTAL PER MTR						
MARK						
01	Y16	1	16	16	2100	20
02	Y16	1	15	15	550	20
03	Y16	1	8	8	200	20
04	Y16	1	10	10	1750	20
05	Y12	1	16	16	600	20
06	Y16	1	12	12	1700	20
07	Y16	1	5	5	650	20
08	Y16	1	16	16	350	20
09	Y16	1	16	16	350	20

SECTION A-A  
SCALE 1:25



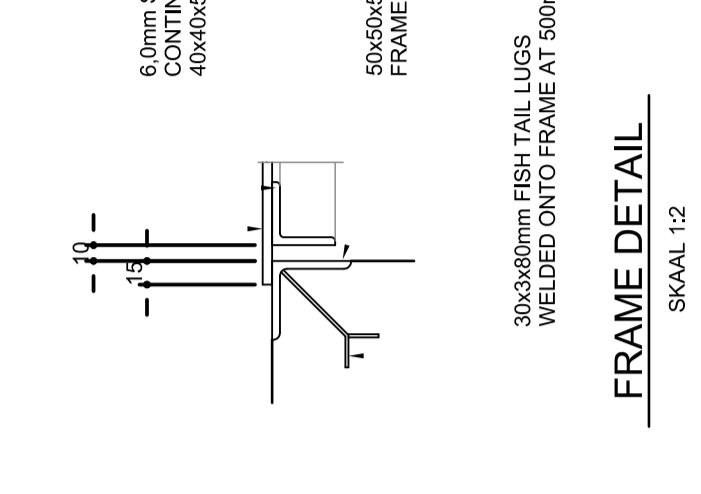
CIVIL CONTRACT

MECHANICAL CONTRACT



SUMP COVER DETAIL  
SCALE 1:2

VALVE CHAMBER COVER DETAIL  
SCALE 1:2



FRAME DETAIL  
SCALE 1:2

HINGE DETAIL  
SCALE 1:2

30x30mm RSH TAL LUGS WELDED ONTO FRAME AT 50mm OC

60mm STEEL PLATE CONTINUOUSLY WELDED ONTO 60x60mm ANGLE IRON FRAME

60mm STEEL PLATE WELDED ONTO 60x60mm ANGLE IRON FRAME

60mm STEEL PLATE WELDED ONTO 60x60mm ANGLE IRON FRAME

60mm STEEL PLATE WELDED ONTO 60x60mm ANGLE IRON FRAME

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ENGINEERS:  
DATE:  
APPROVED  
CLIENT:  
DATE:

CLIENT

PROJECT  
C19109G Kraabosch 195-3 - Groenklouf Ontwikkeling

TITLE  
SEWER PUMPSTATION LAYOUT AND DETAIL

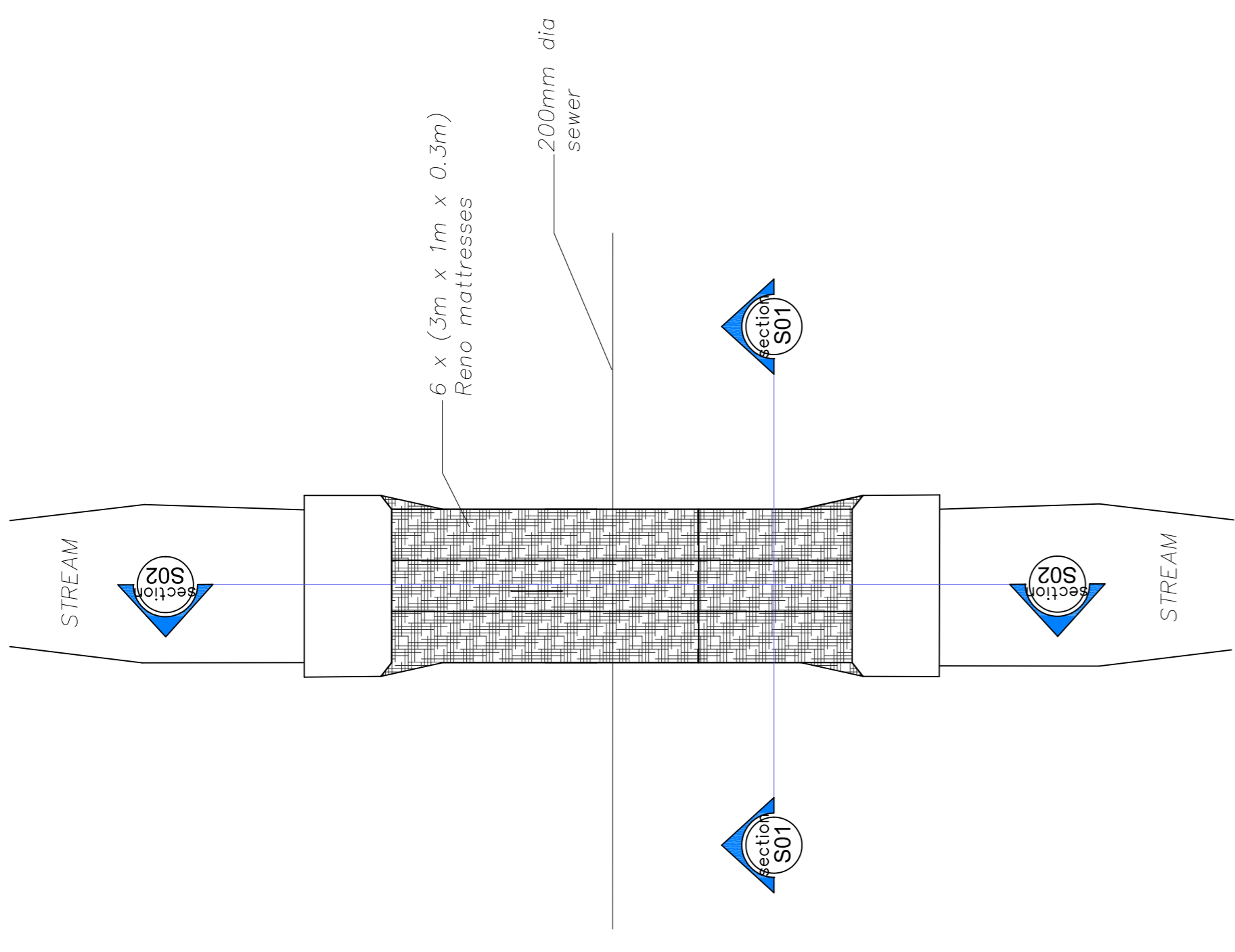
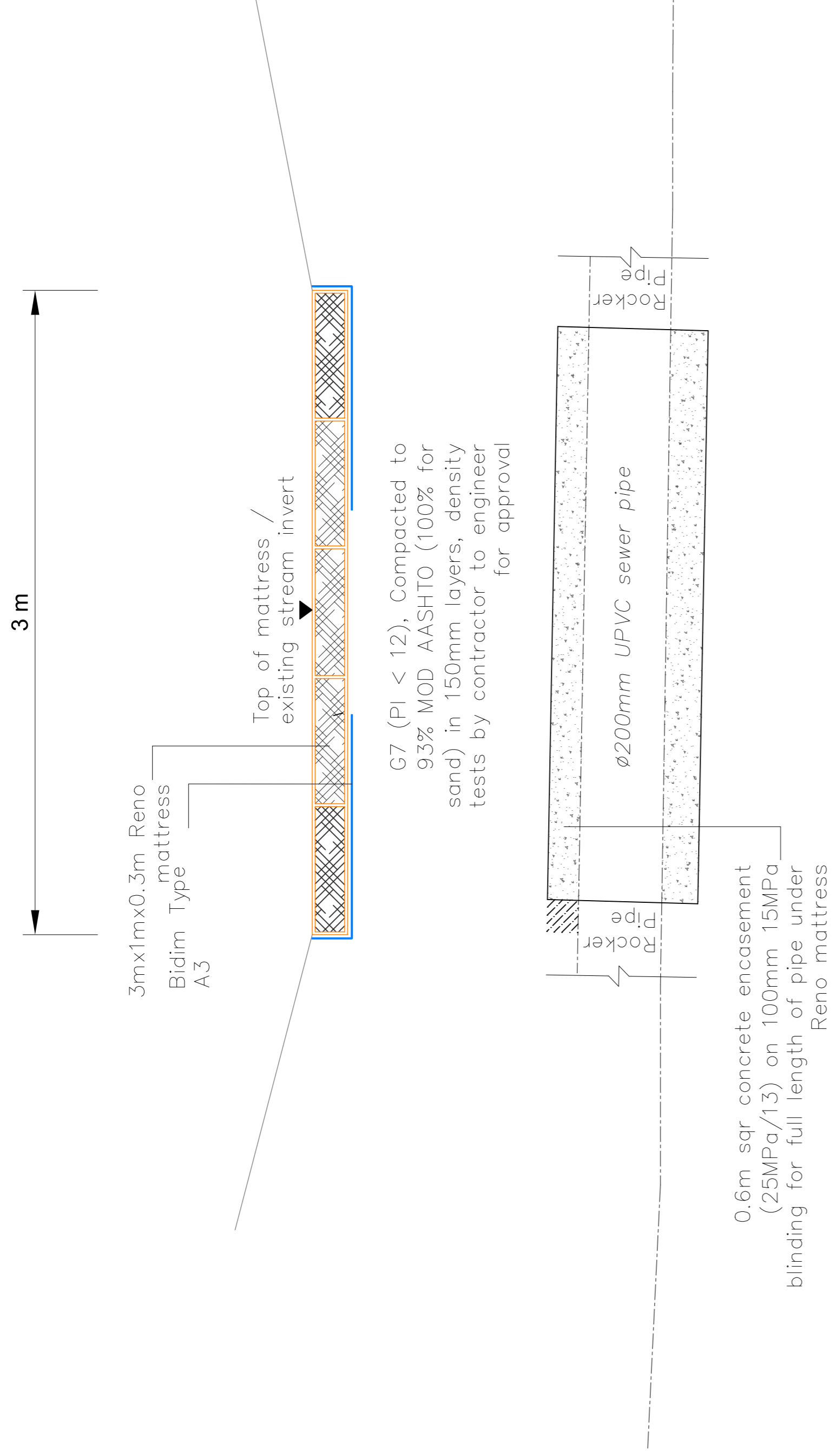
SCALE  
01 A1 SHEET

CONTRACT No.  
PROJECT No.

DRAWING No.  
C19109G-03

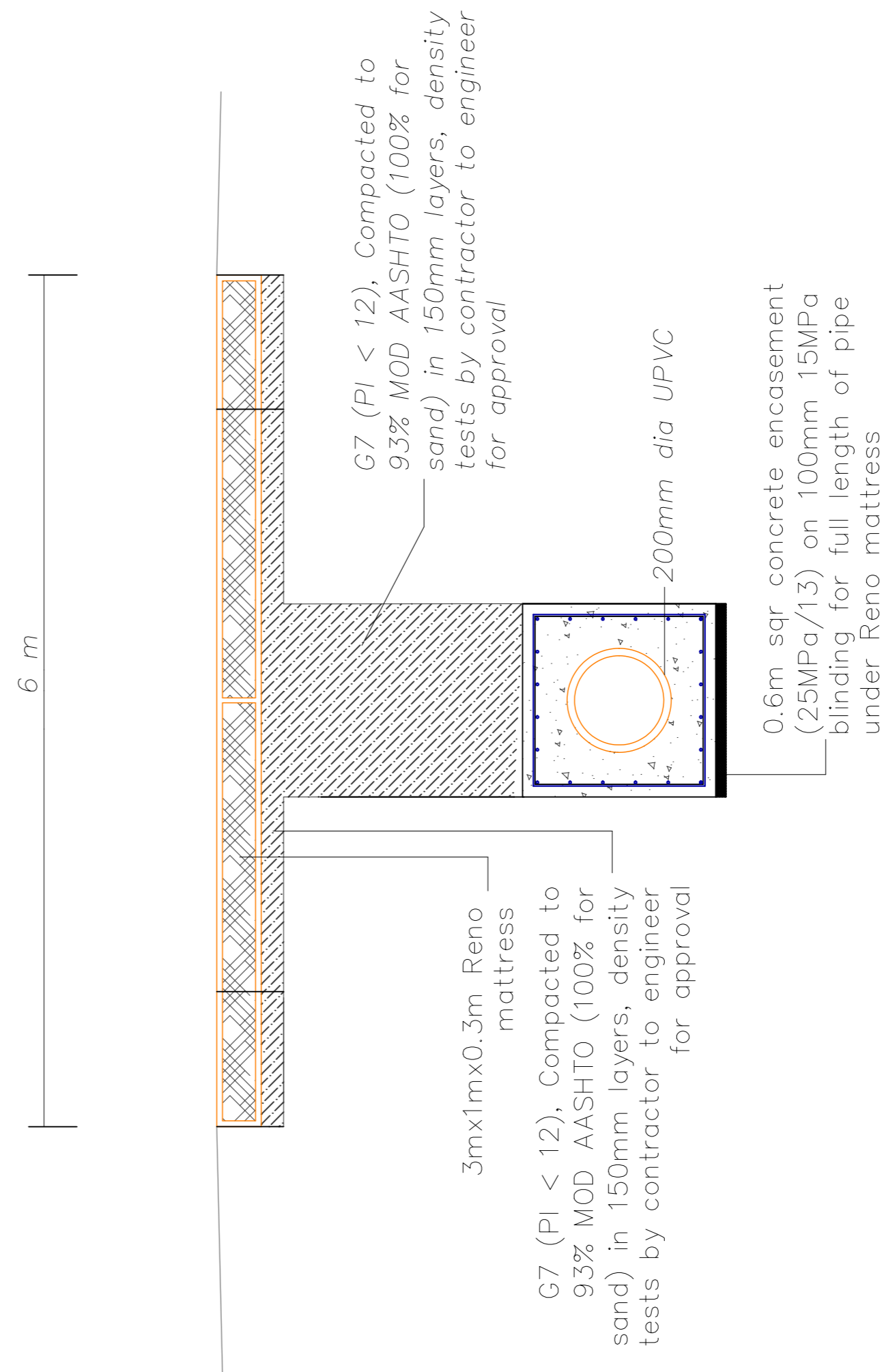
REV  
△

NOTE:  
1. 6 METER LENGTH OF UPVC PIPE TO BE ENCASED IN CONCRETE. JOINTS TO BE FREE OF CONCRETE.



### TYPICAL EROSION CONTROL / WATER COURSE CROSSING SECTION S01

### TYPICAL EROSION CONTROL / WATER COURSE CROSSING PLAN DETAIL SCALE 1:100



### TYPICAL WATER COURSE CROSSING SECTION S02

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APPROVED  
CLIENT: \_\_\_\_\_  
DATE: \_\_\_\_\_

CUSTOMER: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
CLIENT: \_\_\_\_\_

PROJECT  
C19109G Kraaibosch 195-3 - Groenkloof Ontwikkeling  
TITLE  
River Crossing Detail

SCALE on A1 SHEET  
CONTRACT No.  
PROJECT No.  
DRAWING No.  
C19109G-04  
REV  
REV

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