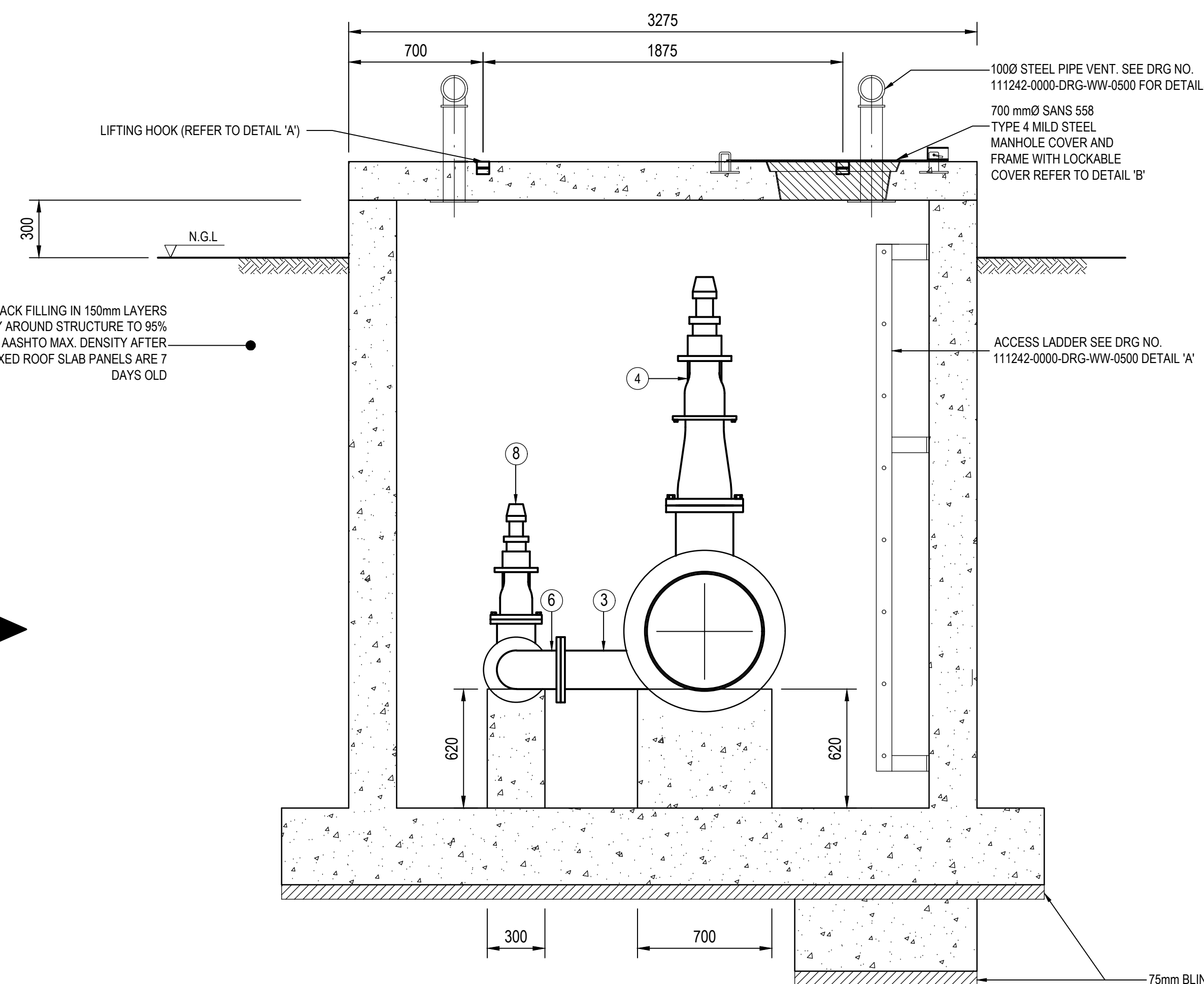


- ## NOTES:
1. RE-INFORCEMENT STEEL SHALL BE MINIMUM OF 50mm CLEAR OF PUDDLE PIPE AND FLANGES.
 2. ALL FLANGES TO BE DRILLED OFF-CENTRE TO SANS 1123 TABLE 18003 OR 25003 AS SPECIFIED IN SCHEDULE OF FITTINGS. PUDDLE PIPE FLANGES SIMILAR TO SANS 1123 TABLE 18003 OR 25003, AS SPECIFIED, BUT DRILLED AND SHOP FITTED AND COATED. CONNECTING PLANGE HOLES IN OPPOSITE FLANGES MUST BE IN LINE.
 3. ALL STEELWORK TO BE FINISHED ACCORDING TO PROJECT SPECIFICATIONS.
 4. ALL VALVES ACCORDING TO PROJECT SPECIFICATIONS.
 5. ALL CONNECTIONS ACCORDING TO PROJECT SPECIFICATIONS.
 6. ALL JOINTING BOLTS AND NUTS TO BE HOT-UP GALVANISED.
 7. THE QUANTITIES IN THE PIPE SPECIAL SCHEDULE ARE FOR ONE CHAMBER ONLY.
 8. A COMPLETE SET OF DETAILED SHOP DRAWINGS OF ALL FITTINGS MUST BE SUBMITTED FOR THE ENGINEERS APPROVAL, PRIOR TO FABRICATION
 9. MILD STEEL PIPES 8mm "TYPE B" WALL THICKNESS CLASS 300WV CLASS 16.
 10. ALL JOINTS MUST BE EXTERNALLY Y128 CORROSION PROTECTED.
 11. ALL JOINTS MUST BE DONE BY APPROVED AND CERTIFIED SUBCONTRACTOR A CERTIFICATE OF COMPLIANCE SHALL BE REQUIRED.
 12. ALL PIPES TO BE DISINFECTED BEFORE COMMISSIONING.
 13. ALL STEEL PIPES MUST BE CATHODIC PROTECTED AS PER SABS 10121 AND IN LINE WITH THE JOHANNESBURG WATER SPECIFICATIONS.
 14. ALL CHAMBERS TO BE REINFORCED WITH CONCRETE OF GRADE 25MPa.
 15. ALL CHAMBERS TO HAVE ADEQUATE ACCESS POINTS AND APPROPRIATE STEPS.
 16. CONCRETE COVERS SHALL BE USED INSTEAD OF STEEL COVERS.
 17. ALL CHAMBERS TO BE CONSTRUCTED STRICTLY AS PER THE ENGINEERS DRAWINGS.
 18. ALL VALVES, 300mm DIAMETER AND UPWARDS, MUST BE MULTI STAGE OPEN SPUR GEAR DRIVEN WITH A MINIMUM GEAR RATIO, HAVING OPERATING SPINDLES ON THE INPUT SPINDLES AND AT A STAGE WHERE THE VALVE CAN BE STROKED WITHOUT EXCEEDING THE MAXIMUM INPUT TORQUE
IF NO DIFFERENTIAL PRESSURE IS APPLIED TO THE VALVE.

- ## GENERAL NOTES:
1. DRAWINGS MUST NOT BE SCALED.
 2. THIS DRAWING TO BE READ IN CONJUNCTION WITH THE GENERAL NOTES DRAWINGS AND ALL PROJECT SPECIFICATIONS.
 3. ACCORDING TO THE COPYRIGHT ACT (ACT No 98 OF 1978) NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WHATSOEVER INCLUDING MECHANICAL, ELECTRONIC, PHOTOCOPYING, MICROFILMING OR ANY OTHER SYSTEM OF INFORMATION STORAGE WITHOUT WRITTEN PERMISSION OF ZUTARI.

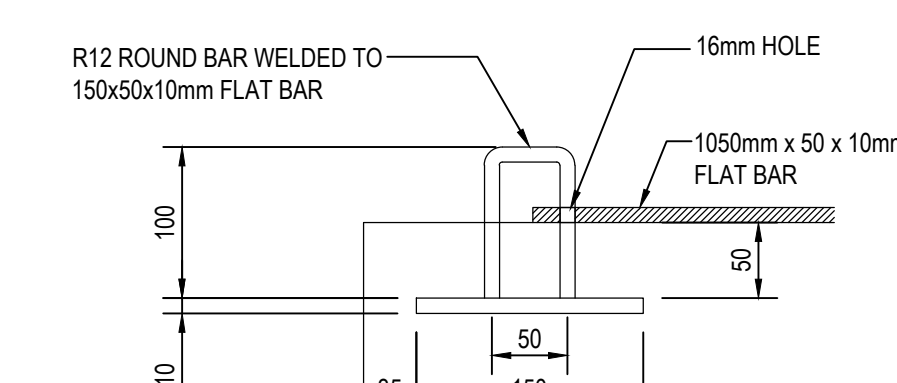
PLAN: ISOLATING VALVE CHAMBER
SCALE 1:20

ROOF PLAN: ISOLATING VALVE CHAMBER
SCALE 1:20



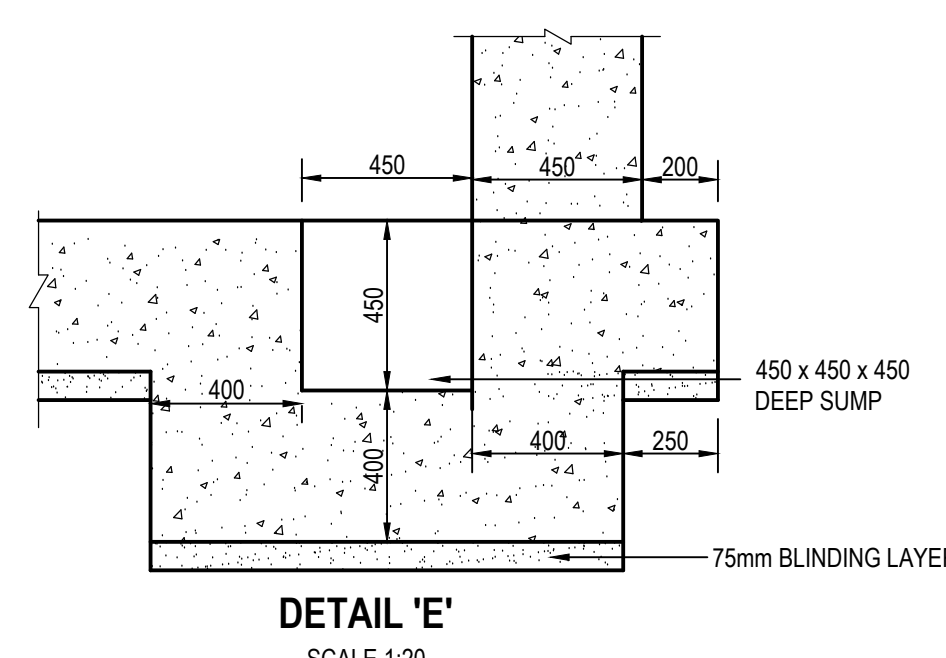
SECTION **A**
1:20

SECTION **B**
1:20 -

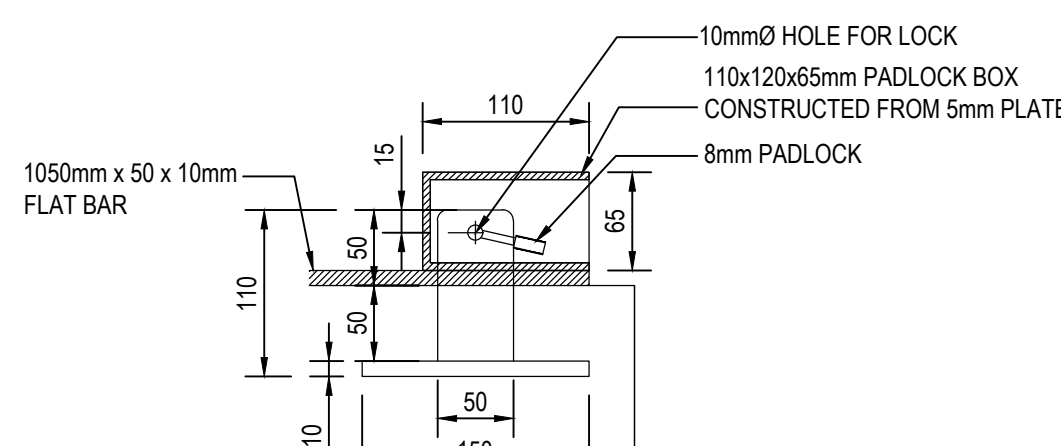


DETAIL B: MANHOLE LOCKING DEVICE
SCALE 1:5

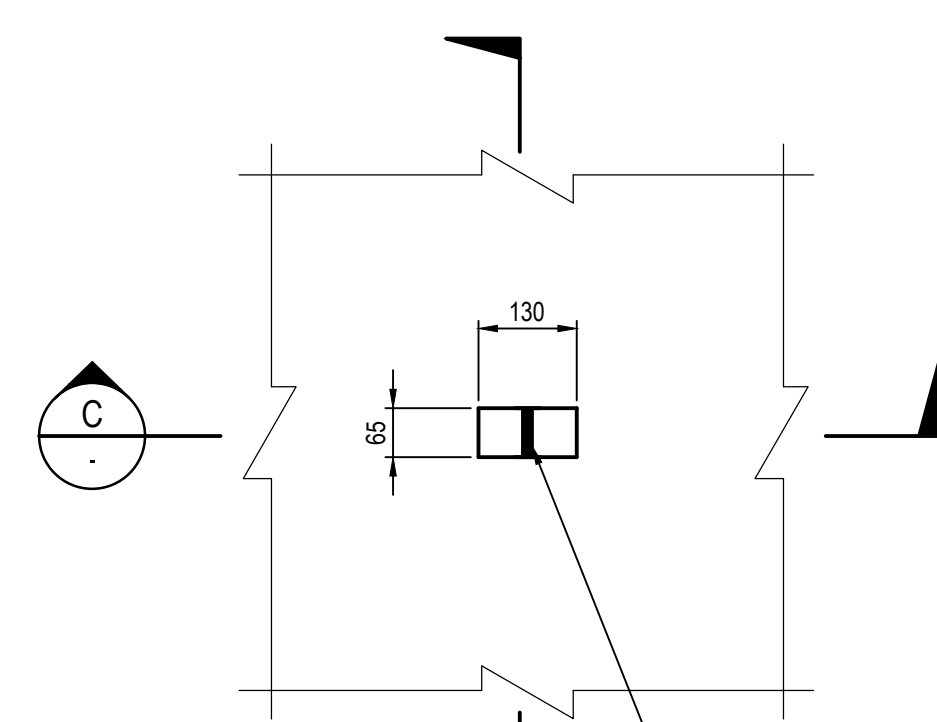
DETAIL C
SCALE 1:5



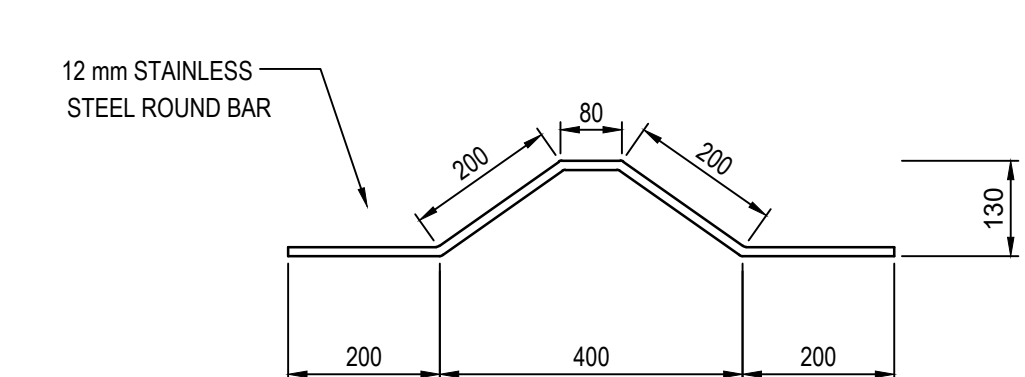
DETAIL 'E'
SCALE 1:20



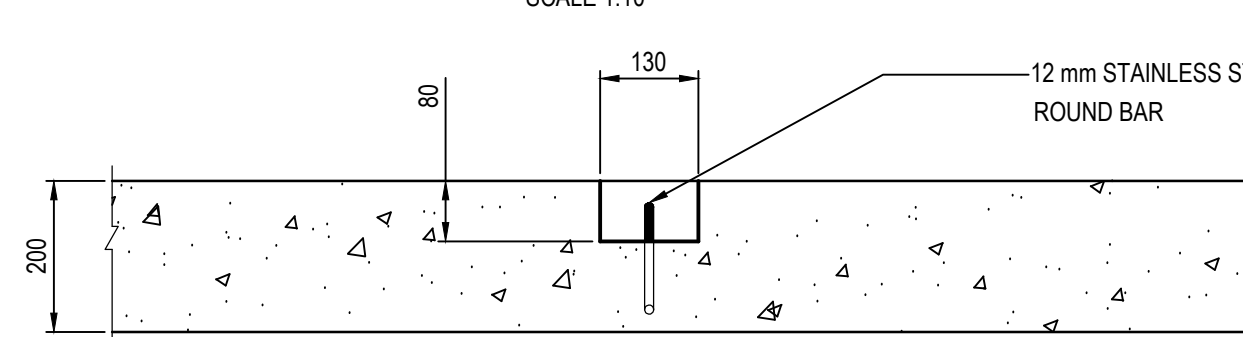
DETAIL
SCALE 1:5



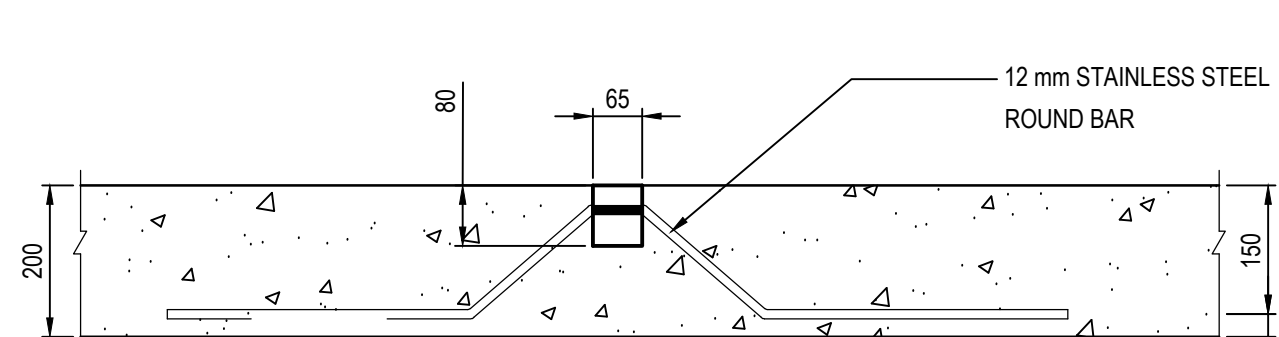
DETAIL 'A'
SCALE 1:10



LIFTING HOOK

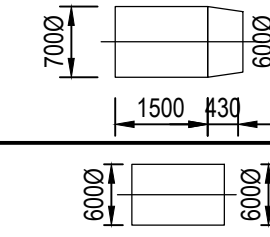
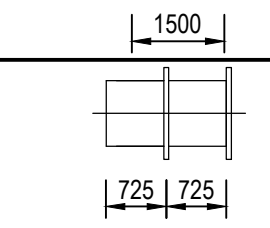
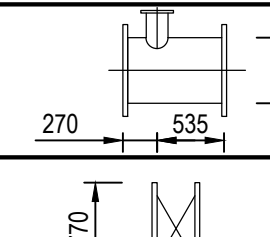
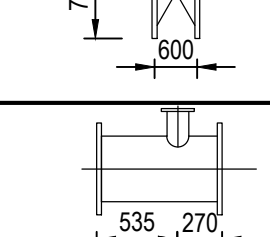
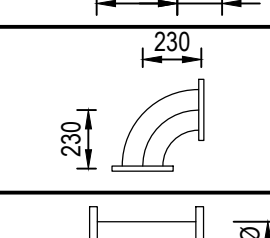
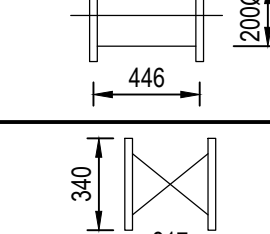
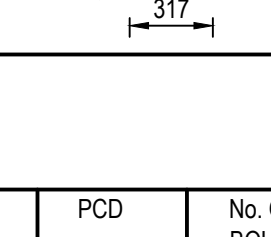

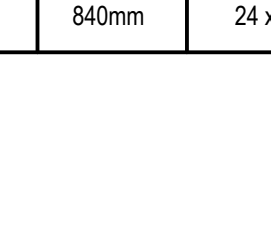


SECTION **C**
1:10



SECTION D
1:10

FITTING SCHEDULE

ITEM No.	QTY	DESCRIPTION	PRESSURE RATING	WALL THICKNESS	PROTECTION		FLANGE DRILLING	DIMENSIONS (mm)
					LINING	COATING		
1	2	700mm Ø x 600mm Ø x 430mm STEEL REDUCER WITH 1500mm INTEGRAL STRAIGHT PIPE	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T16003	
		600mm Ø INTEGRAL STRAIGHT PIPE L = 1500 mm						
2	2	600mm x 1450mm STEEL PUDDLE PIPE, FLANGED ONE END	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T16003	
3	1	600mm x 200mm Ø STEEL TEE	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T16003	
4	1	600mm Ø VOSA, NON-RISING SPINDLE WEDGE GATE OR APPROVED EQUIVALENT (MECH)	16 BAR	-	AS SPECIFIED	AS SPECIFIED	SANS 1123 T16003	
5	1	600mm x 200mm Ø STEEL TEE	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T16003	
6	2	200mm x 90° STEEL BEND	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T16003	
7	2	200mm Ø X 446 mm STEEL STRAIGHT PIPE, FLANGED BOTH SIDES	16 BAR	8.0	SINGLE COAT SOLVENT FREE LIQUID EPOXY	RIGID POLYURETHANE	SANS 1123 T16003	
8	1	200mm Ø VOSA NON-RISING WEDGE GATE OR APPROVED EQUIVALENT (MECH)	16 BAR	-	AS SPECIFIED	AS SPECIFIED	SANS 1123 T16003	

STEEL FLANGES TO: SANS 1123

PIPE SIZE	ITEM DESCRIPTION	PRESSURE RATING	FLANGE DIAMETER	THICKNESS	PCD	NO. OF BOLTS
200mmØ	FLANGE	16 BAR	340mm	22mm	295mm	12 x M20
500mmØ	FLANGE	16 BAR	715mm	40mm	650mm	16 x M30
600mmØ	FLANGE	16 BAR	840mm	50mm	770mm	20 x M30
700mmØ	FLANGE	16 BAR	910mm	55mm	840mm	24 x M30