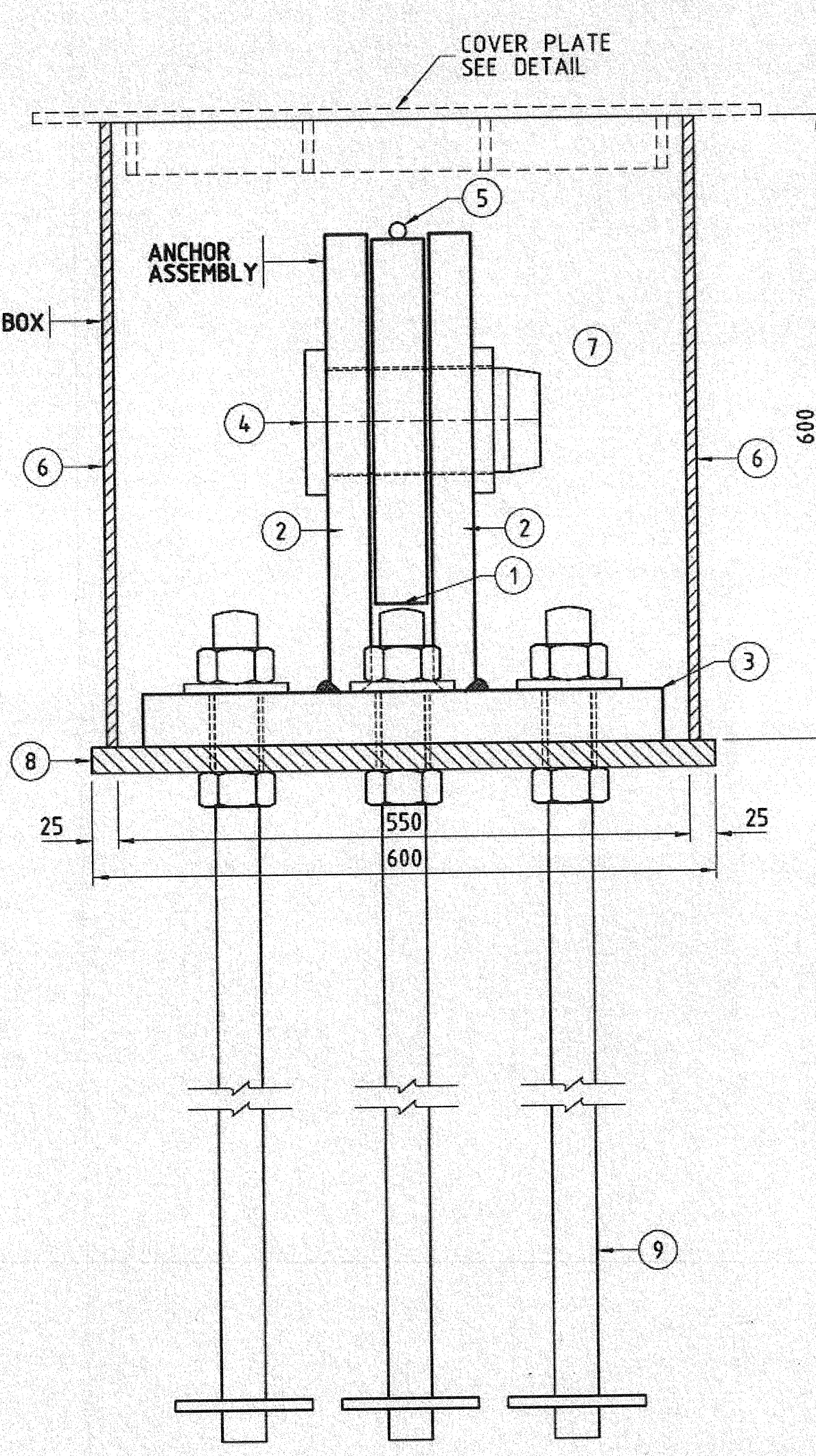
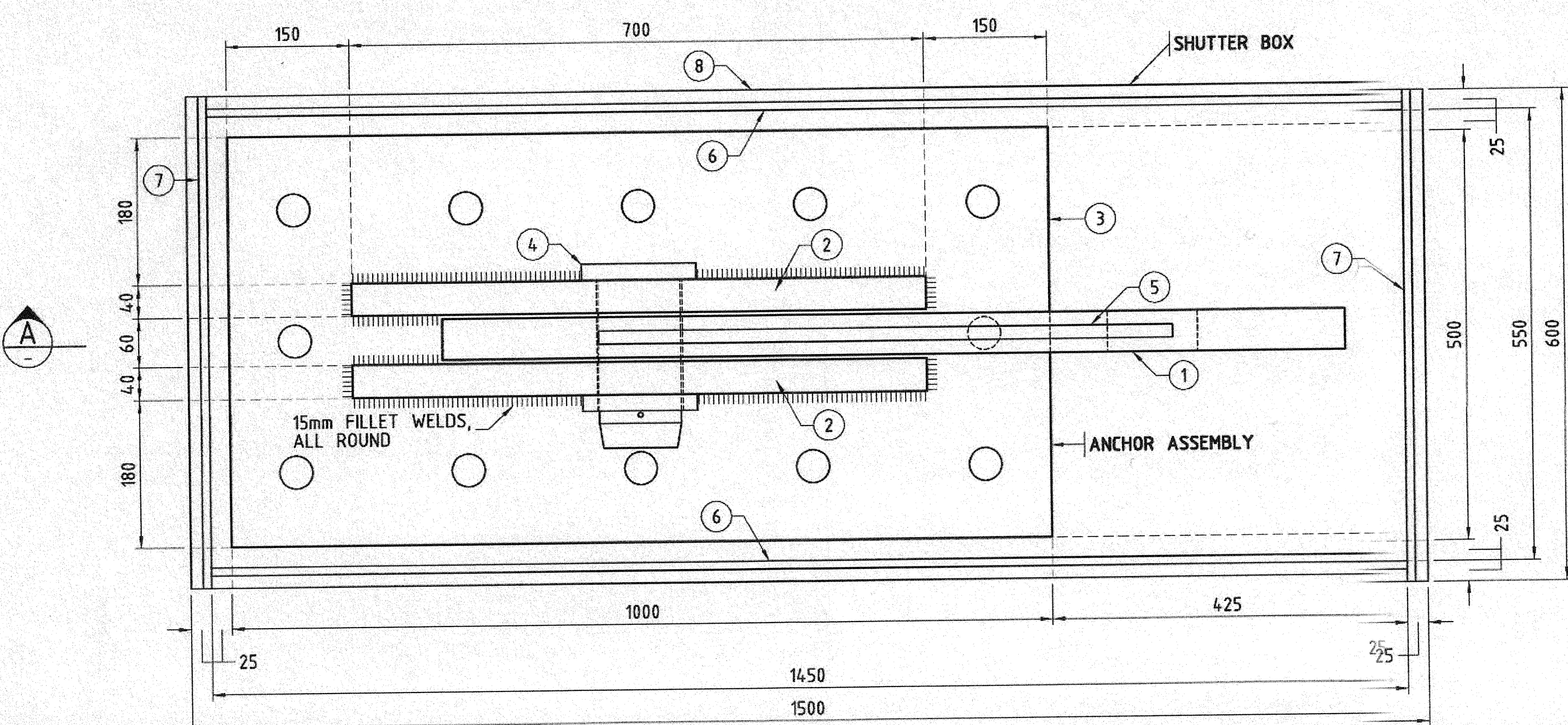


SECTION A  
1 : 5



SECTION B  
1 : 5

ANCHOR TIE DOWN FORCE = 180t



PLAN  
1 : 5

ANCHOR ASSEMBLY

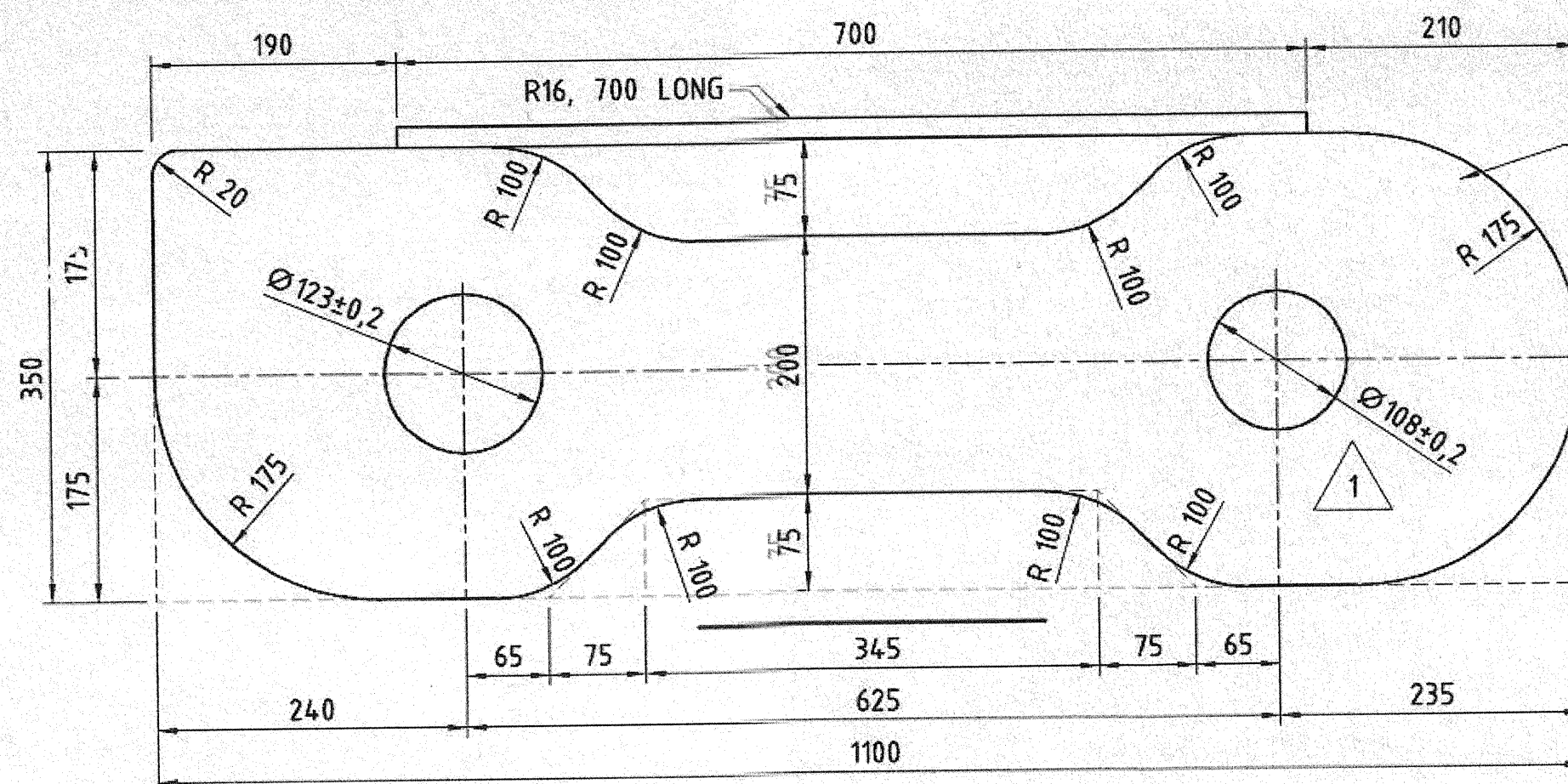
NOTES

1. FABRICATION:
- 1.1. ALL SHARP CORNERS AND EDGE TO BE ROUNDED.
  - 1.2. AFTER FABRICATION, THE WHOLE ASSEMBLY IS TO BE THERMAL DIFFUSED TO BS EN:13811:2003.
  - 1.3. ITEMS 1 & 4 TO BE SEPARATELY DIFFUSED.
  - 1.4. H.D. BOLTS FABRICATED FROM GRADE 8.8 STEEL.
  - 1.5. ALL PLATES TO BE GRADE S355JR.
  - 1.6. ANCHOR SHANK (ITEM 1) TO BE CUT WITH THE AXIS THROUGH THE PIN HOLES IN THE ROLLING DIRECTION OF THE STEEL PLATE.
  - 1.7. ANCHOR PIN (ITEM 4) TO BE GRADE EN 8 STEEL.
2. WELDING:
- 2.1. ALL WELDS FOR ANCHOR, TO BE 15mm FILLET WELDS UNLESS OTHERWISE NOTED. ELECTRODE BASE METAL STRENGTH TO BE 600MPa.
  - 2.2. ALL WELDS FOR COVER PLATE TO BE 5mm FILLET WELDS

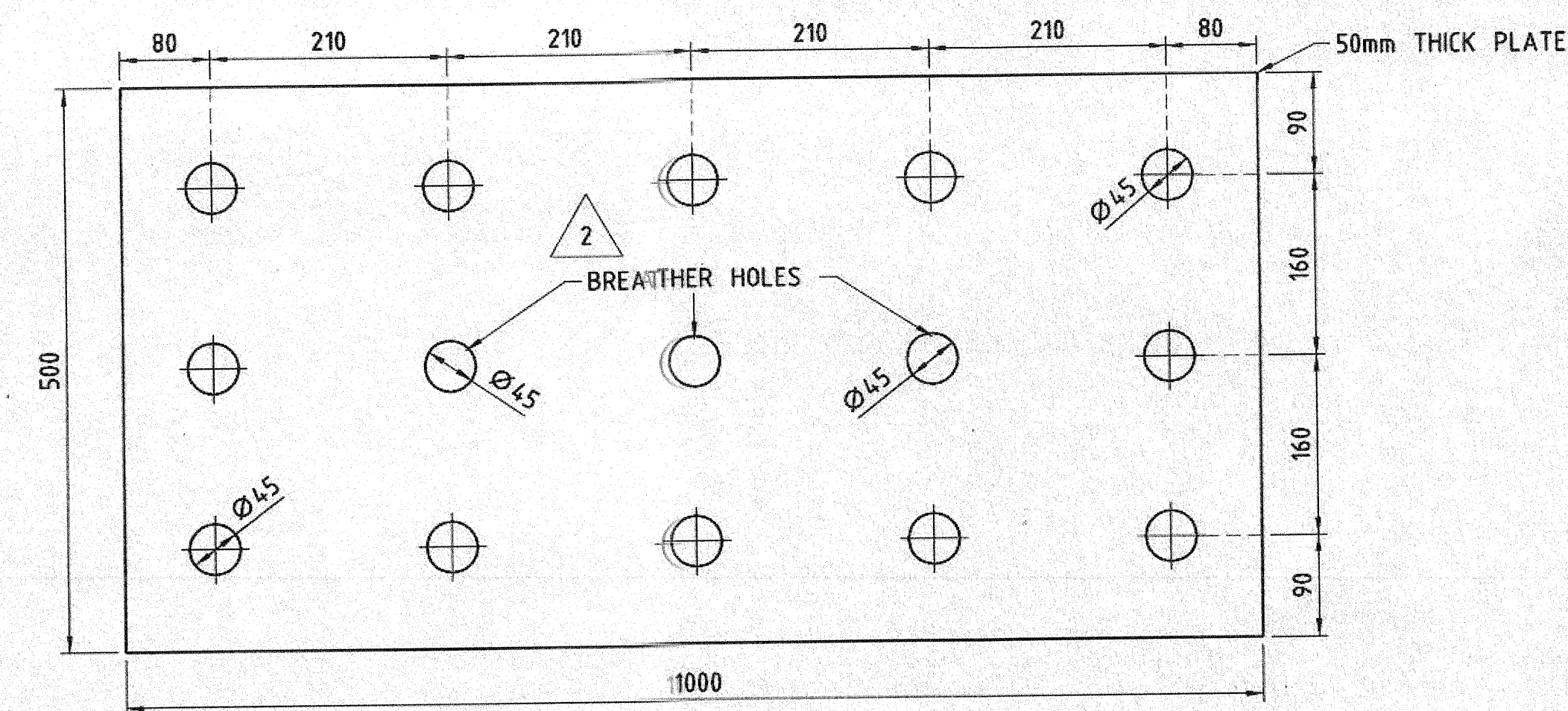
MATERIAL LIST (PER ANCHOR)

ITEM	DESCRIPTION	DIMENSIONS	No OFF	MASS/ITEM (kg)	TOTAL MASS (kg)
ITEM 1	ANCHOR SHANK	1100 x 350 x 50 PLATE (SHAPED) WITH HOLES	1	110,21	110
ITEM 2	FLANGE PLATE	700 x 440 x 40 PLATE (SHAPED) WITH HOLES	2	58,12	116
ITEM 3	BASE PLATE	1000 x 500 x 50	1	196,25	196
ITEM 4	PIN	Ø120 PIN, 225 LONG WITH Ø150 x 16 WASHER	1	21,2	22
ITEM 5	HANDLE ROD	R16, 700 LONG	1	1,11	1
ITEM 6	SIDE SHUTTER	1450 x 600 x 10 PLATE	2	68,3	136
ITEM 7	END SHUTTER	600 x 600 x 10 PLATE	2	28,26	57
ITEM 8	BOTTOM SHUTTER	1500 x 600 x 25 PLATE	1	176,63	177
ITEM 9	ANCHOR BOLT	Ø42 BOLT WITH NUT AND WASHER, 1500 LONG	12	16,31	196
ITEM 10	COVER PLATE	1600 x 700 x 10 PLATE	1	87,92	88
ITEM 11	STIFFENER	1420 x 50 x 10 PLATE	4	5,57	24
ITEM 12	STIFFENER	160 x 50 x 10 PLATE	15	0,63	10
					<b>1011 kg</b>
					<b>TOTAL MASS PER ANCHOR ASSEMBLY</b>
					<b>122 kg</b>
					<b>TOTAL MASS PER COVER PLATE</b>
					<b>1133 kg</b>

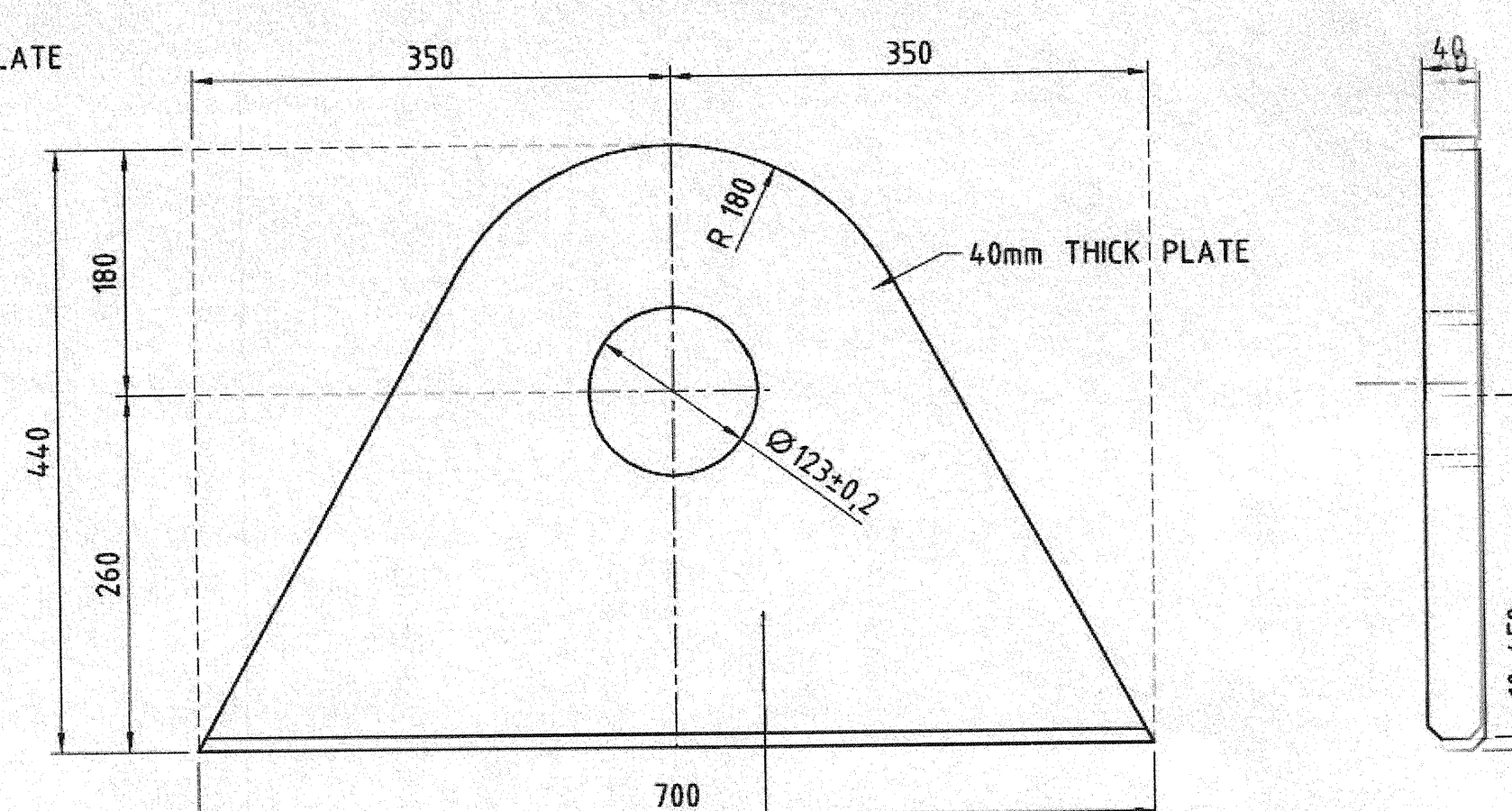
ANCHOR ASSEMBLY REQUIRED No. OFF = 20  
COVER PLATE REQUIRED No. OFF = 20



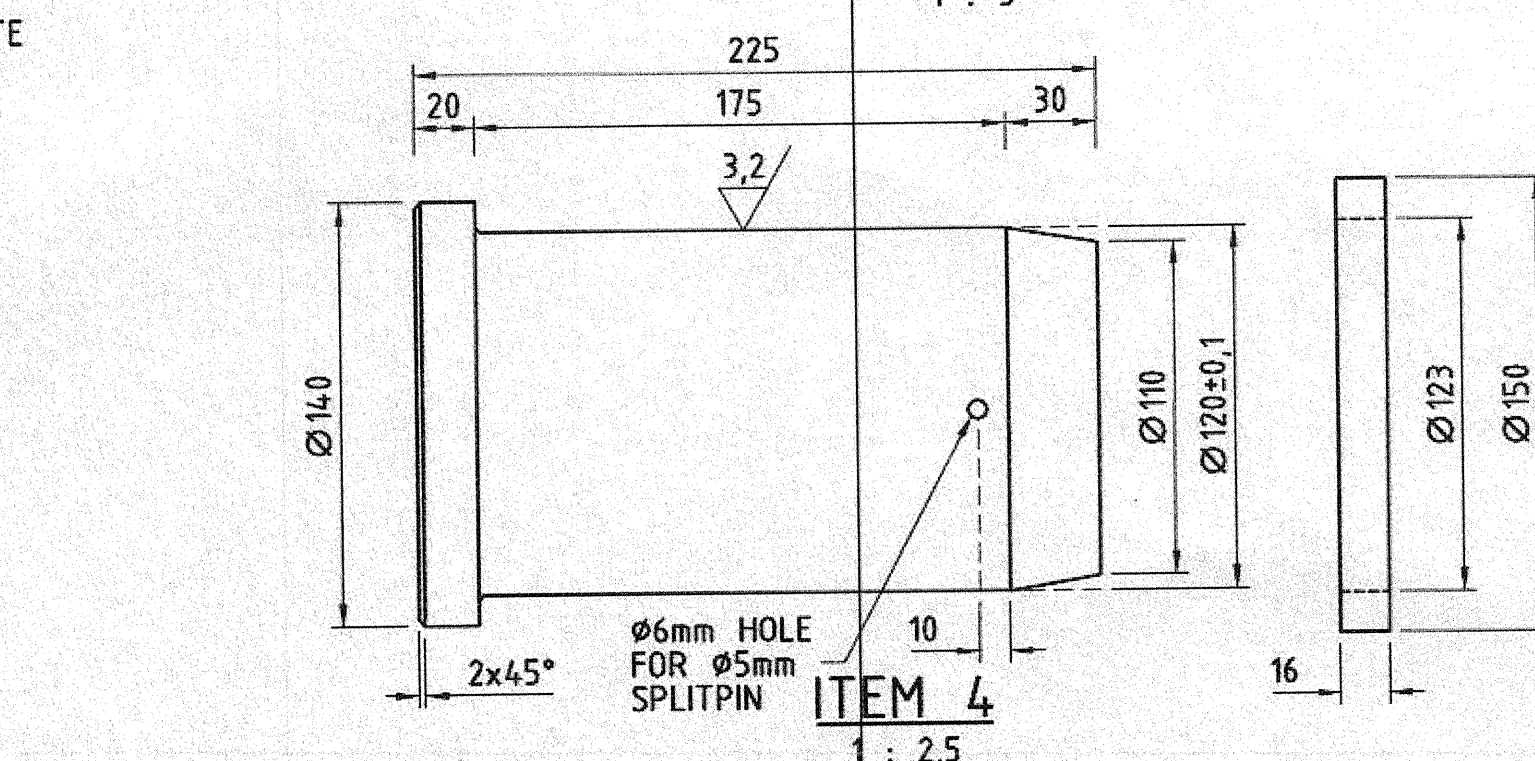
ITEM 1  
1 : 5



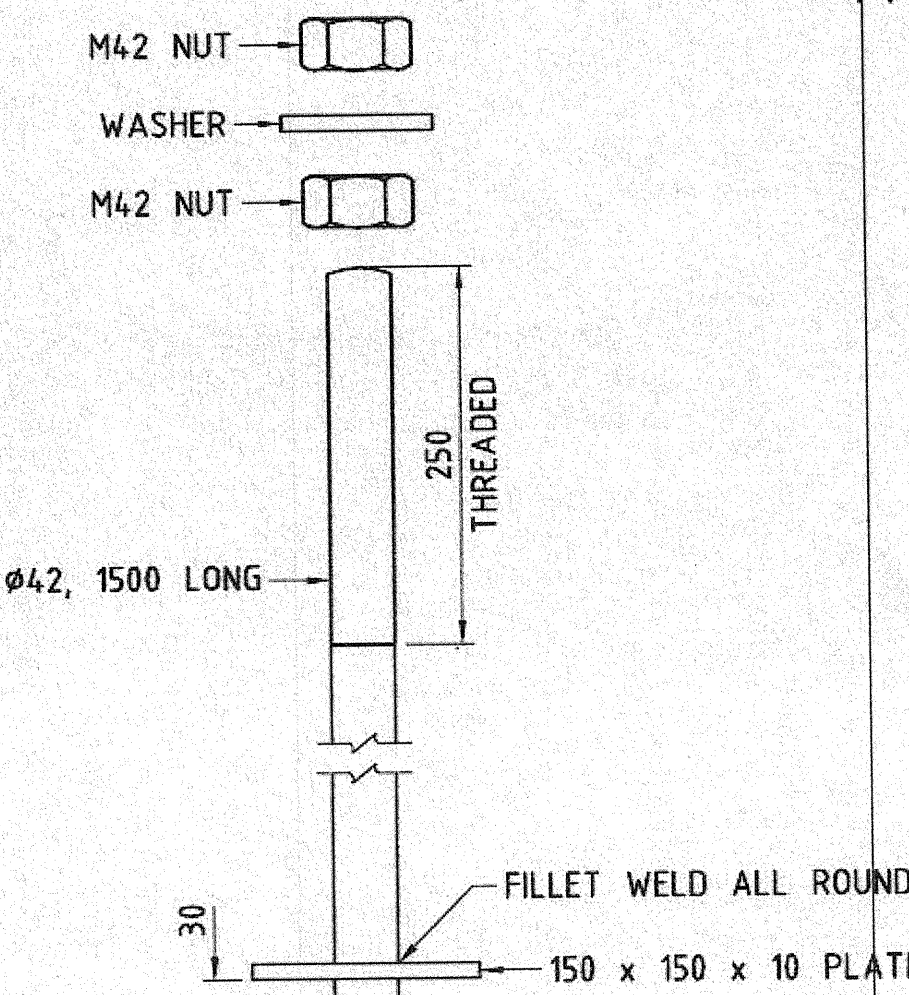
ITEM 3  
1 : 5



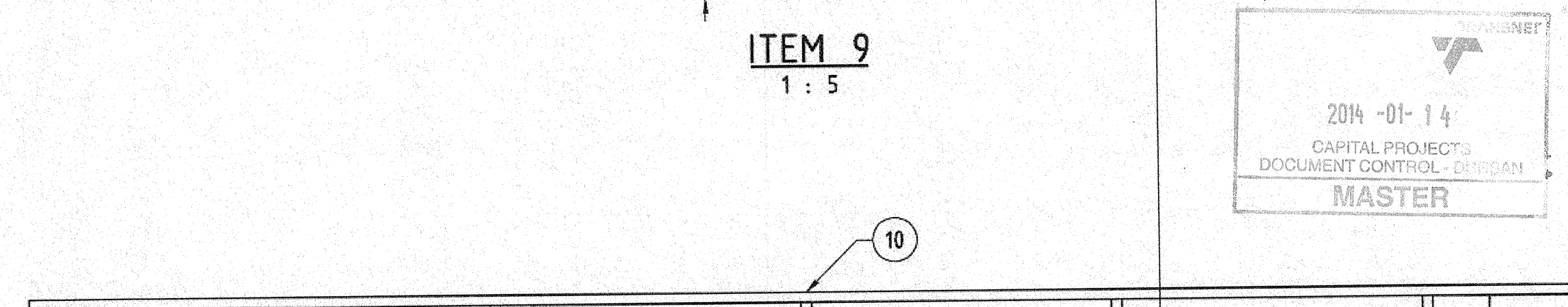
ITEM 2  
1 : 5



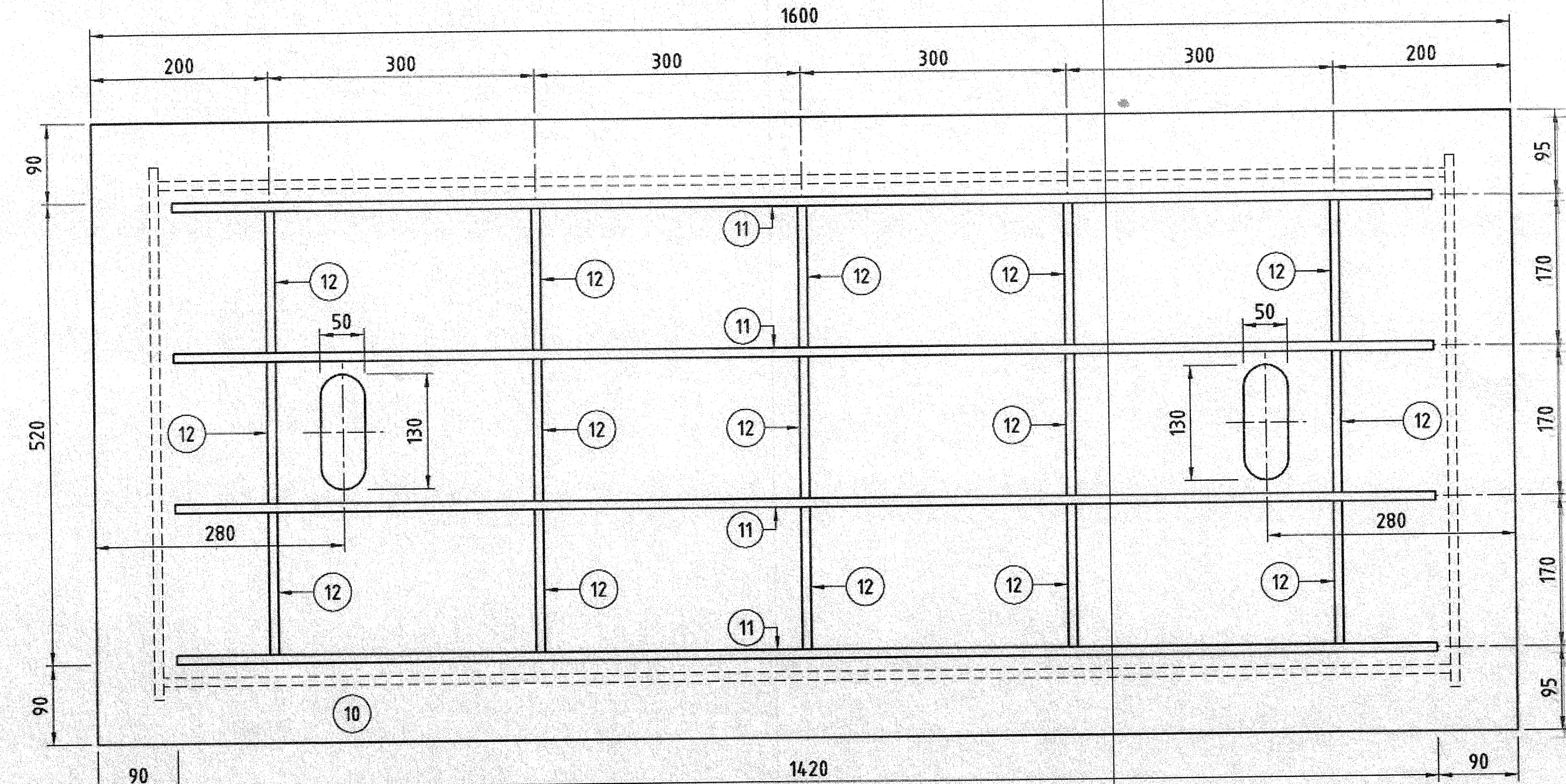
ITEM 4  
1 : 2,5



ITEM 9  
1 : 5



ELEVATION  
1 : 5



BOTTOM PLAN  
1 : 5  
COVER PLATE

AS BUILT

DRAWING NO.	REFERENCE

**NOTES**

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2. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND LEVELS ON THE SITE AND NOTIFY THE NEC SUPERVISOR OF ANY VARIATIONS BEFORE CONSTRUCTION.

CONSULTANT:  
**RCE** CONSULTANTS  
RCE 346-CB-01 Sh. 10 Rev. Z

REV	DESCRIPTION	BY	CHKD	APPRO	DATE

CONTRACTOR / CONSULTANT			TRANSMET CAPITAL PROJECTS		
NAME	SIGN	DATE	NAME	SIGN	DATE

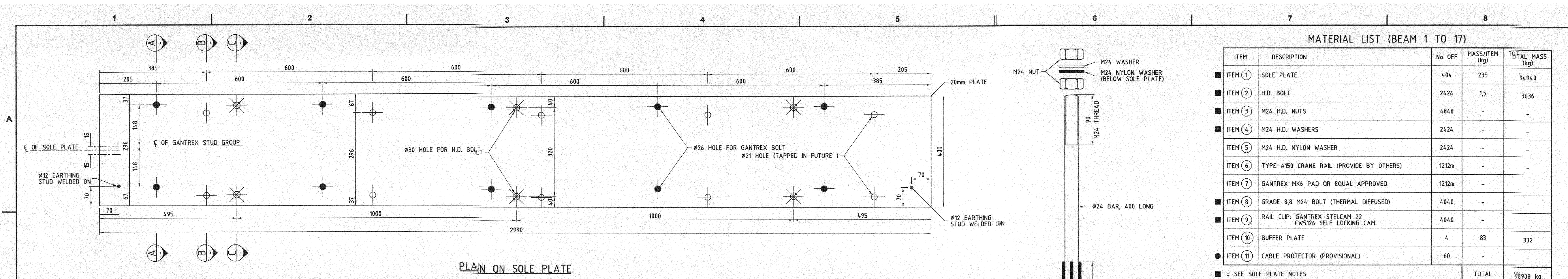
TRANSMET Capital Projects  
20th MAINTENANCE ROAD  
DURBAN TEL: 031 361 1686  
P.O. BOX 1073, DURBAN FAX: 031 361 1686

PROJECT NUMBER: 2011-01-14  
CAPITAL PROJECTS  
DOCUMENT CONTROL - DURBAN  
MASTER

2011-01-14  
DATE: 2011-01-14  
SIGNATURE: [Signature]  
AS BUILT

REV	NO	DATE	BY	CHKD	APPRO	DESCRIPTION

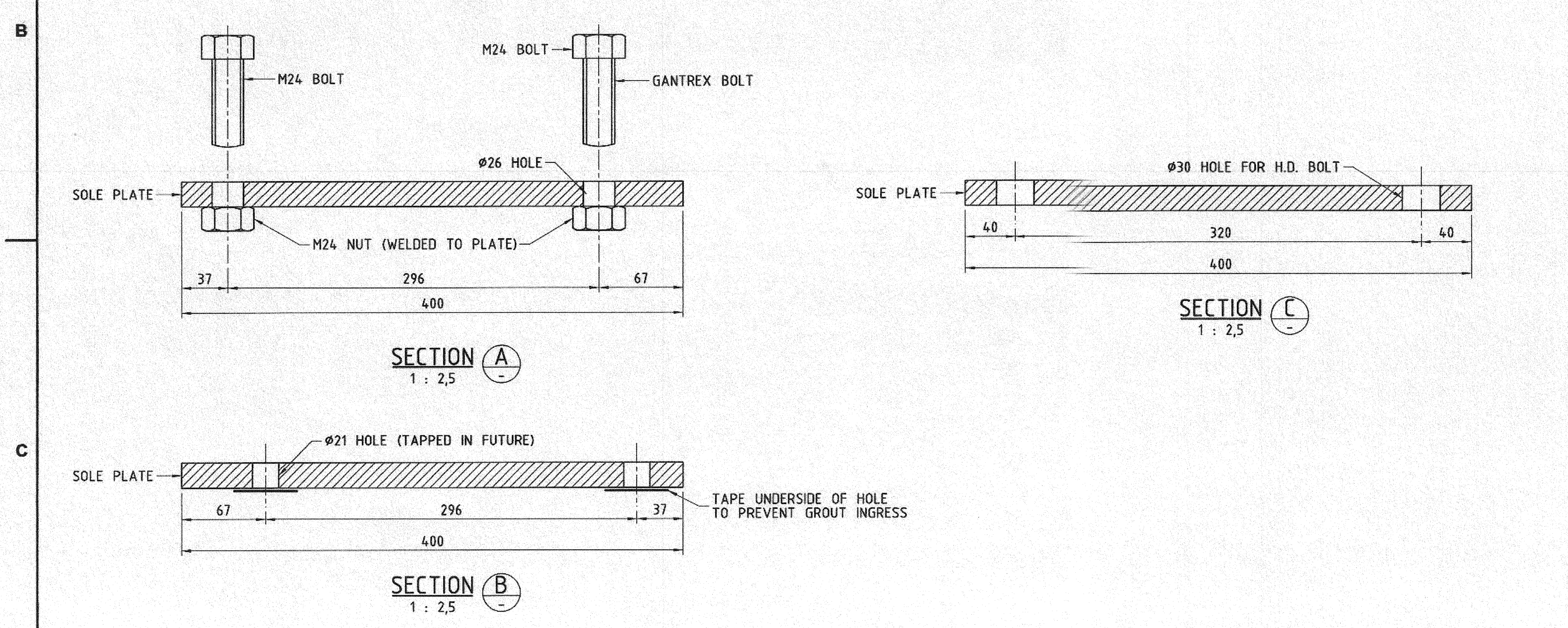




**MATERIAL LIST (BEAM 1 TO 17)**

ITEM	DESCRIPTION	No OFF	MASS/ITEM (kg)	TOTAL MASS (kg)
ITEM 1	SOLE PLATE	404	235	94940
ITEM 2	H.D. BOLT	2424	1.5	3636
ITEM 3	M24 H.D. NUTS	4848	-	-
ITEM 4	M24 H.D. WASHERS	2424	-	-
ITEM 5	M24 H.D. NYLON WASHER	2424	-	-
ITEM 6	TYPE A150 CRANE RAIL (PROVIDE BY OTHERS)	1212m	-	-
ITEM 7	GANTREX MK6 PAD OR EQUAL APPROVED	1212m	-	-
ITEM 8	GRADE 8,8 M24 BOLT (THERMAL DIFFUSED)	4040	-	-
ITEM 9	RAIL CLIP: GANTREX STELCAM 22 CW5126 SELF LOCKING CAM	4040	-	-
ITEM 10	BUFFER PLATE	4	83	332
ITEM 11	CABLE PROTECTOR (PROVISIONAL)	60	-	-
<b>TOTAL</b>				<b>98908 kg</b>

■ = SEE SOLE PLATE NOTES  
● = SEE CABLE PROTECTOR NOTES



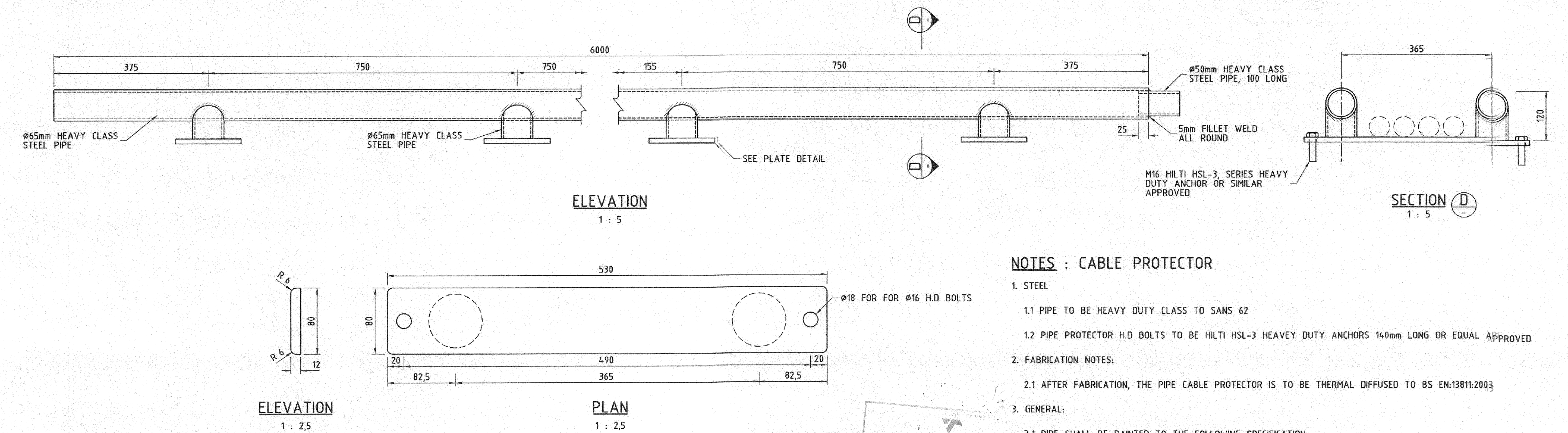
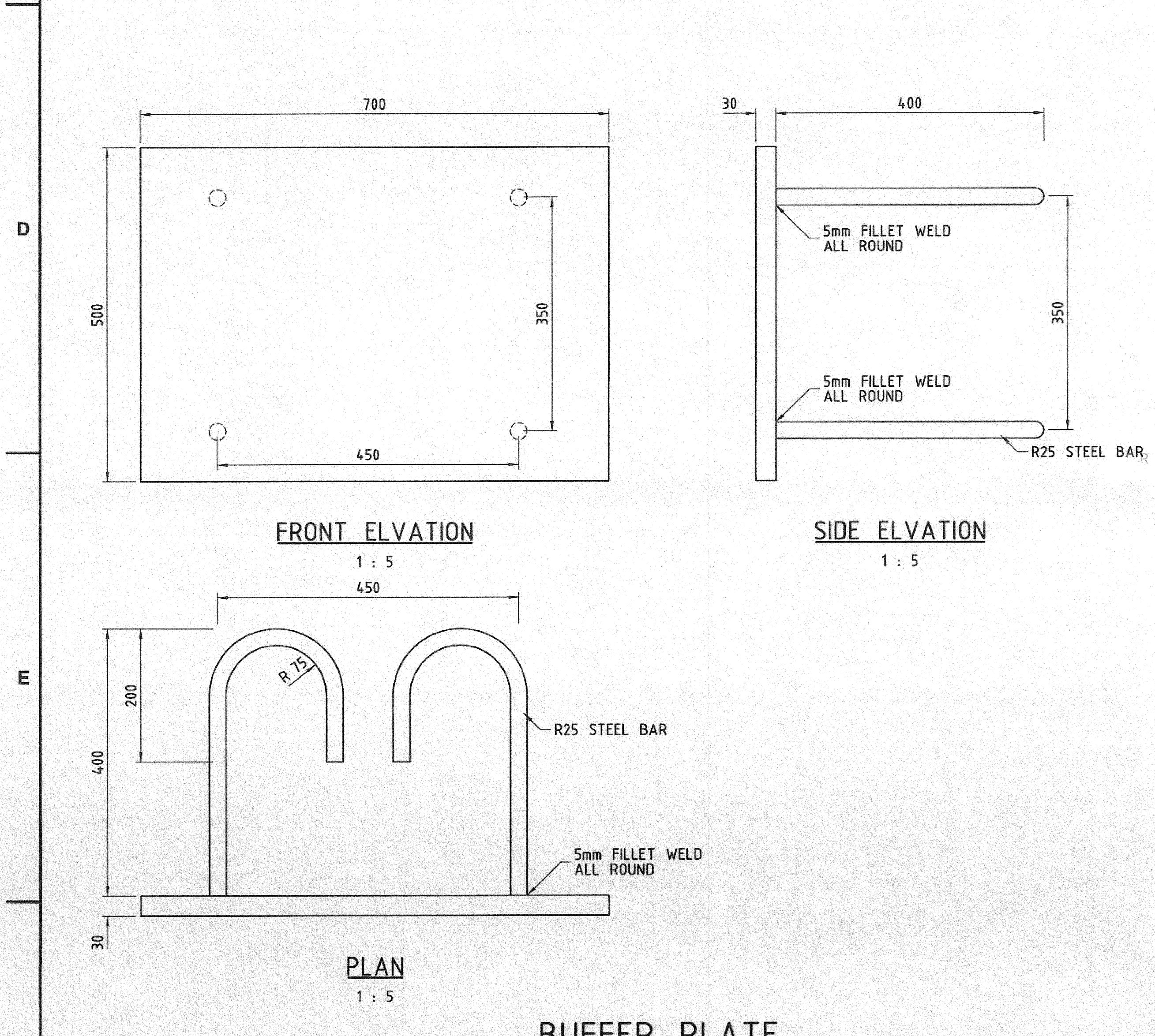
**NOTES : SOLE PLATES**

- STEEL
  - 1.1 ALL STEEL TO BE GRADE S355JR
- FABRICATION
  - 2.1 AFTER FABRICATION, THE SOLE PLATE IS TO BE THERMAL DIFFUSED TO BS EN:13811:2003
  - 2.2 H.D. BOLTS AND ALL RAIL FASTENING COMPONENTS TO BE THERMAL DIFFUSED TO BS EN:13811:2003

**MATERIAL LIST (BEAMS 18 TO 20)**

ITEM	DESCRIPTION	No OFF	MASS/ITEM (kg)	TOTAL MASS (kg)
ITEM 1	SOLE PLATE	72	235	16920
ITEM 2	H.D. BOLT	432	1.5	648
ITEM 3	M24 H.D. NUTS	864	-	-
ITEM 4	M24 H.D. WASHERS	864	-	-
ITEM 5	M24 H.D. NYLON WASHER	432	-	-
ITEM 6	TYPE A150 CRANE RAIL	216m	-	-
ITEM 7	GANTREX MK6 PAD OR EQUAL APPROVED	216m	-	-
ITEM 8	GRADE 8,8 M24 BOLT (THERMAL DIFFUSED)	720	-	-
ITEM 9	RAIL CLIP: GANTREX STELCAM 22 CW5126 SELF LOCKING CAM	720	-	-
<b>TOTAL</b>				<b>19568 kg</b>

■ = SEE SOLE PLATE NOTES



**NOTES : CABLE PROTECTOR**

- STEEL
  - 1.1 PIPE TO BE HEAVY DUTY CLASS TO SANS 62
  - 1.2 PIPE PROTECTOR H.D BOLTS TO BE HILTI HSL-3 HEAVY DUTY ANCHORS 140mm LONG OR EQUAL APPROVED
- FABRICATION NOTES:
  - 2.1 AFTER FABRICATION, THE PIPE CABLE PROTECTOR IS TO BE THERMAL DIFFUSED TO BS EN:13811:2003
- GENERAL:
  - 3.1 PIPE SHALL BE PAINTED TO THE FOLLOWING SPECIFICATION:
 

THE SURFACES OF THE STEEL PIPES SHALL BE PREPARED BY LIGHT ABRASION WITH A GALVANIZING PRE-CLEANER, WASHING WITH DETERGENT AND WATER UNTIL A WATER BREAK FREE SURFACE IS ACHIEVED. THE SURFACES SHALL BE ALLOWED TO DRY THOROUGHLY BEFORE ANY PAINTING COMMENCES.

PAINTING SHALL CONSIST OF 1 COAT SURFACE TOLERANT EPOXY PRIMER TO A DRY FILM THICKNESS OF 65 - 75 MICRON AND 1 COAT OF A TWO COMPONENT RECOATABLE POLYURETHANE FINISH (GLOSS) TO A DRY FILM THICKNESS OF 65 - 75 MICRON.

THE PAINT MANUFACTURER'S RECOMMENDATIONS FOR THE APPLICATION OF THE DIFFERENT COATING SYSTEMS, CURING TIME BEFORE HANDLING OR APPLICATION OF SUBSEQUENT COATS, HEALTH AND SAFETY RECOMMENDATIONS SHALL BE ADHERED TO. COLOUR TO BE GOLDEN YELLOW TO SANS 1091-B4.9.
  - 3.2 PIPE SHALL BE PRE-ASSEMBLED AND ALIGNED TO A TOLERANCE OF 5mm BEFORE BOLTING INTO POSITION.
  - 3.3 12mm THICK BASE PLATES TO BE CUT WHERE REQUIRED AT TURN OVER FUNNEL POSITIONS. ALL SHARP EDGES TO BE ROUNDED TO A RADIUS OF 3-4mm AND COATED WITH ONE COAT ZINC/FIX EPOXY COLD GALVANIZING FOLLOWED BY 2 COATS OF INTERZONE 954 EPOXY APPLIED BY BRUSH TO A MINIMUM COATING THICKNESS OF 250 MICRONS PER COAT.

COLOUR TO BE GOLDEN YELLOW TO SANS 1091-B4.9. A POLYURETHANE TOP COAT COULD BE PROVIDED OVER THE TWO COATS OF INTERZONE 954 SHOULD THE LATTER NOT BE AVAILABLE IN THE SPECIFIED COLOUR.

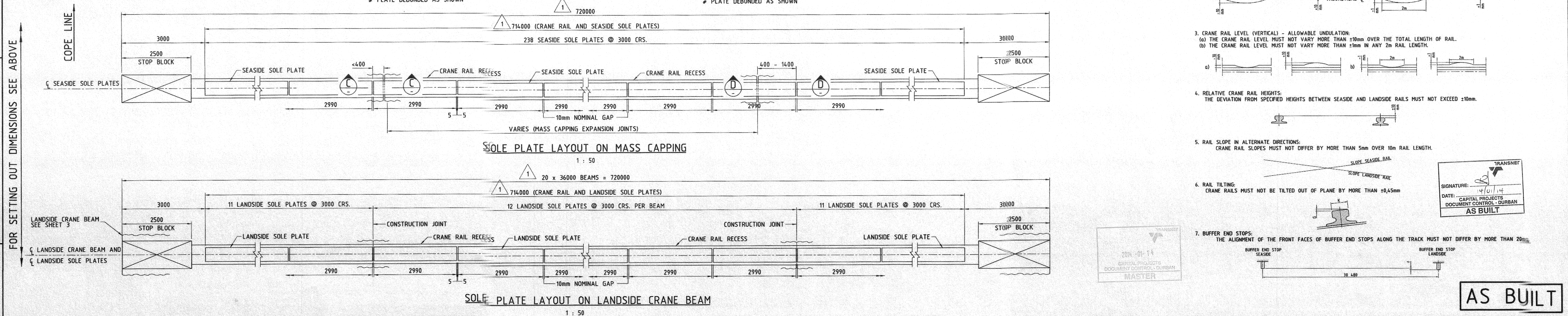
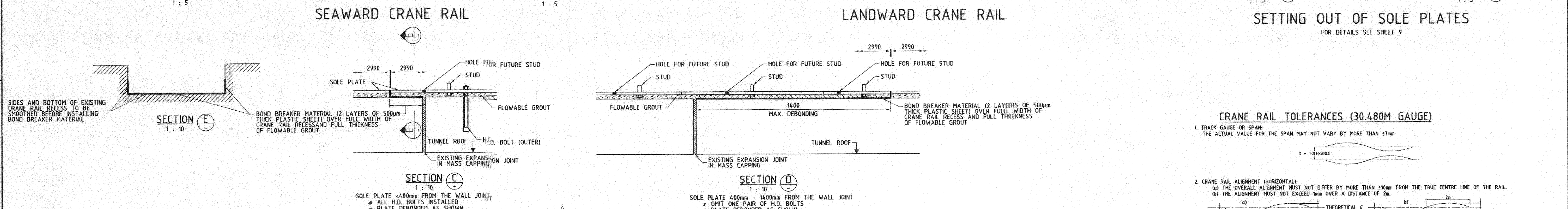
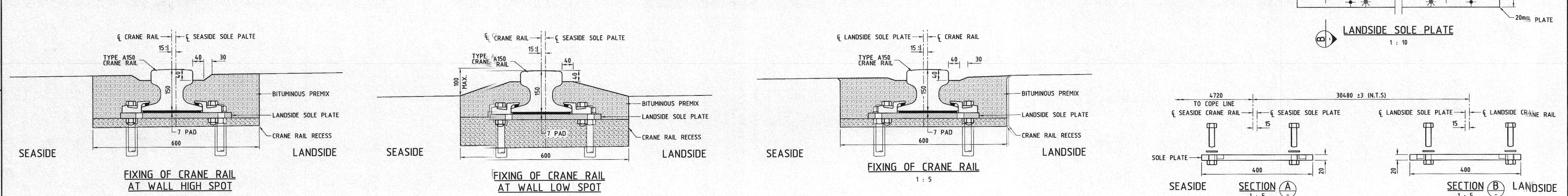
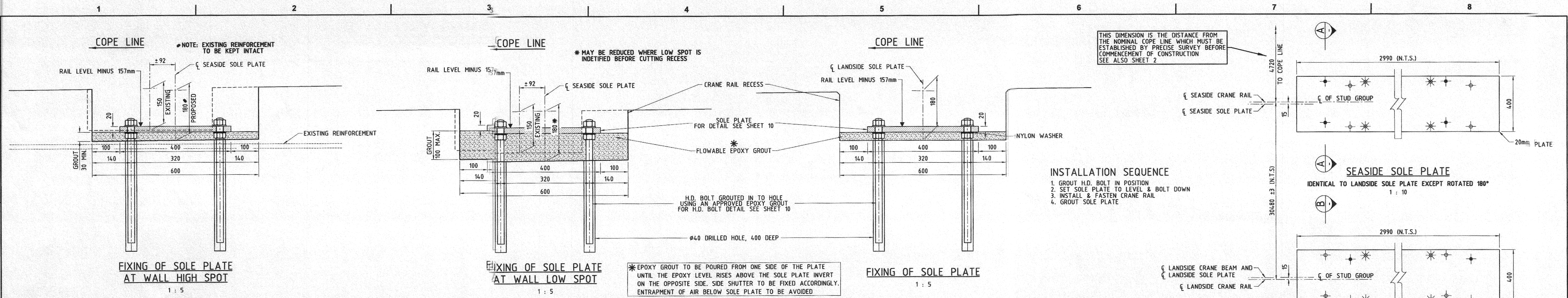
2014-01-14  
CAPITAL PROJECTS  
DOCUMENT CONTROL  
MASTER

TRANSNET  
SIGNATURE: [Signature]  
DATE: 14/01/14  
CAPITAL PROJECTS  
DOCUMENT CONTROL - DURBAN  
AS BUILT

**AS BUILT**

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