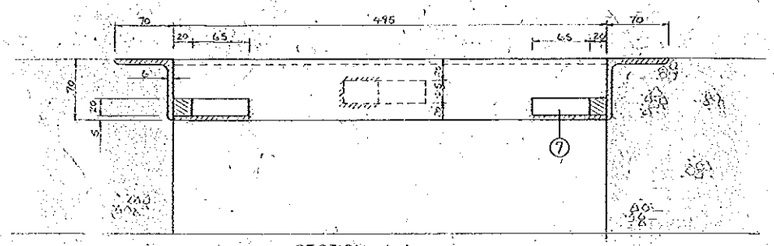
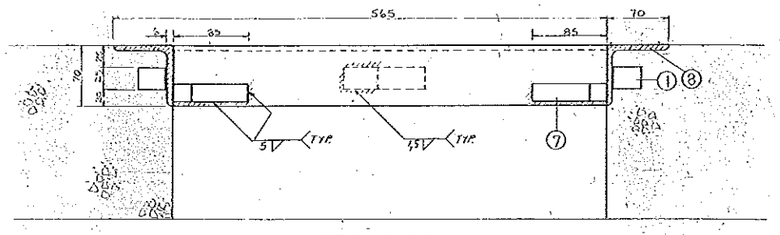
DRG. No. 11860 /1



SECTION 1-1



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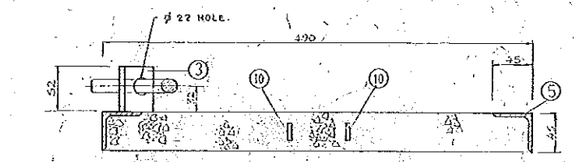

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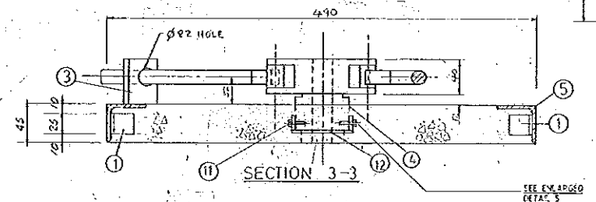

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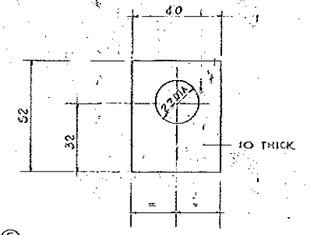
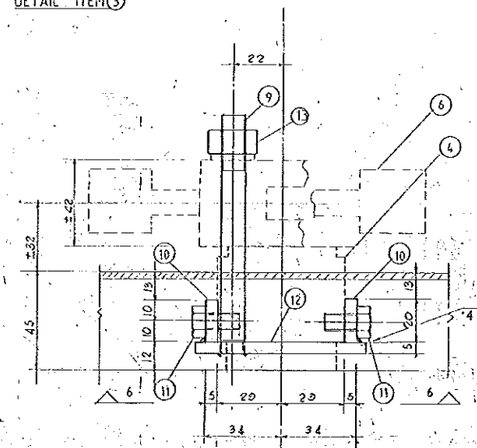
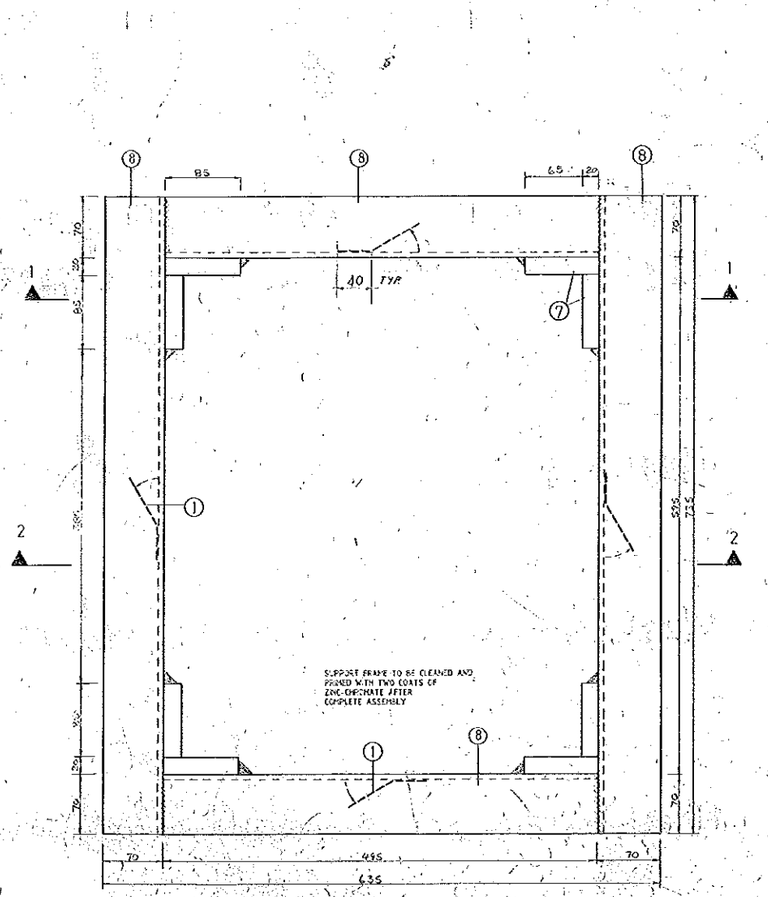


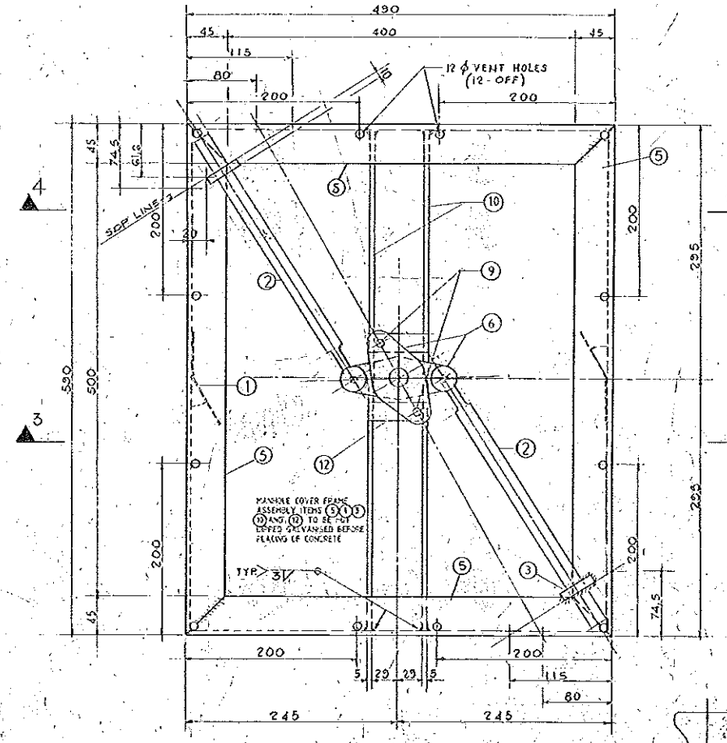
DETAIL ITEM 3



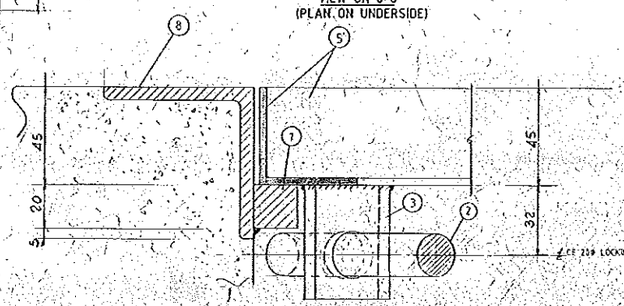
PART ENLARGED DETAIL 5



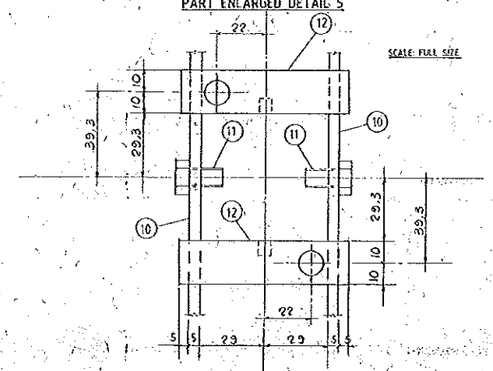
PLAN ON MANHOLE COVER SUPPORT FRAME



PLAN ON UNDERSIDE OF MANHOLE COVER



ASSEMBLY DETAIL SHOWING MANHOLE COVER FRAME IN POSITION (ONTO SUPPORT FRAME)
SCALE: FULL SIZE



VIEW ON 6-6
(PLAN ON UNDERSIDE)

DESCRIPTION

1. 25mm x 15mm MILD STEEL BONDING TIES, 105mm LONG
2. 20mm DIAMETER LOCKING BAR
3. 140mm x 10mm MILD STEEL PLATE 52mm LONG WITH 22mm ø HOLE
4. MANCO S.G. CAST IRON CYLINDRICAL BARREL. BARREL TO BE DRILLED AND TAPPED TO SUIT ITEM 11
5. 45mm x 45mm x 3mm MILD STEEL ANGLE
6. MANCO LOCKING DEVICE CAST IN S.G. IRON
7. 20mm x 20mm MILD STEEL SQUARE BAR 85mm LONG
8. 75mm x 70mm x 6mm MILD STEEL ANGLE
9. 2 x 12mm ø STAINLESS STEEL STUDS x 110mm LONG WITH THREADS OF 25mm AT ONE END AND 6mm AT OTHER END OF STUD
13. 2 x 20mm x 5mm MILD STEEL FLAT BARS x 580mm LONG, WELDED TO VERTICAL LEG OF 5 AT EACH END
11. 2 x 12mm ø HT. BOLTS x 32mm LONG TO SECURE MANCO CYLINDRICAL BARREL TO 10
12. 2 x 20mm x 5mm MILD STEEL FLAT BARS x 78mm LONG WELDED AS SHOWN EACH PLATE TO HAVE ONE HOLE DRILLED AND TAPPED TO SUIT 10mm ø STAINLESS STEEL BOLT
13. STAINLESS STEEL NYLOC NUT TO SUIT ITEM 5

NOTES:

1. STEEL FIBRE CONCRETE TO CONTAIN 45% BY WEIGHT OF 25mm LONG STEEL FIBRES
2. STONE AGGREGATE TO BE 7mm MAXIMUM
3. CUBE STRENGTH OF CONCRETE TO BE 40MPa AT 28 DAYS
4. MANHOLE COVER FRAME TO BE HOT DIPPED GALVANISED ACCORDING TO TABLE 2 OF SABS 763 FOR HEAVY DUTY APPLICATION ON AT ARTICLES
5. SUPPORT FRAME TO BE CLEANED AND PRIMED WITH TWO COATS OF ZINC-CHROMATE AFTER COMPLETE ASSEMBLY.
6. SEQUENCE OF MANUFACTURE OF MANHOLE COVER:
   a) MANHOLE COVER FRAME ITEMS 5 3 1 9 AND 13 TO BE ASSEMBLED, WELDED AND VENTILATION HOLES DRILLED BEFORE GALVANISING
   b) AFTER GALVANISING ITEMS 13 TO BE DRILLED AND TAPPED TO SUIT ITEMS 12
   c) ITEMS 1 TO BE INSTALLED AND WELDED TO ITEMS 13
   d) ITEM 4 TO BE BOLTED TO ITEMS 13
   e) MANHOLE COVER FRAME TO BE PLACED TO LEVEL SURFACE AS SHOWN ON SECTION 3-3 ITEMS 2 BRACED AND STEEL FIBRE CONCRETE CAST
   f) CONCRETE TO FILL UNDERSIDE OF FRAME COMPLETELY AND BE STRUCK LEVEL WITH TOP OF FRAME
   g) FINAL ASSEMBLY OF LOCKING MECHANISM LOCKING BARS ETC. WITH NYLOC NUTS ITEMS 13

REVISIONS

No	DATE	CHECKED	APPROVED	DESCRIPTION
1	91.08.16			LOCKING MECHANISM LOCATION DETAIL ETC. ALTERED

STATION: WKS: DOC. REF. No.

ASSET NUMBER: TYPE OF KEY AND LOCKING NUT

REFERENCE DRAWINGS

RAND WATER BOARD
BOX 1327 JOHANNESBURG 2000 TEL: 682-0911
A.B. SMIT GENERAL MANAGER ENGINEERING

JOB No.		CHECKED	
CONTRACT No.		SECTION HEAD	
SCHEME		APPROVED	
DRAWN		CAPACITY	
TRACED BY		DATE	91.08.16
DATE			

PIPELINES AND BOOSTERS

STANDARD DETAILS

STEEL FIBRE CONCRETE MANHOLE COVER AND SUPPORT FRAME.

SCALE 2.5 UDS

DRG. No. 11860 /1