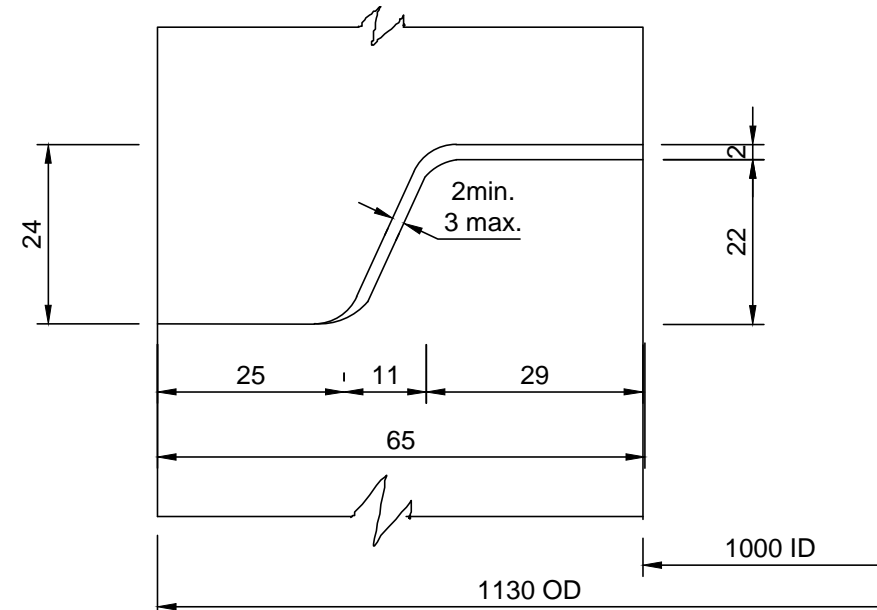
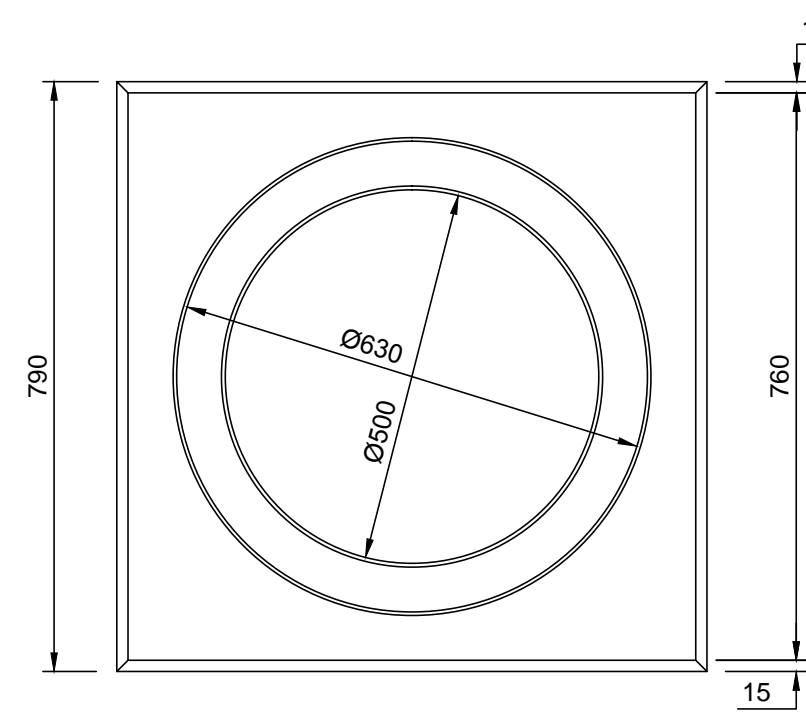


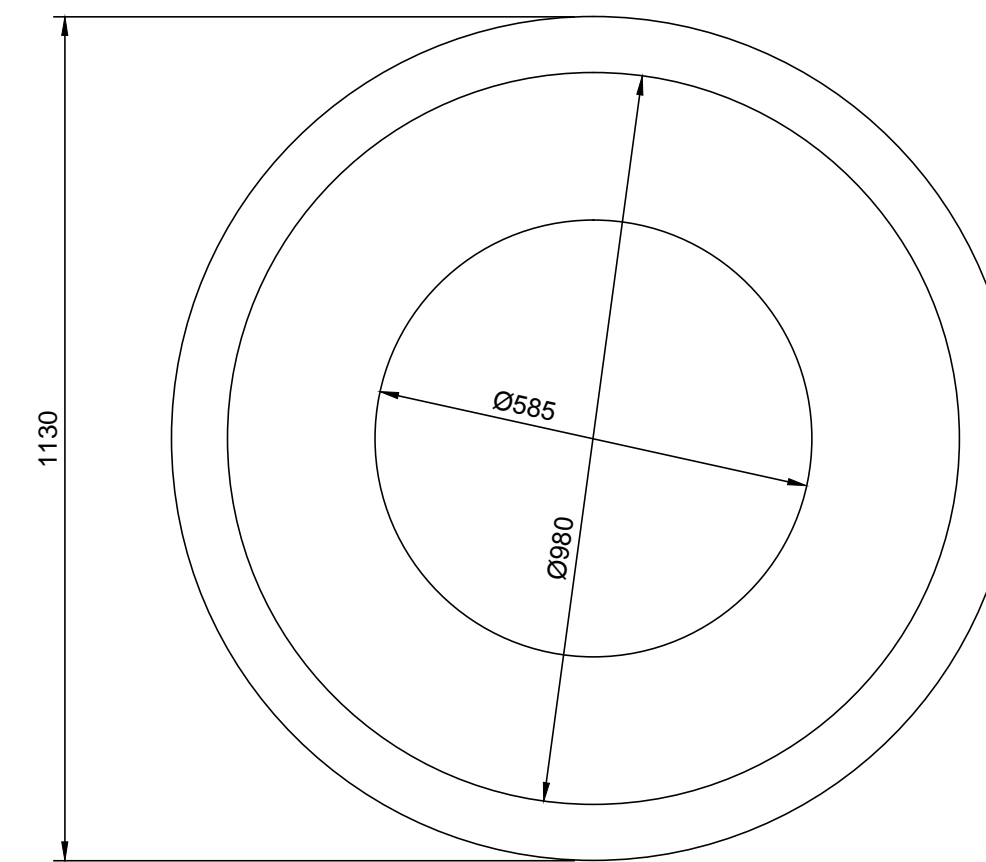
PLAN OF CIRCULAR LIGHT AND HEAVY DUTY  
FRAME FROM 1000 NOM. Ø MANHOLE



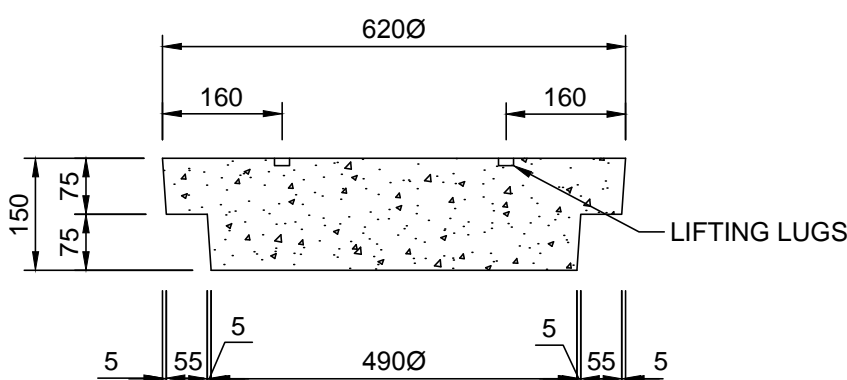
DETAIL OF JOINT



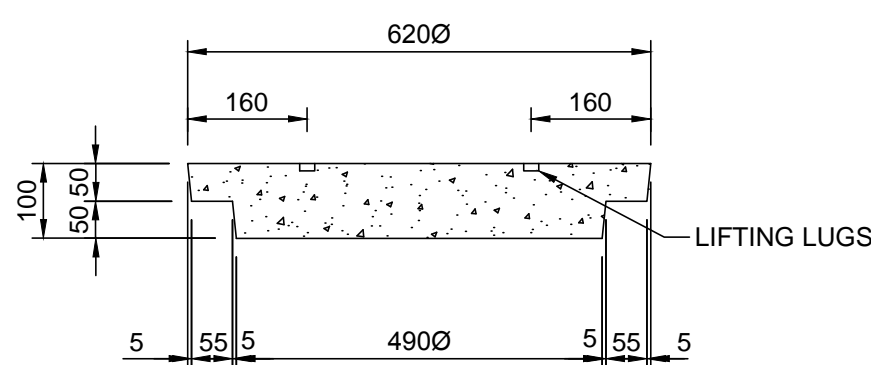
PLAN



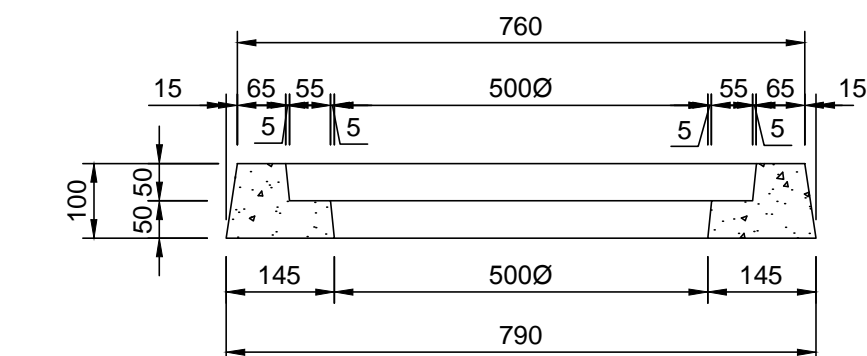
PLAN OF CIRCULAR COVER SLAB



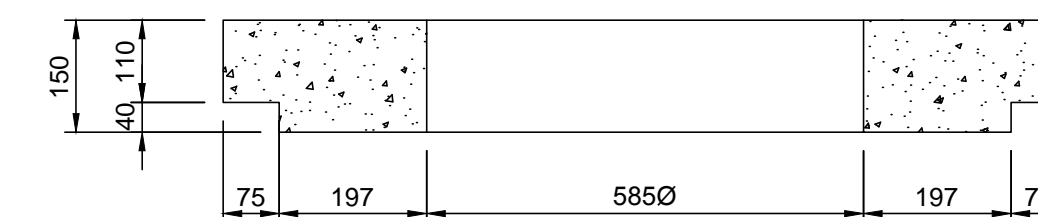
SECTION OF CIRCULAR HEAVY DUTY MH COVER



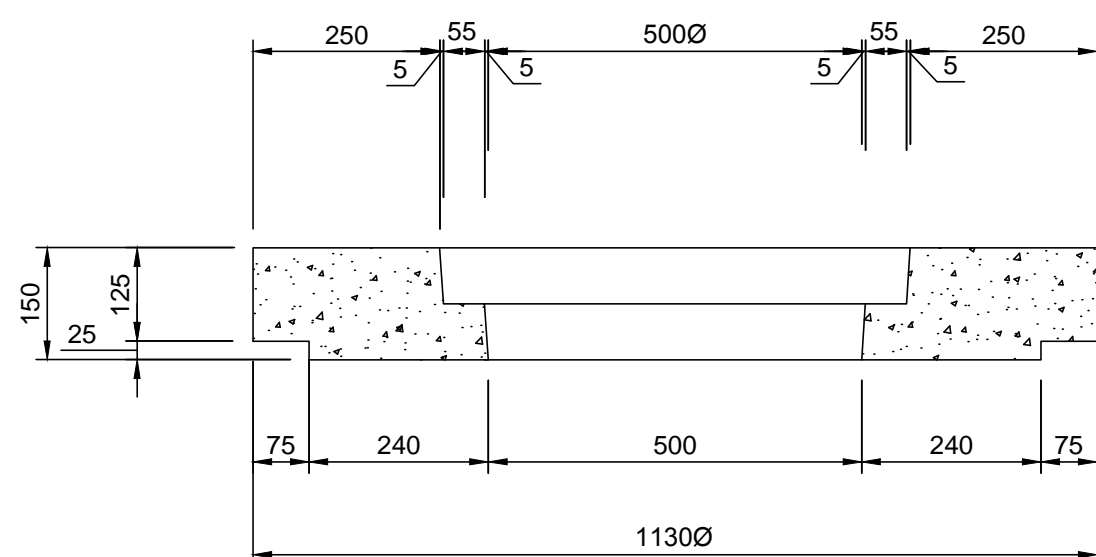
SECTION OF CIRCULAR LIGHT DUTY MH COVER



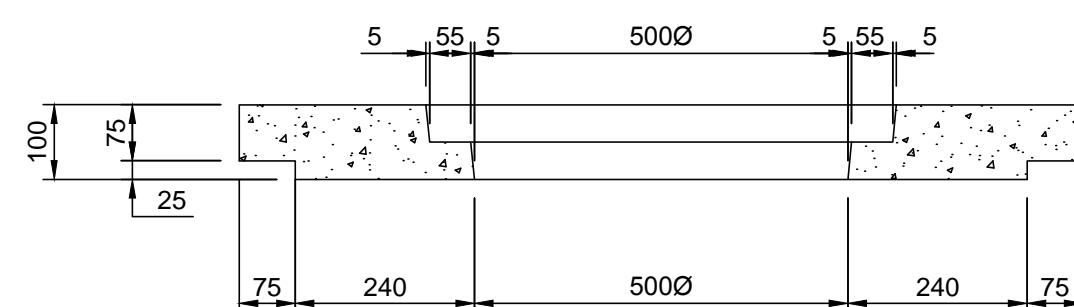
SECTION OF LIGHT DUTY SQUARE MANHOLE  
FRAME



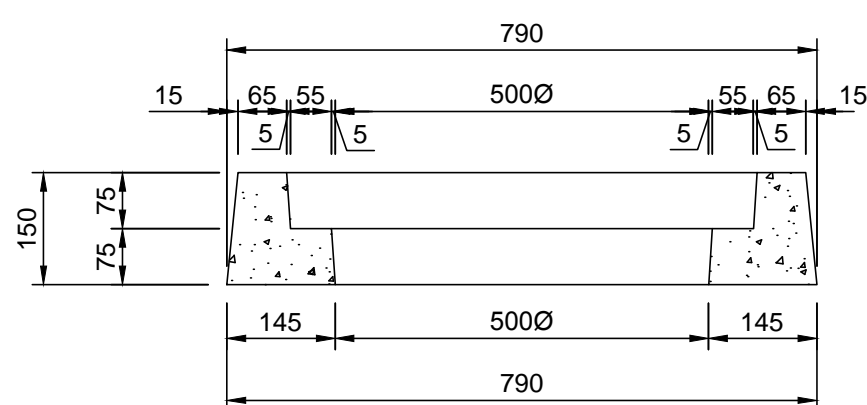
SECTION OF CIRCULAR COVER SLAB



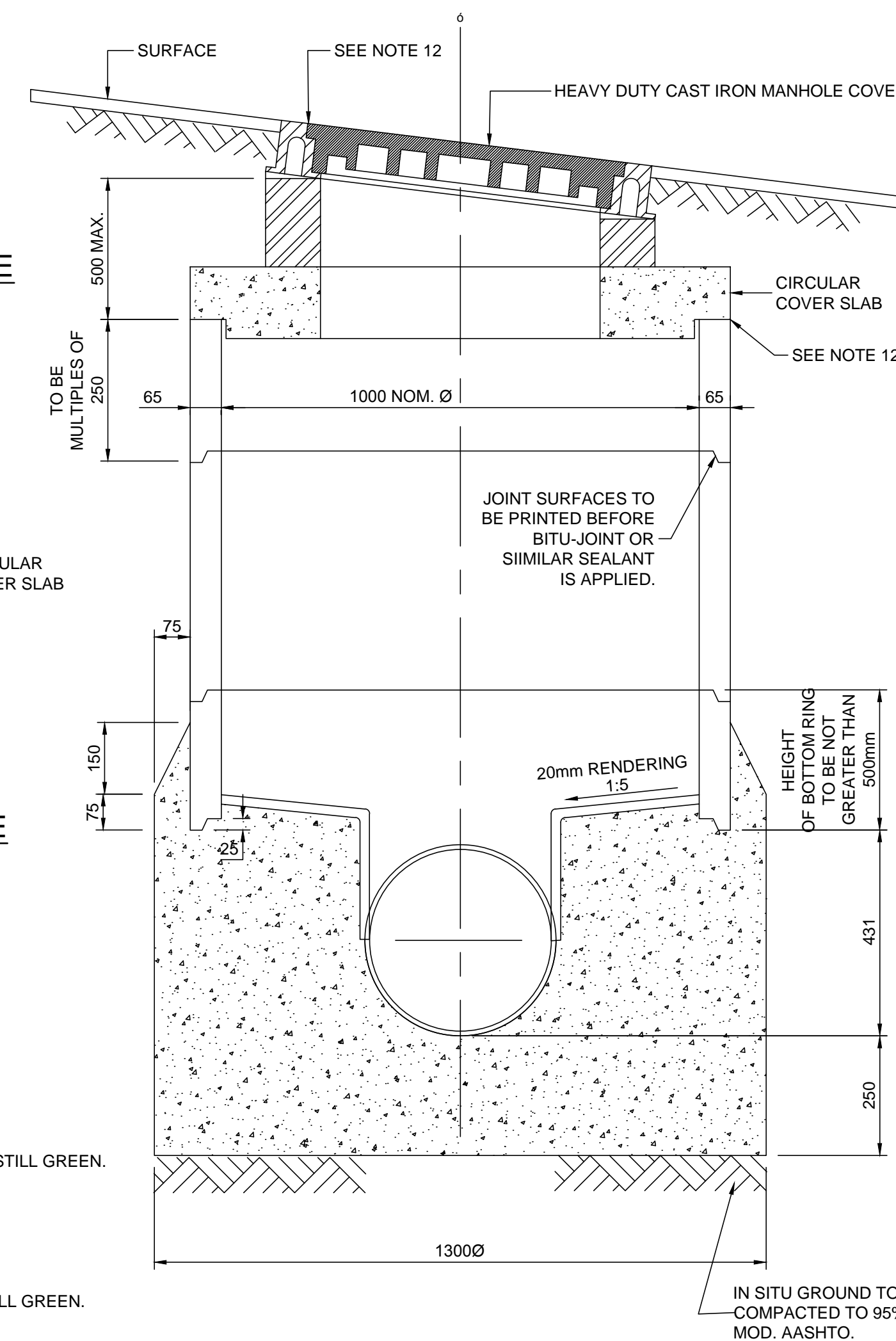
SECTION OF CIRCULAR HEAVY DUTY M.H. FRAME



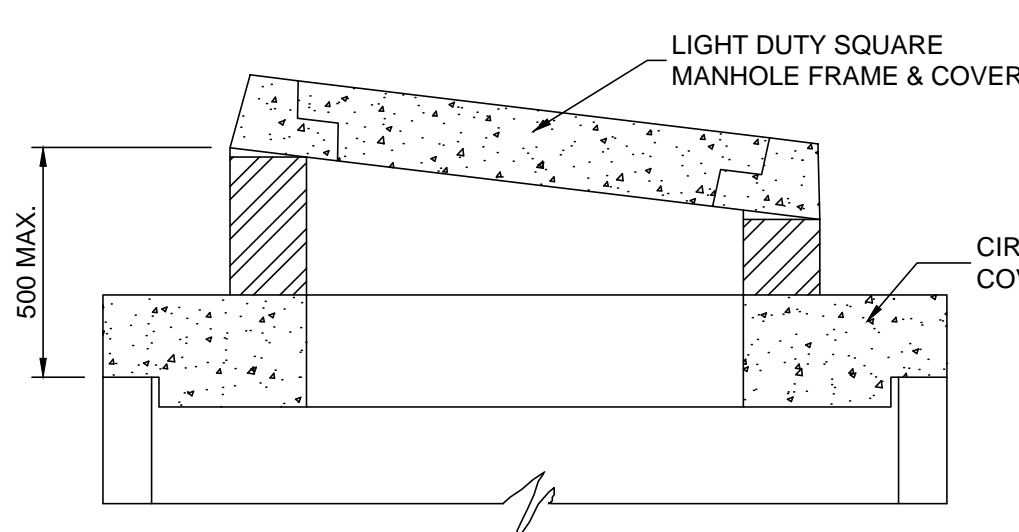
SECTION OF CIRCULAR LIGHT DUTY MH FRAME



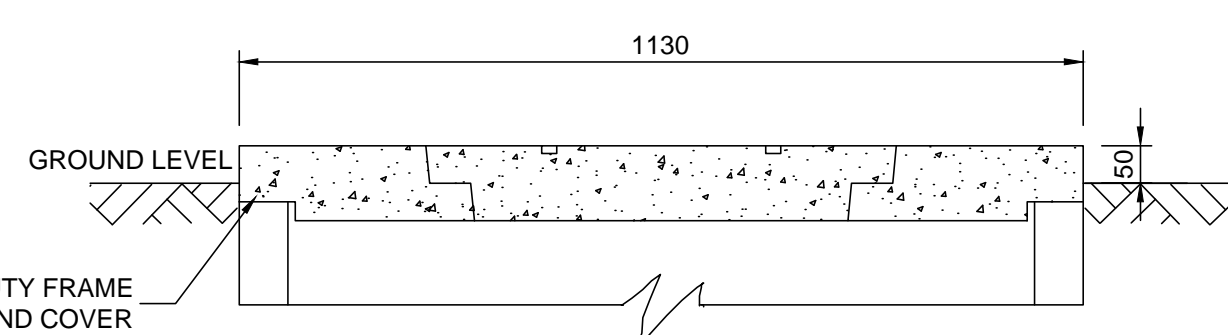
SECTION OF HEAVY DUTY SQUARE MANHOLE  
FRAME



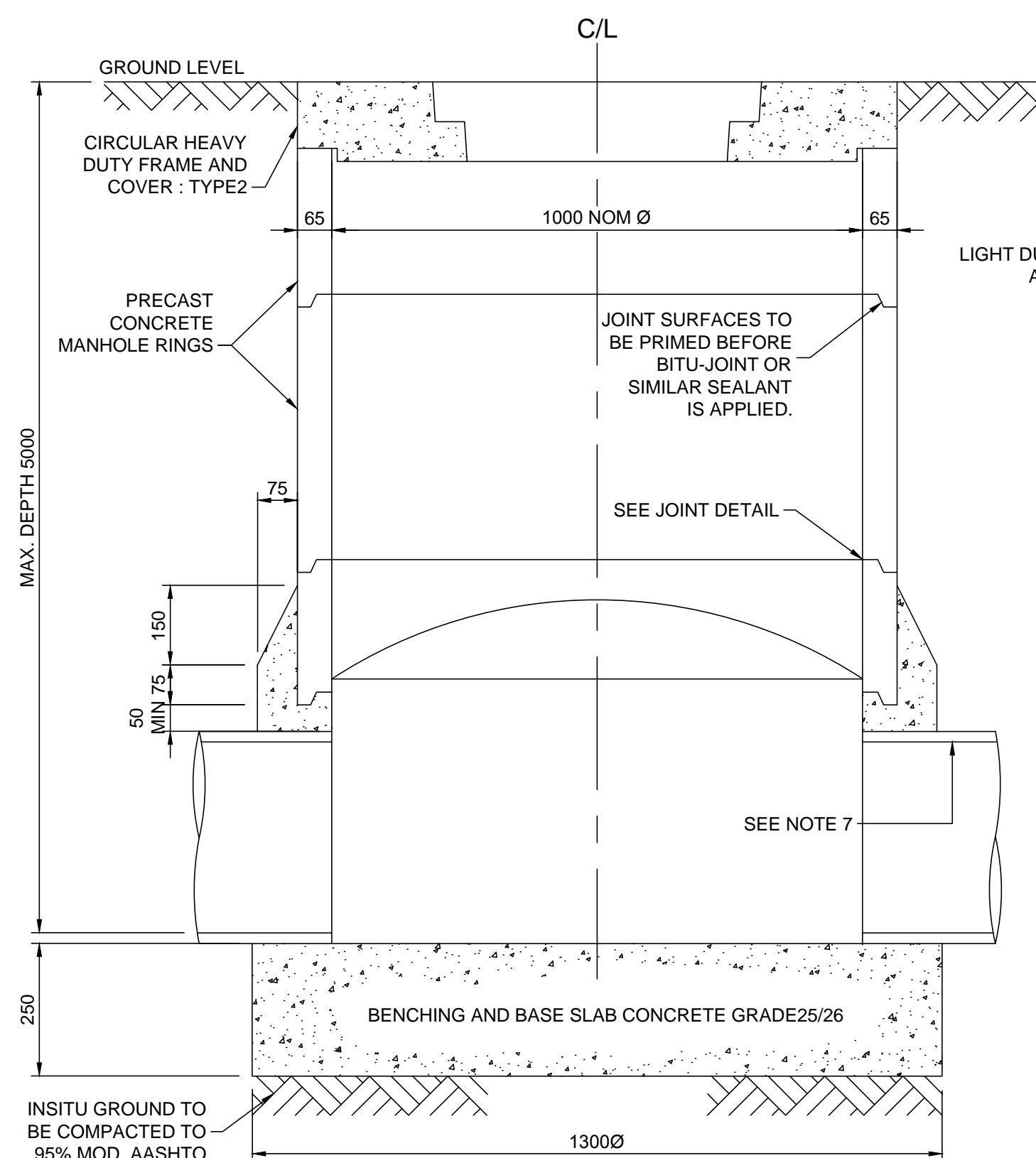
SECTION OF 1000 DIA. MANHOLE



SECTION OF LIGHT DUTY SQUARE MANHOLE  
FRAME AND COVER



SECTION OF CIRCULAR LIGHT DUTY MANHOLE  
COVER AND FRAME



SECTION OF 1000 DIA. MANHOLE

### NOTES:

#### A. GENERAL:

1. ALL PRECAST CONCRETE MANHOLE COMPONENTS TO COMPLY WITH THE REQUIREMENTS OF S.A.B.S.1294 (WHERE APPLICABLE).
2. LENGTHS OF INDIVIDUAL WALL UNITS ARE TO VARY IN MULTIPLES OF 250mm.
3. HEAVY DUTY CAST IRON COVERS AND FRAMES ARE TO BE USED ON MANHOLES UNDER VEHICULAR TRAFFIC.
4. FOR DETAILS OF STEEL REINFORCEMENT TO MANHOLE COVERS, COVER SLABS AND FRAMES - SEE STANDARD PRECAST DETAILS LISTED ABOVE.

#### B. STORMWATER MANHOLE:

5. DIMENSION D VARIES WITH THE DIAMETER OF THE PIPES. DIMENSION D SHALL BE TO A POINT 50mm ABOVE THE HIGHEST CROWN OF THE PIPES.
6. RENDERING FOR MANHOLE BENCHING SHALL CONSIST OF 1 PART CEMENT TO 3 PARTS SAND THOROUGHLY MIXED AND APPLIED TO CONCRETE SURFACES WHILE THE LATTER ARE STILL GREEN. RENDERING SHALL BE AT LEAST 20mm THICK.
7. THE LENGTH OF PIPE BUILT INTO THE MANHOLE SHALL NOT EXCEED 2.5m.

#### C. SEWER MANHOLE:

8. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING ......
9. RENDERING FOR MANHOLE BENCHING SHALL CONSIST OF 1 PART H.A.C. TO 2 PARTS SAND THOROUGHLY MIXED AND APPLIED TO CONCRETE SURFACES WHILE THE LATTER ARE STILL GREEN. RENDERING SHALL BE AT LEAST 20mm THICK.
10. ALL PIPES BUILT INTO MANHOLES SHALL NOT EXCEED 1.0m IN LENGTH, AND THE ADJOINING PIPE SHALL NOT EXCEED 2.0m IN LENGTH.
11. EVERY U.P.V.C. PIPE BUILT INTO A MANHOLE SHALL HAVE CLEAN DRY SAND ( TO S.A.B.S. 1083 TABLE 1. ) GLUED TO ITS OUTSIDE AS RECOMMENDED BY PIPE MANUFACTURER USING SPECIAL PVC CEMENT ( HENKEL S.A. PTY. LTD. TANGIT OR SIMILAR ) TO ENSURE GOOD ADHESION TO BASE CONCRETE.
12. IN LOCATIONS DEFINED BY THE ENGINEER AS SUBJECT TO FLOODING, C.I. MANHOLE COVERS AND JOINTS SEALED WITH BOSTIK BUTYL TAPE OR SIMILAR, SHALL BE USED.

READ THIS DRAWING ON CONJUNCTION  
WITH DWG B02-PZB-000084-30

ISSUED FOR CONSTRUCTION

### NOTES

1. ALL FINISHED GRADES OF COVERS/LIDS TO MATCH FINISHED ROAD/SIDEWALK GRADES.

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THE DUPLICATION OF THIS DRAWING IS STRICTLY PROHIBITED.



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### PROJECT:

SARS PIER 1 STATE WAREHOUSE

### PURPOSE OF ISSUE:

ISSUED FOR CONSTRUCTION

### DRAWING DESCRIPTION:

EXTERNAL WORKS:  
TYPICAL SEWER RING  
MANHOLE DETAILS

DESIGNED BY: S. JAMALI	SIGNATURE AND DATE: [Signature]
DESIGN CHECKED BY: F. KAMBA	SIGNATURE AND DATE: [Signature]
DRAWN BY: S. JAMALI	SIGNATURE AND DATE: [Signature]
DRAWING CHECKED BY: F. KAMBA	SIGNATURE AND DATE: [Signature]
ENGINEERS FINAL APPROVAL: F. KAMBA	SIGNATURE AND DATE: [Signature]

PROJECT NUMBER: B03-DUR-000084	PAPER SIZE: A1
SHEET NUMBER: SHEET 1 OF 1	SCALE FACTORS: AS SHOWN

### REVISION INFORMATION

NO	DATE ISSUED	CHANGED	DESCRIPTION OF CHANGE	APPROVED
0	05.12.2016	SJ	ISSUED FOR CONSTRUCTION	FK

B02-PZB-000084-31

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