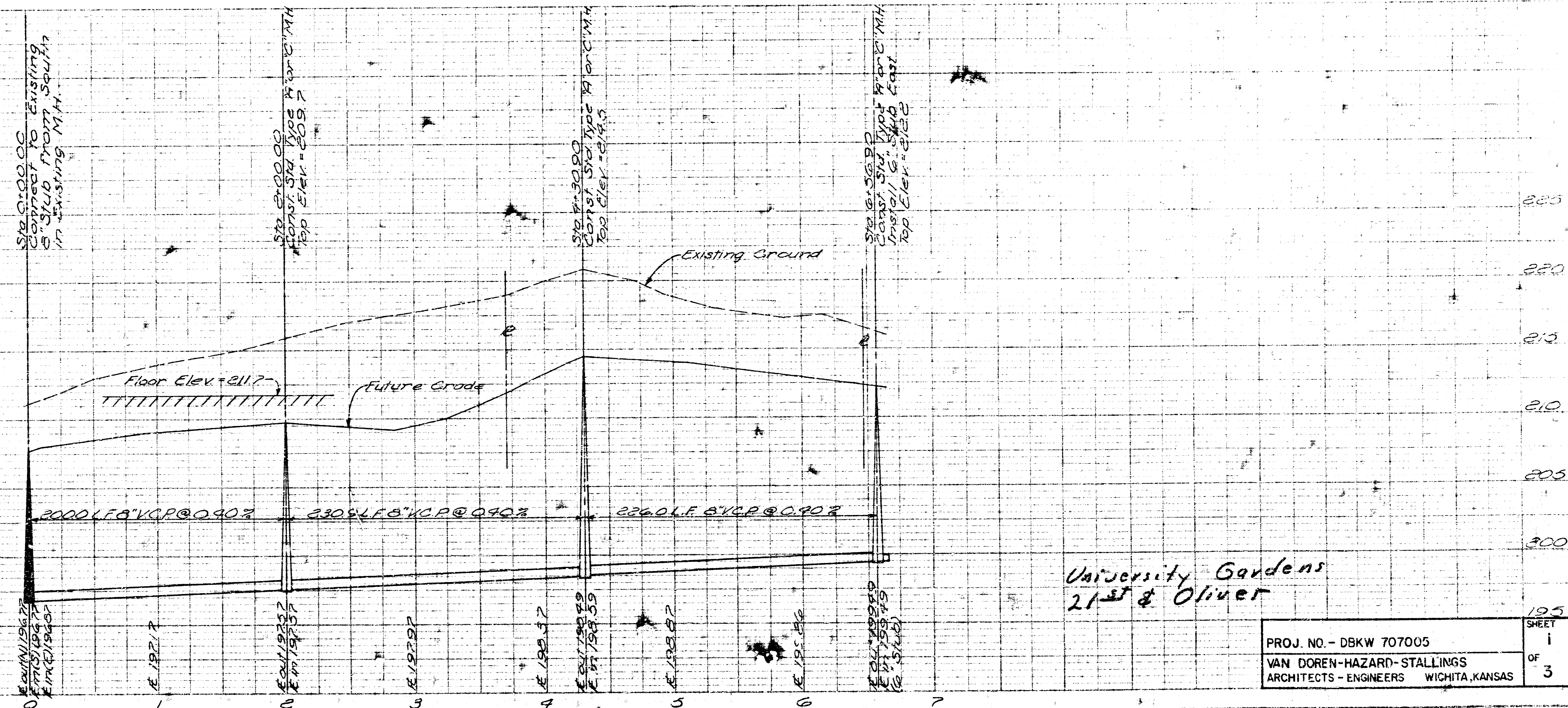


1-25-77  
**APPROVED AS NOTED**  
 By CITY ENGINEER OF WICHITA  
 Sanitary Sewers D. E. S.  
 Storm Sewers \_\_\_\_\_  
 Driveway Approaches \_\_\_\_\_

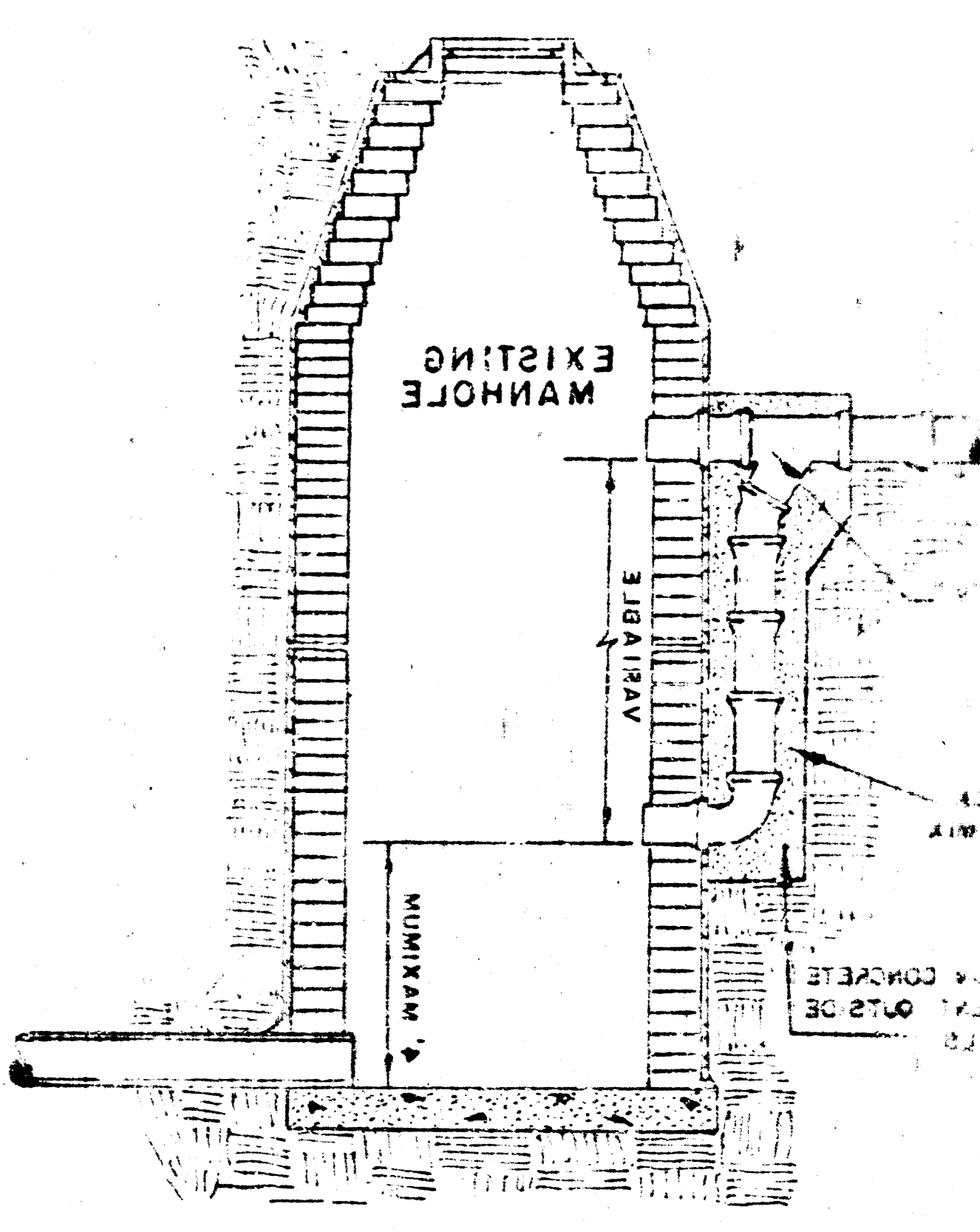
**NOTE TO CONTRACTOR**  
 This project will be constructed under the supervision of the City Engineer and conforming to the specifications of the City of Wichita. The City of Wichita will not be responsible for any and all cost of construction and inspection.



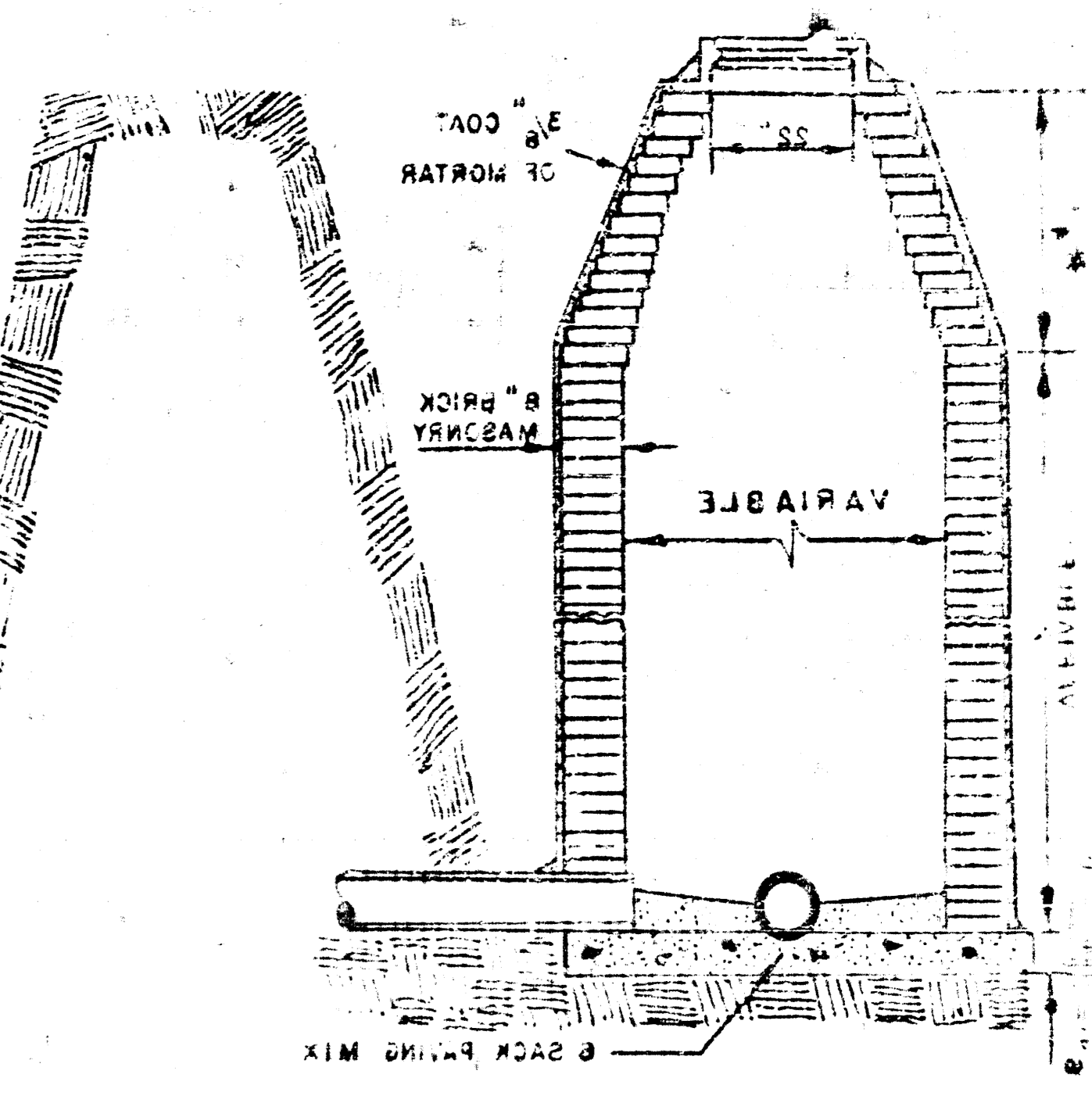
University Gardens  
 21st & Oliver

**MANHOLES**  
 THE CONCRETE USED FOR MORTAR IN MANHOLES SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. STANDARD MANHOLES AND DROP MANHOLES, REGARDLESS OF DIAMETER, SHALL BE BID AT ONE PRICE AS STANDARD MANHOLES. SINGLE OR DOUBLE OUTSIDE DROP MANHOLES SHALL BE BID AT ONE PRICE AS OUTSIDE DROP MANHOLES. ALL MANHOLES WITH FIRES LARGER THAN 2" SHALL BE 2' DIAMETER UNLESS OTHERWISE SPECIFIED ON PLAN. ALL M.H.'S WITH FIRES 2" & SMALLER SHALL BE 4' DIA.

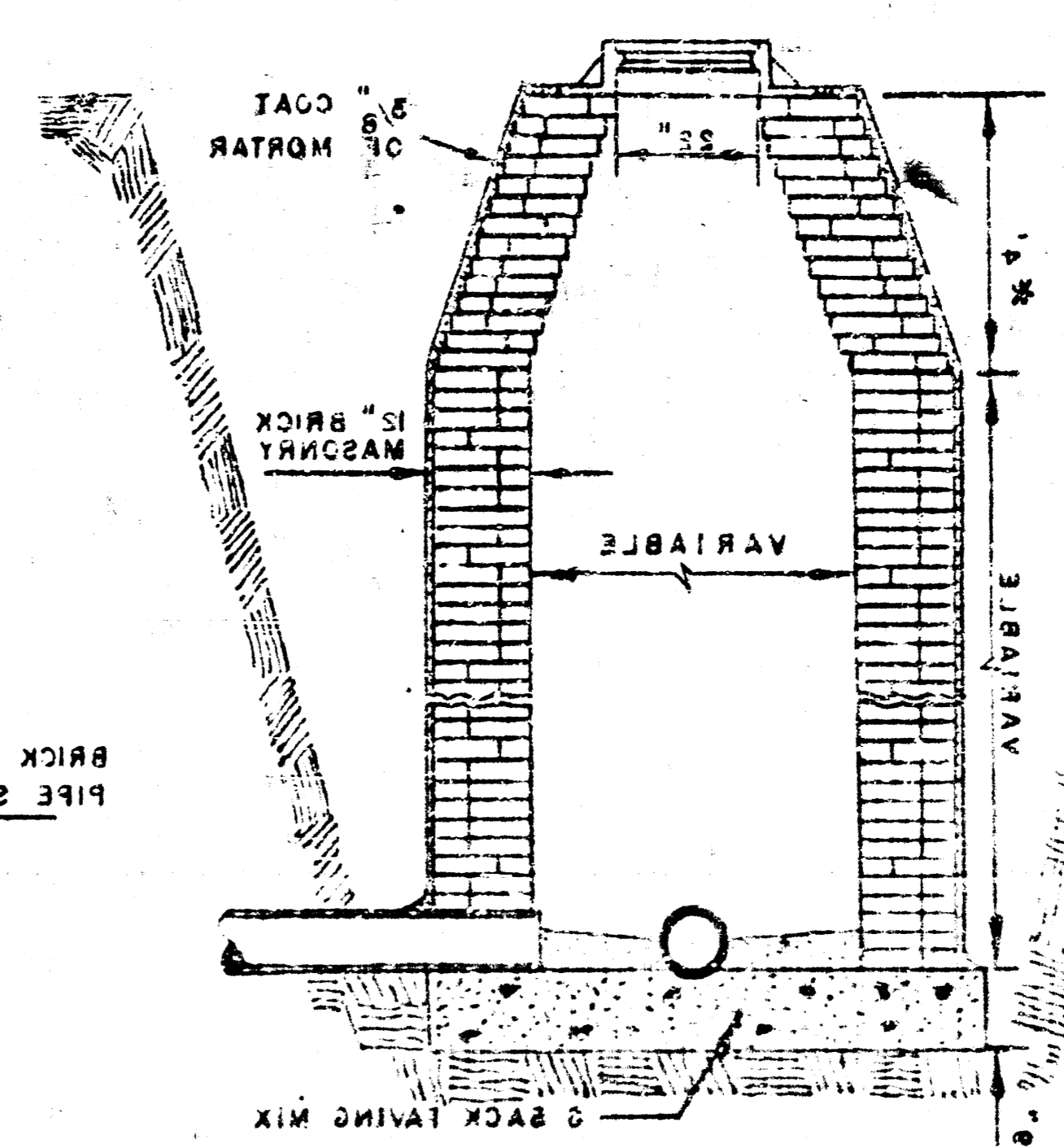
**DETAIL OF DROP STACK**  
 FOR EXISTING MANHOLES IN GROUND WATER



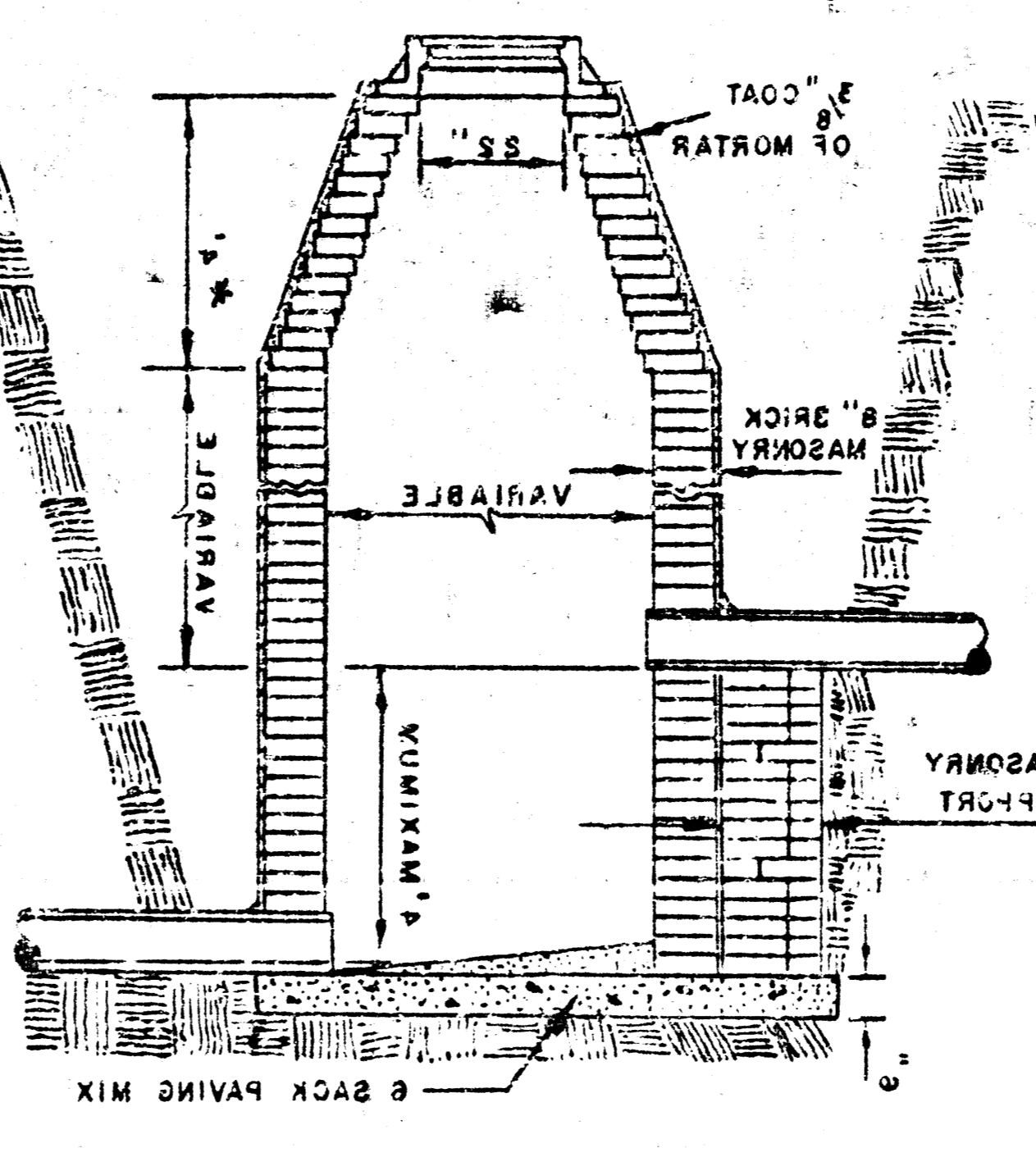
**STANDARD MANHOLE TYPE "A"**



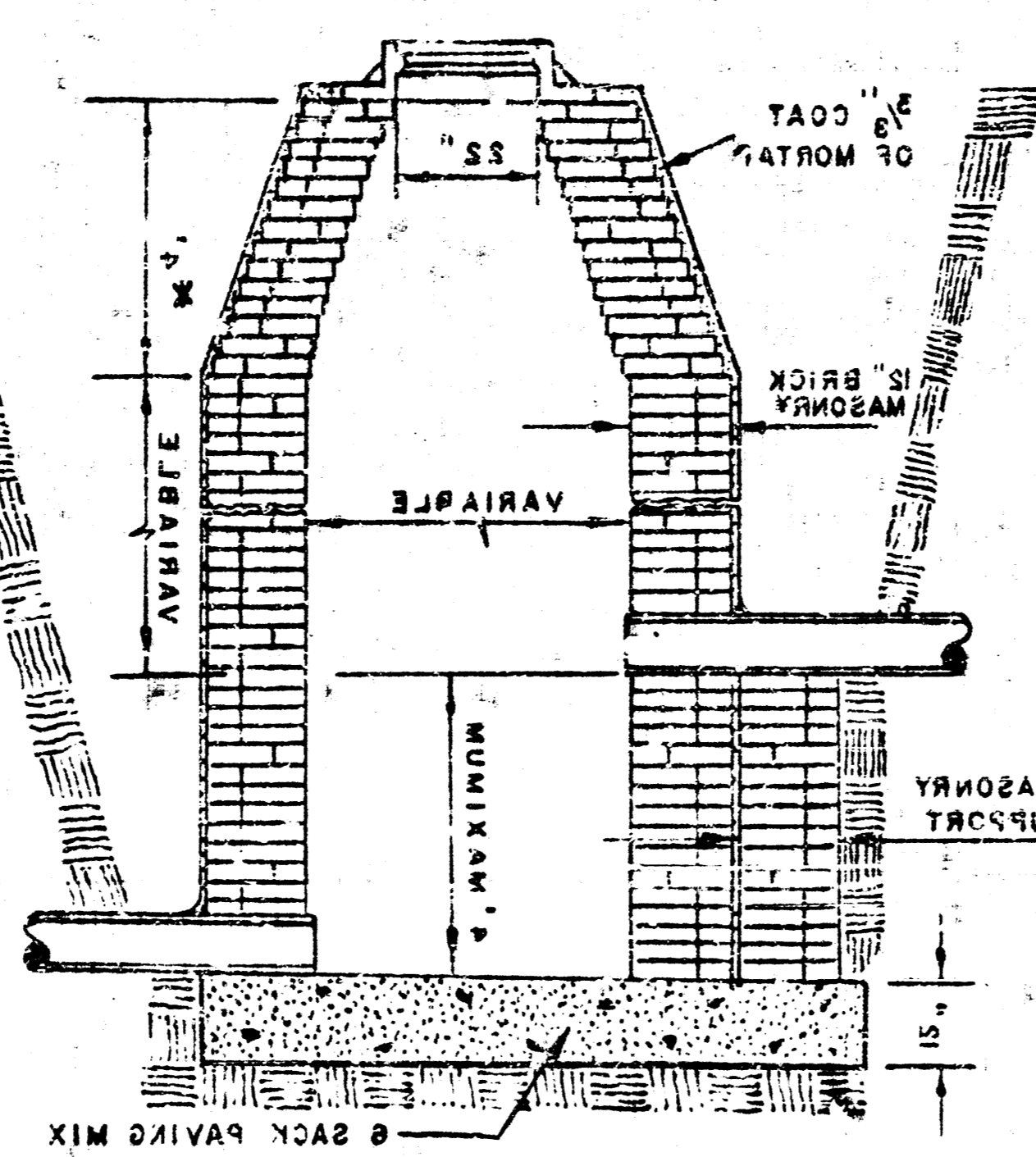
**STANDARD MANHOLE TYPE "B"**



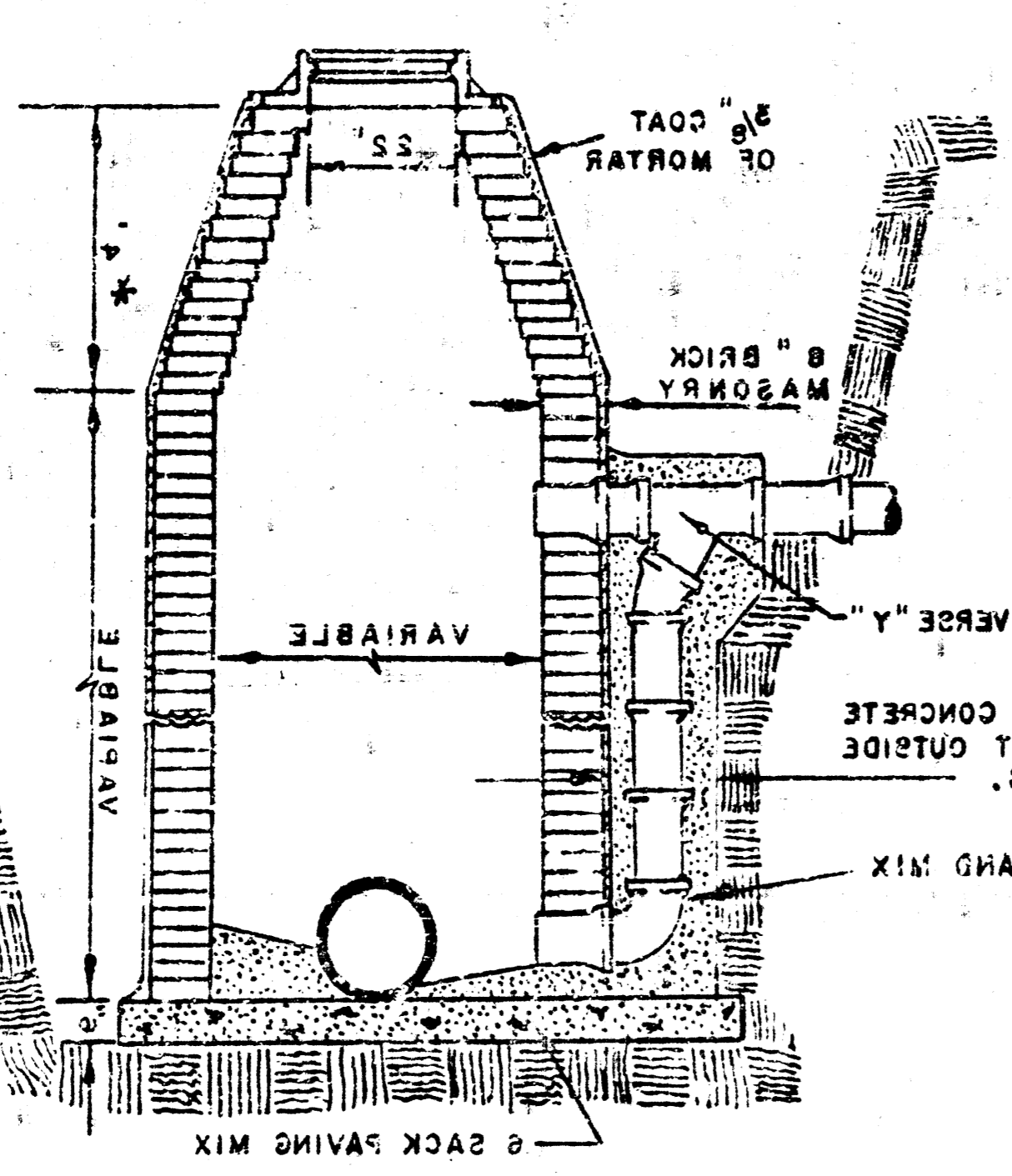
**DROP MANHOLE TYPE "A"**



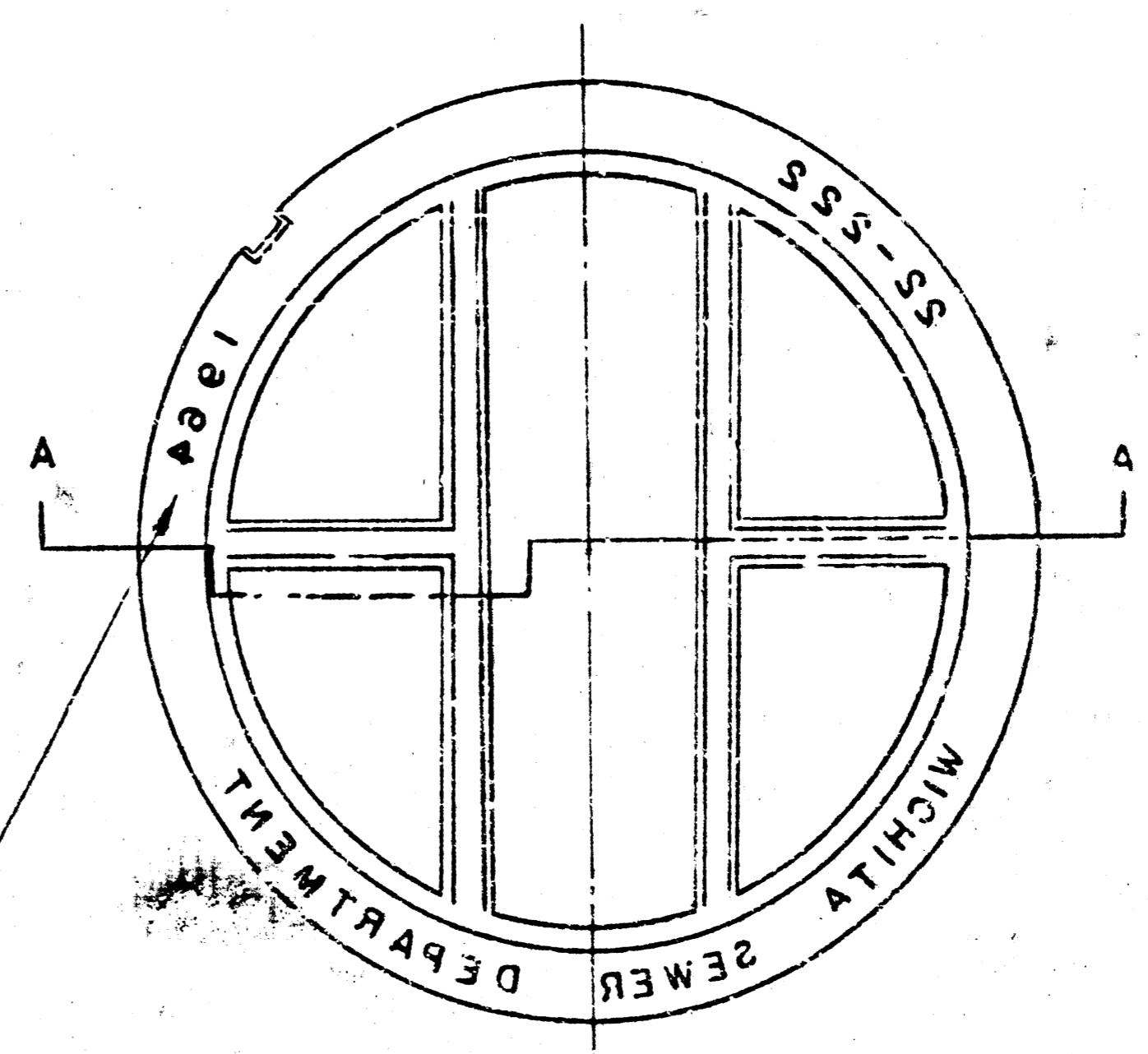
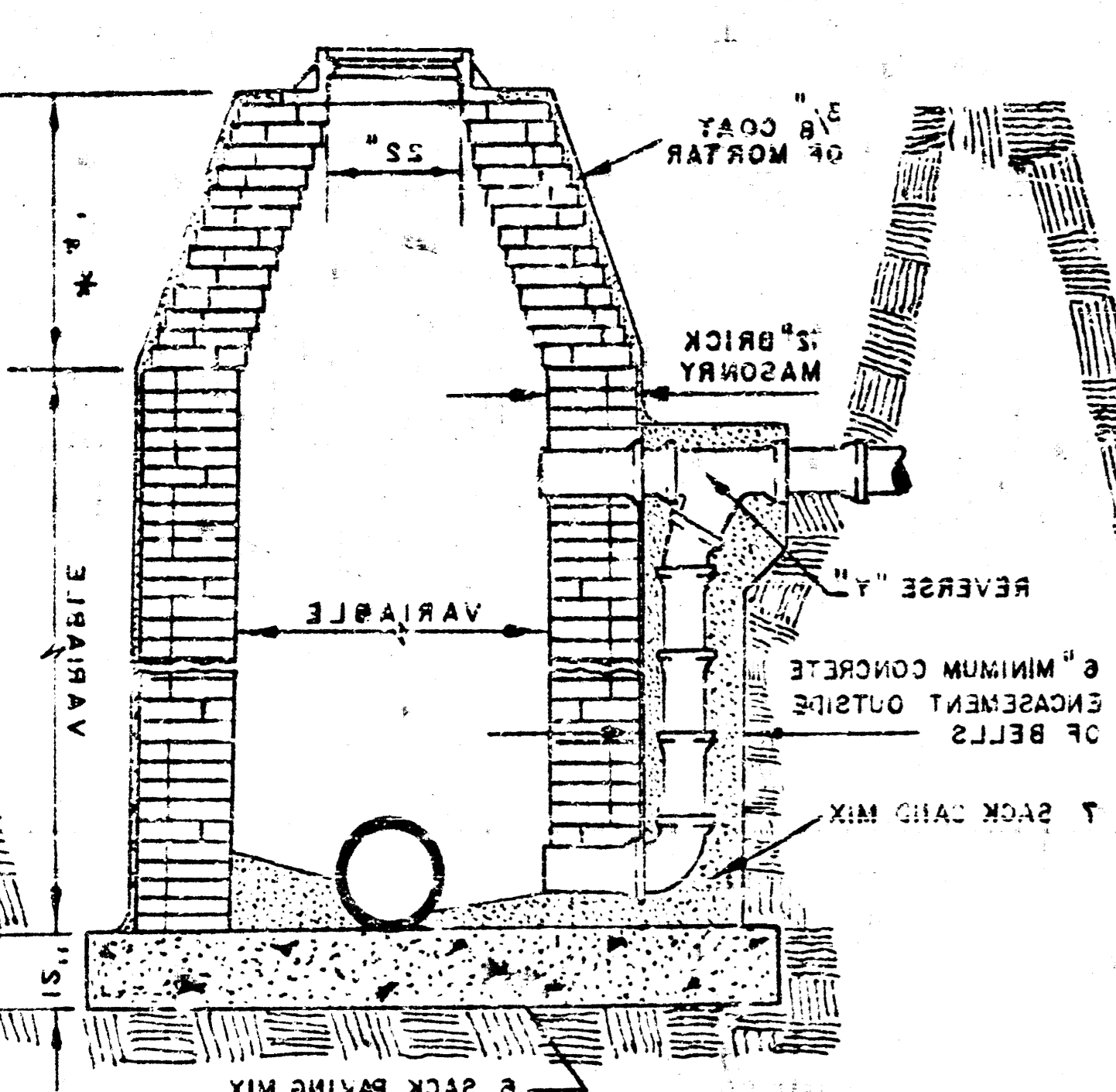
**DROP MANHOLE TYPE "B"**



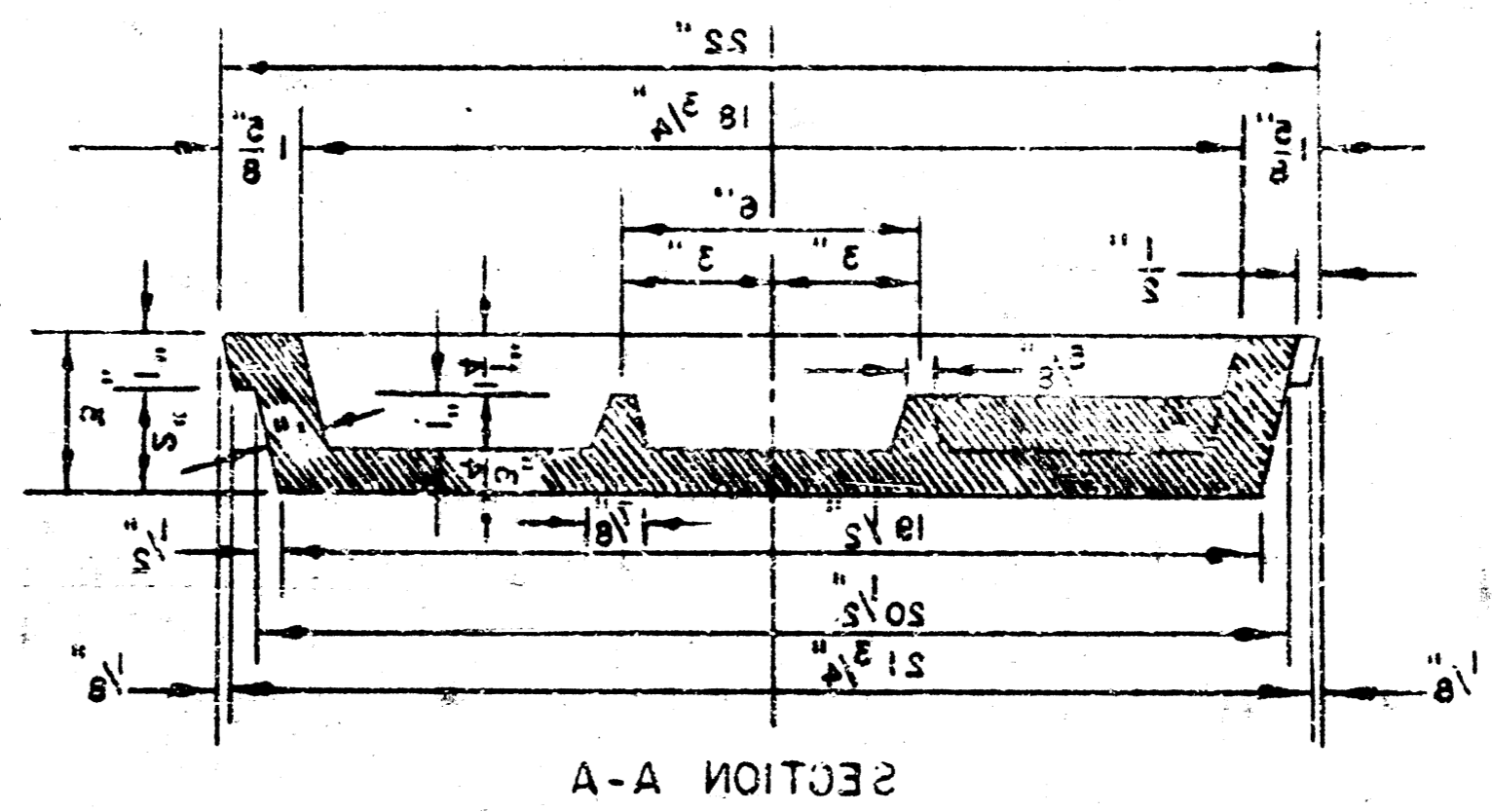
**OUTSIDE DROP MANHOLE TYPE "A"**



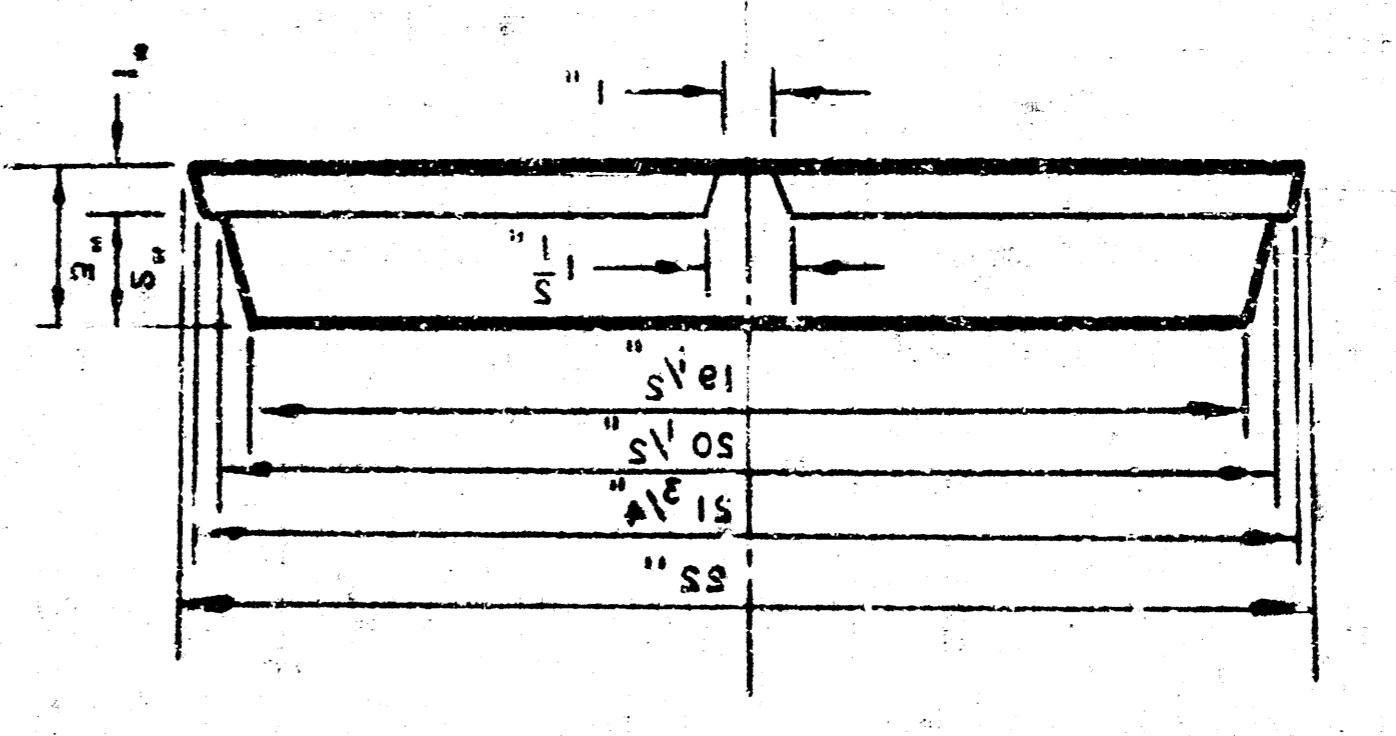
**OUTSIDE DROP MANHOLE TYPE "B"**



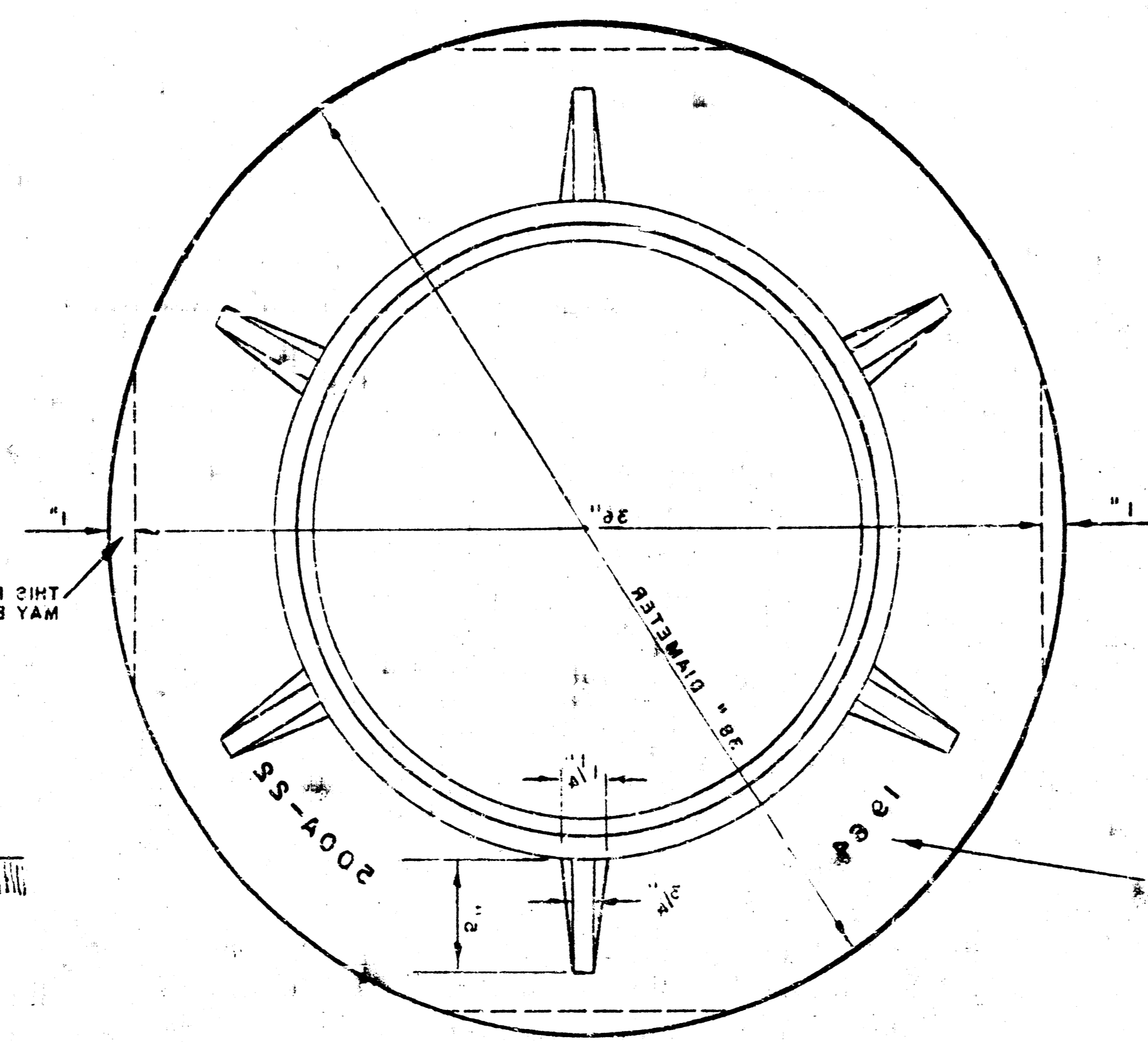
**MANHOLE COVER**



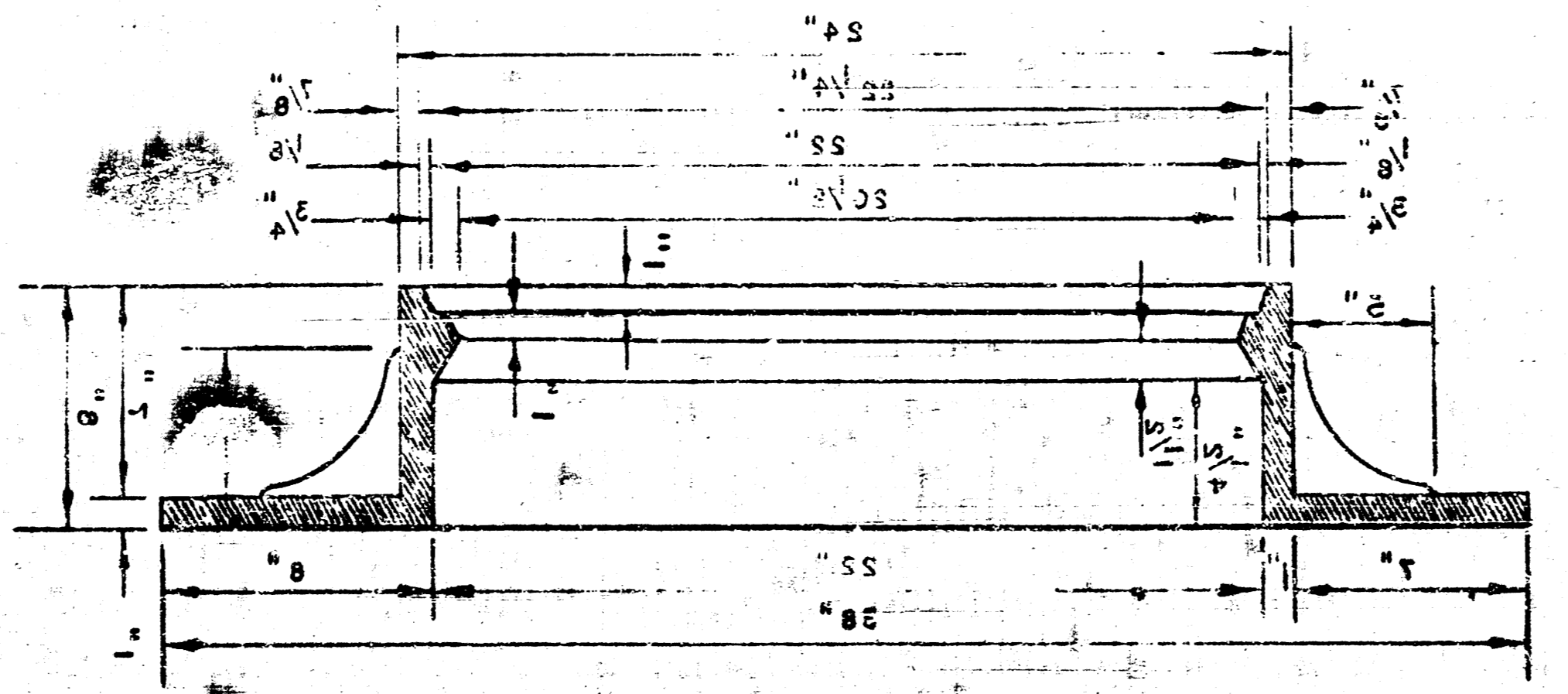
**MANHOLE COVER**



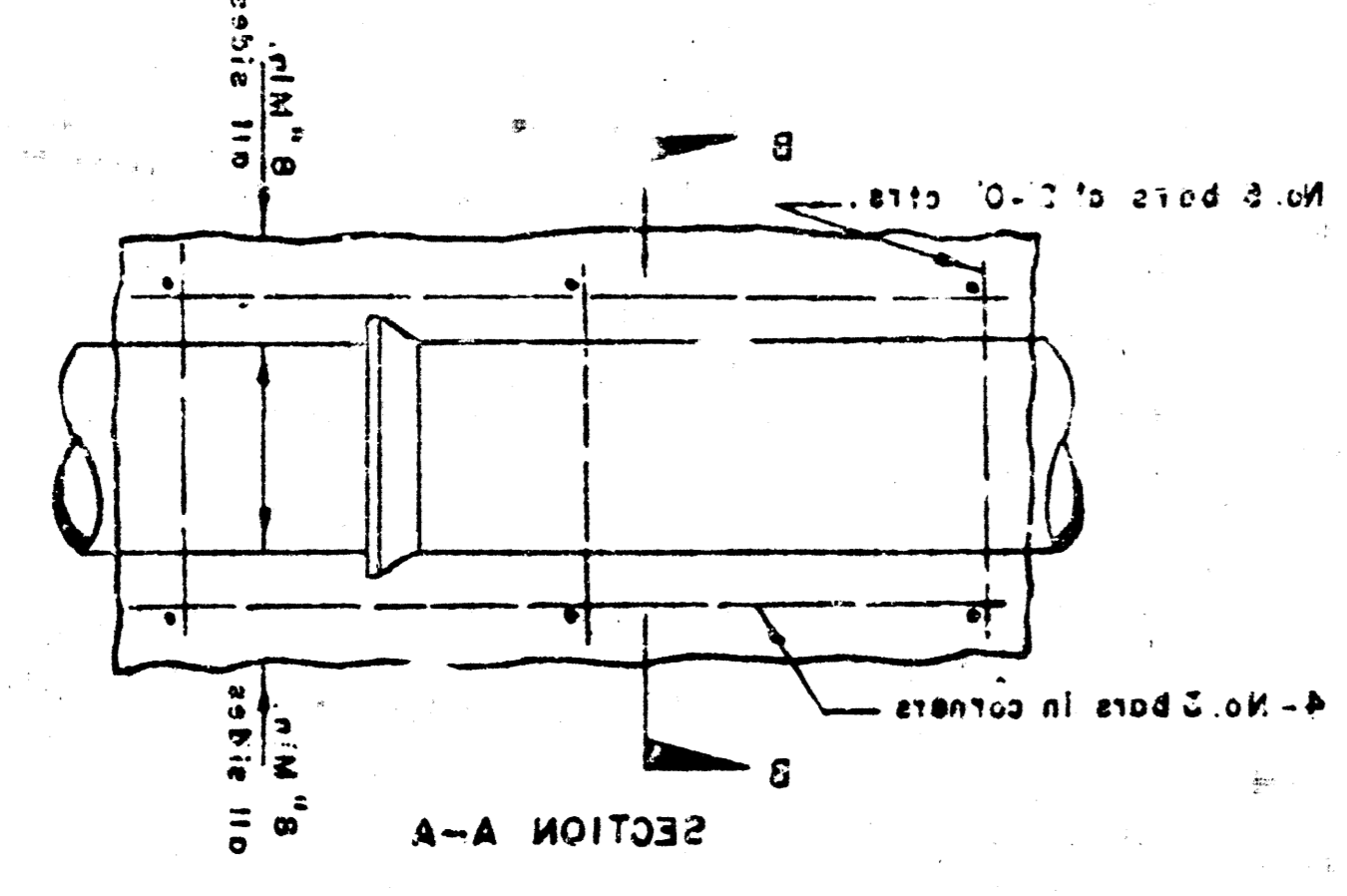
**MANHOLE COVER**



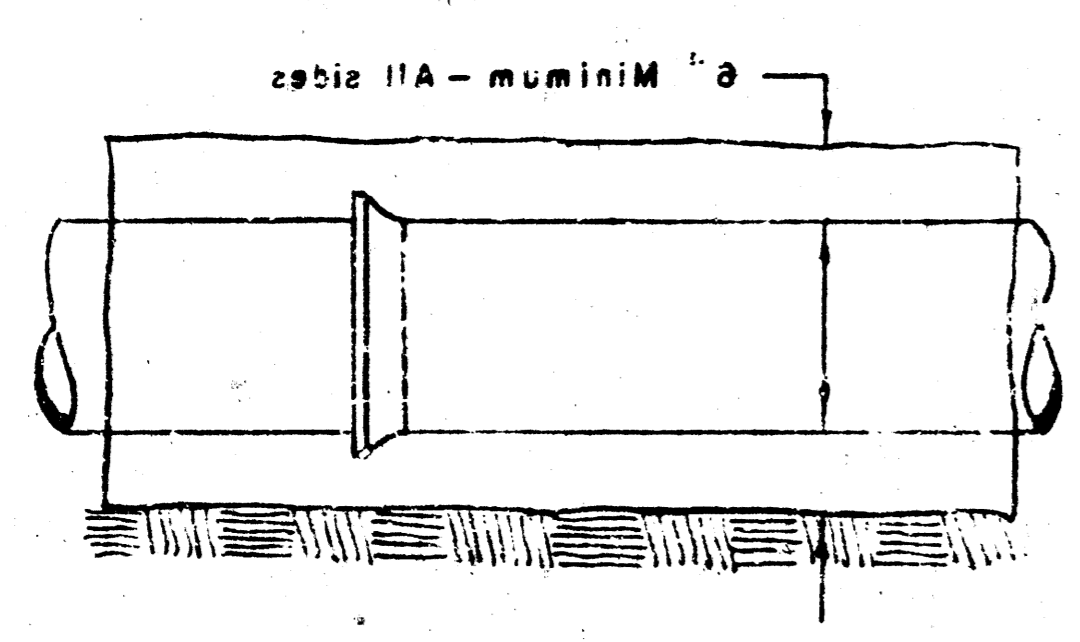
**MANHOLE RING**



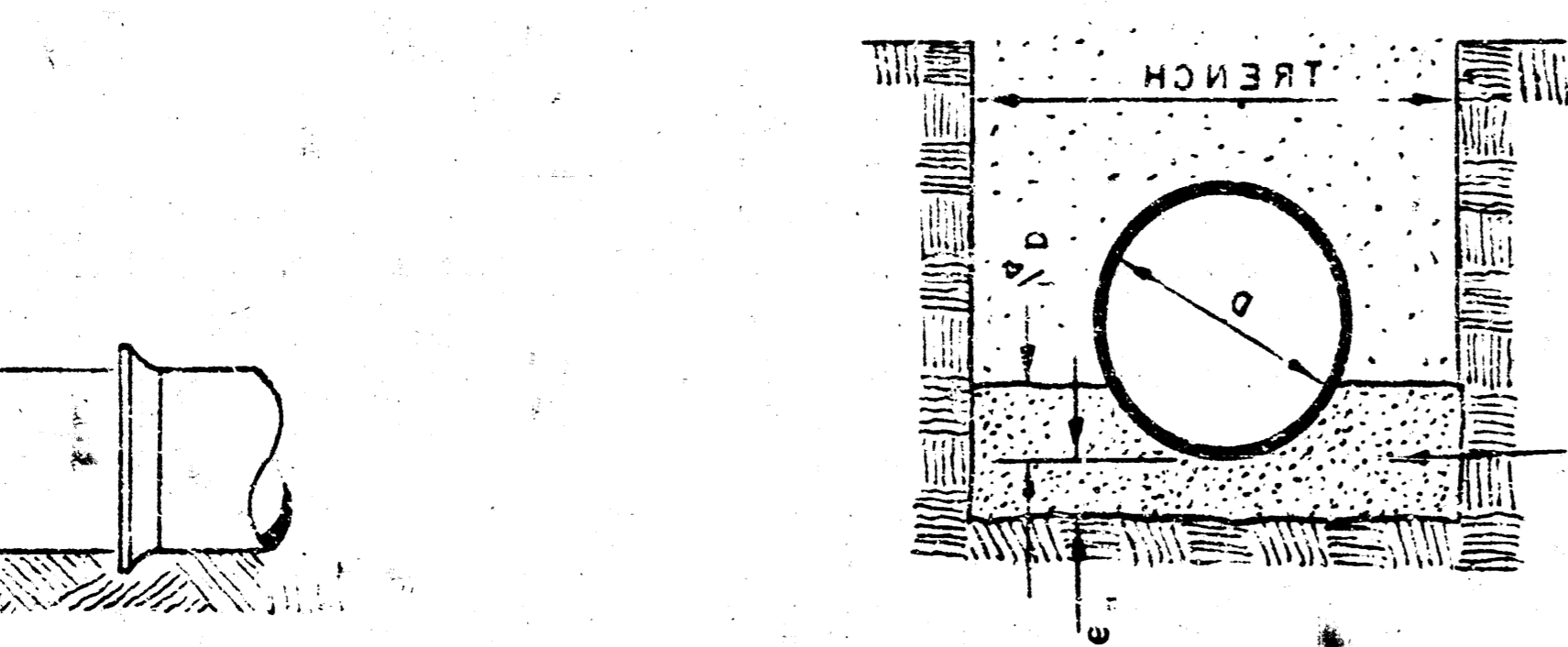
**MANHOLE RING**



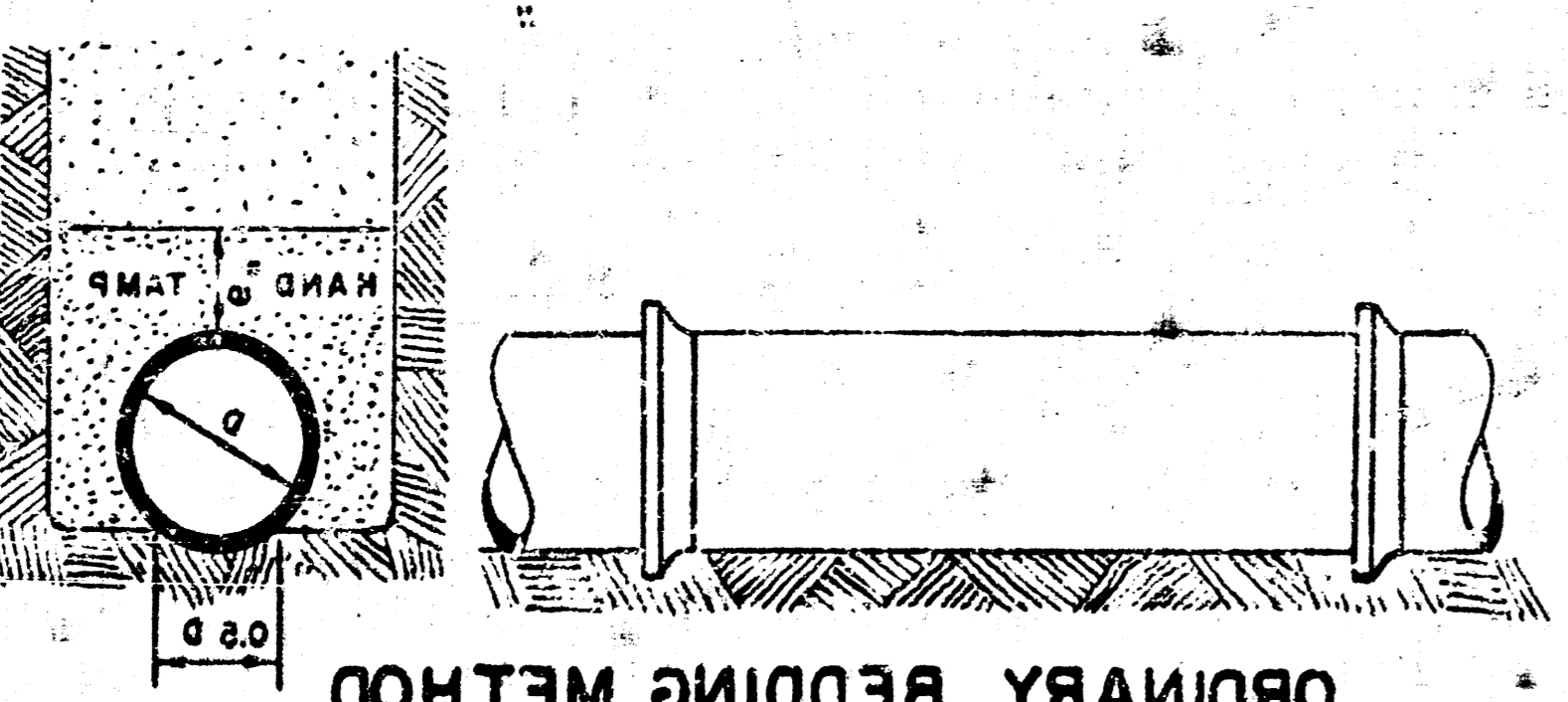
**REINFORCED CONCRETE ENCASMENT FOR STRENGTH**



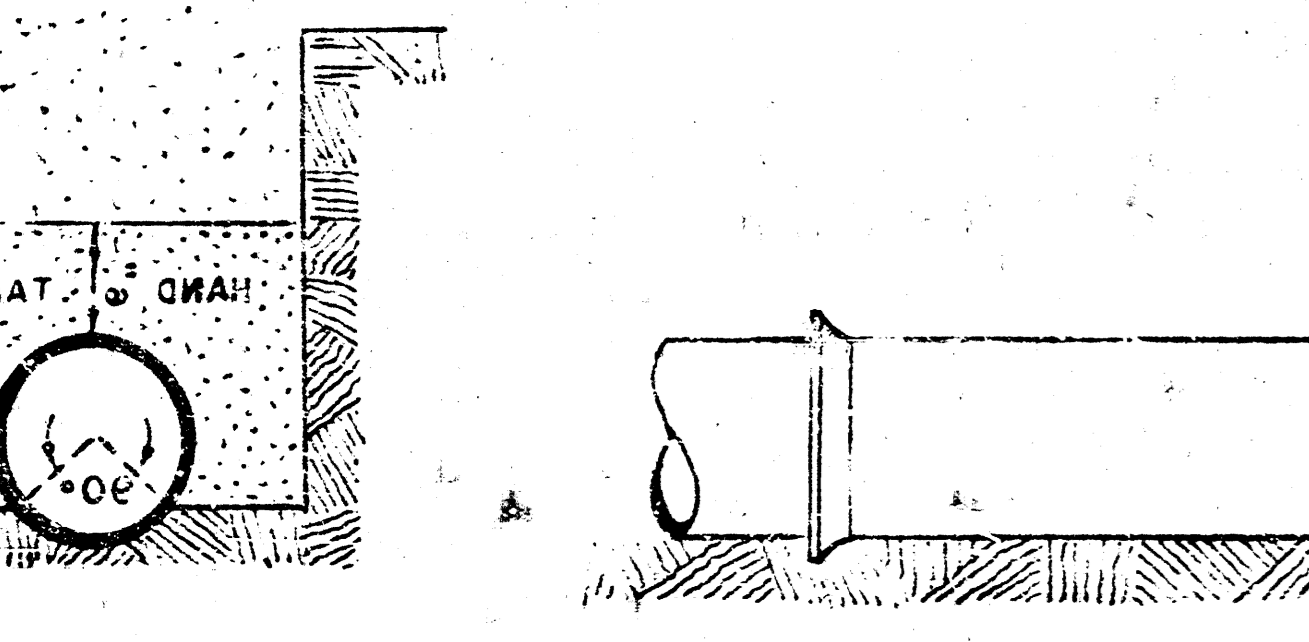
**CONCRETE ENCASMENT FOR COVER**



**DETAIL OF CONCRETE CRADLE**



**ORDINARY BEDDING METHOD**



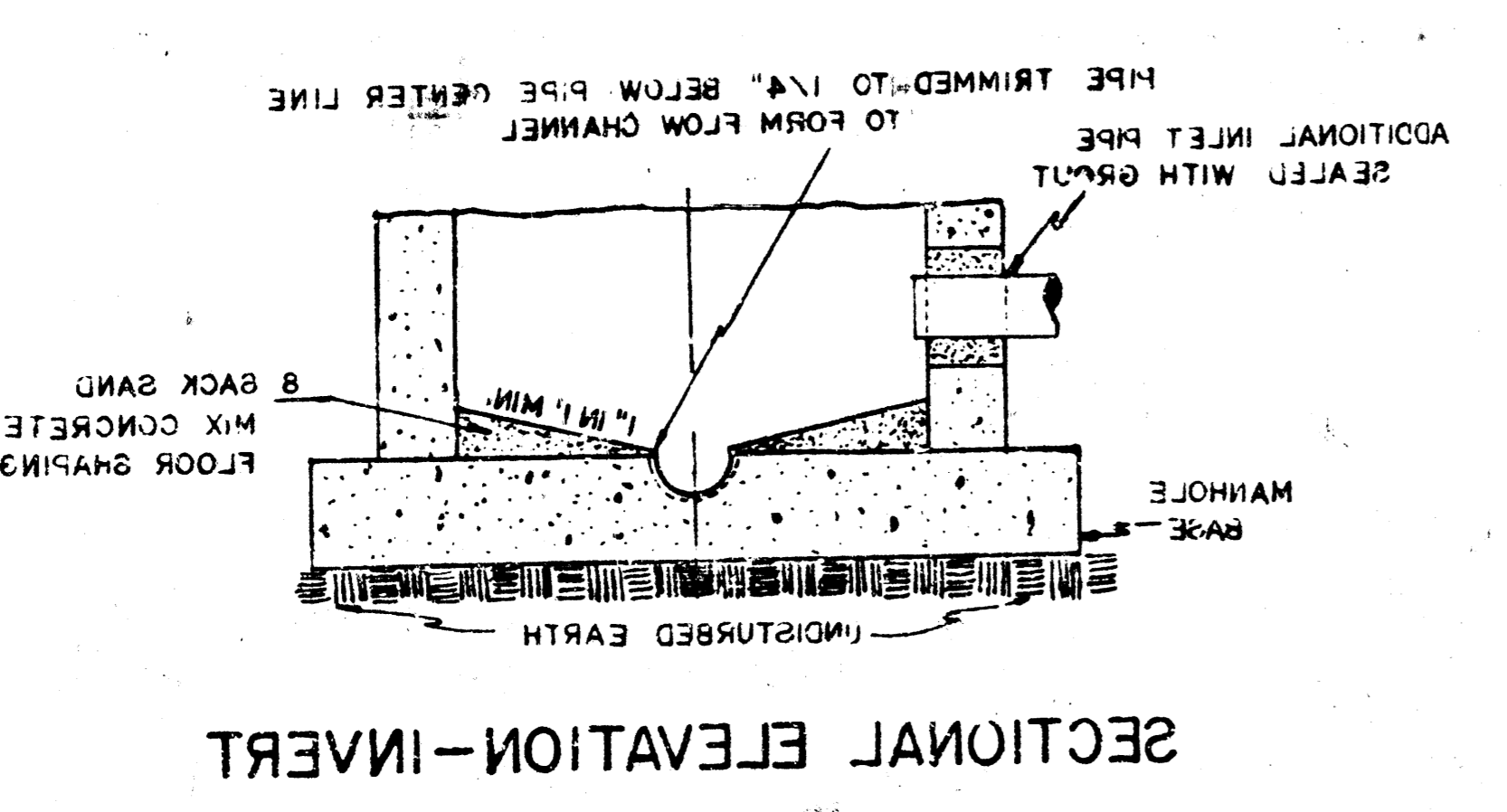
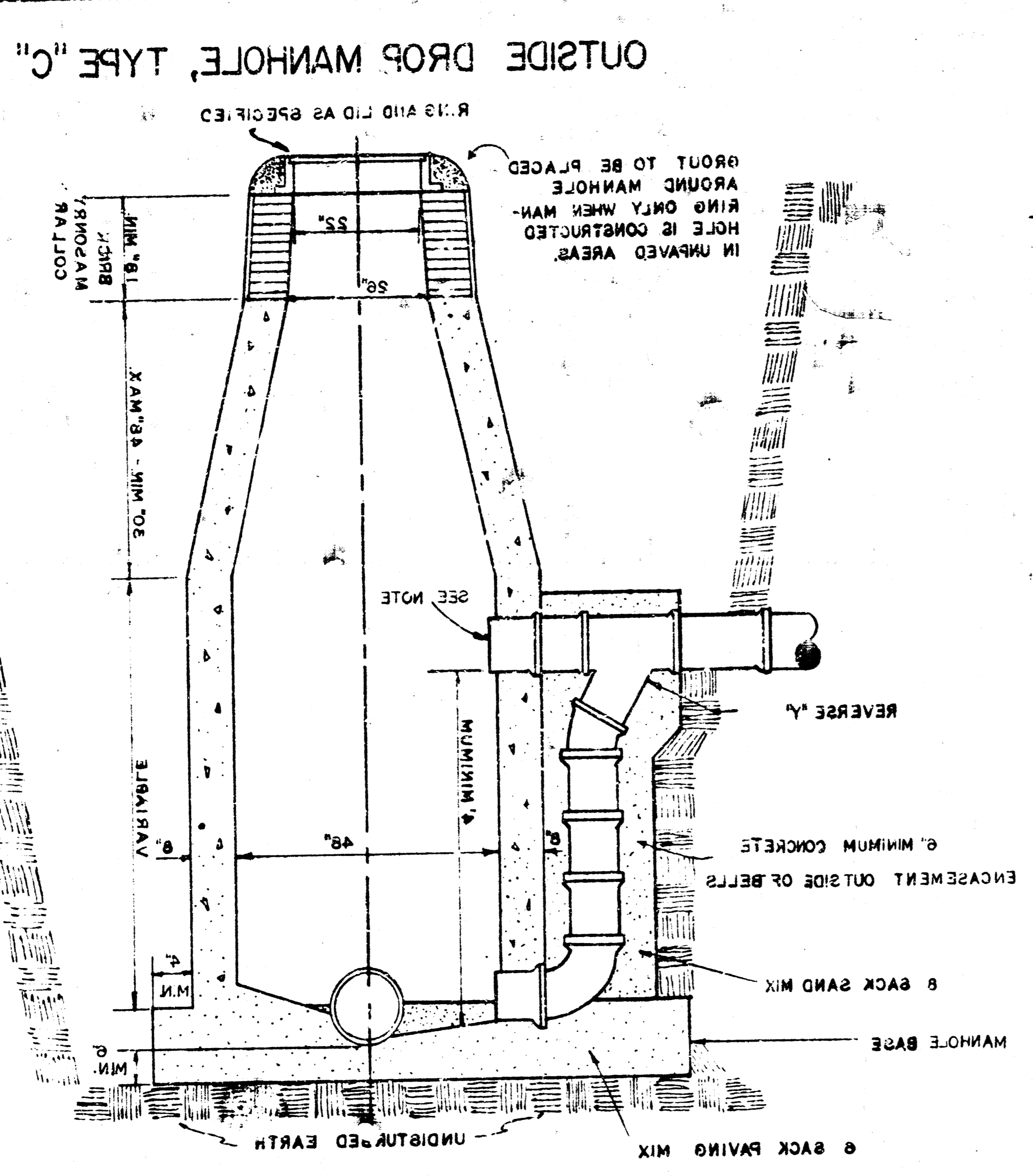
**ORDINARY BEDDING METHOD FOR CLAY PIPE**

**SEWER APPURTENANCES**  
 ADOPTED AS STANDARD DESIGN  
 BY  
 ENGINEERING DIVISION  
 CITY OF WICHITA, KANSAS

\* DRAW "E" ON 2" DIA. M.H.'S

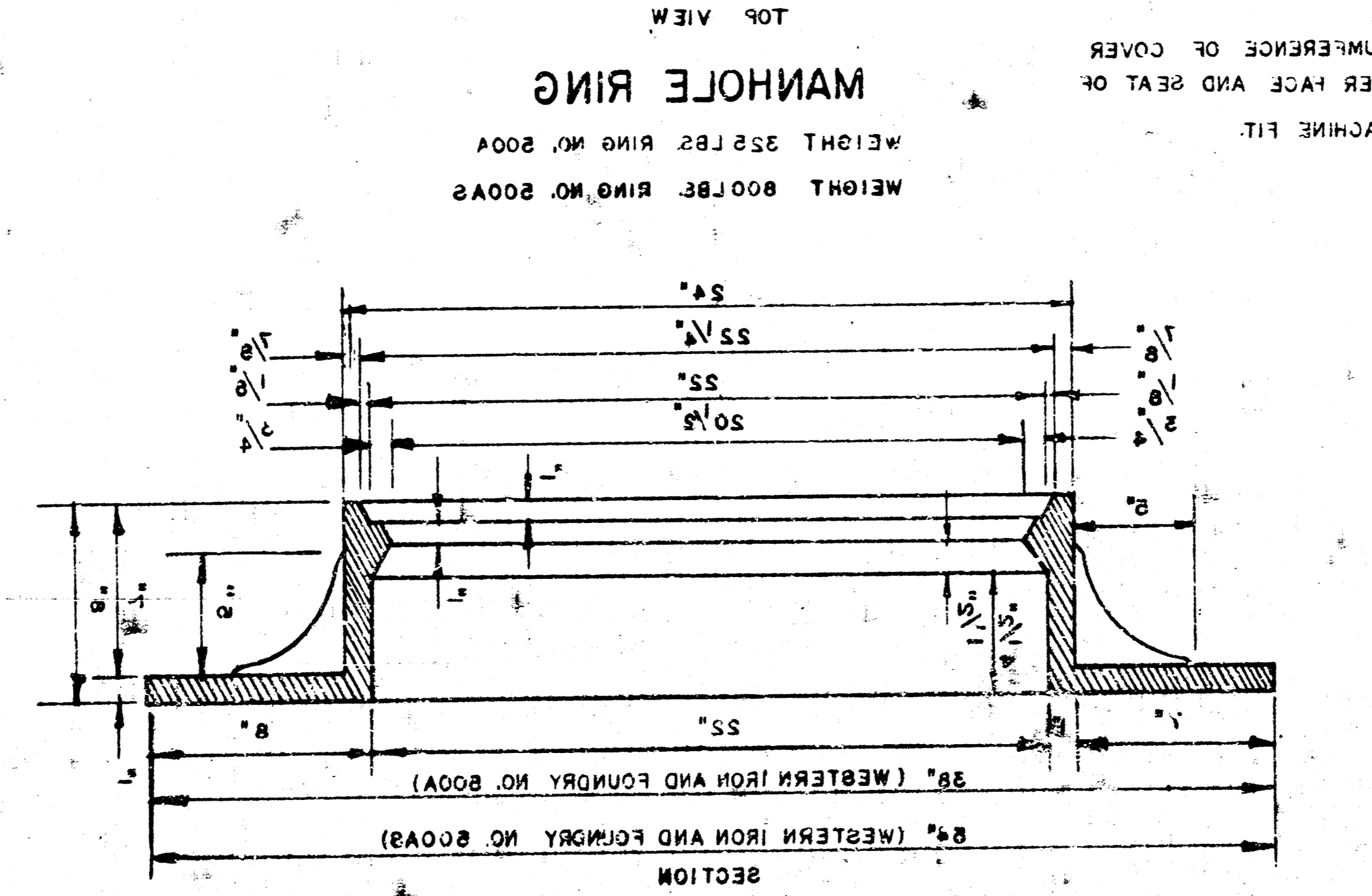
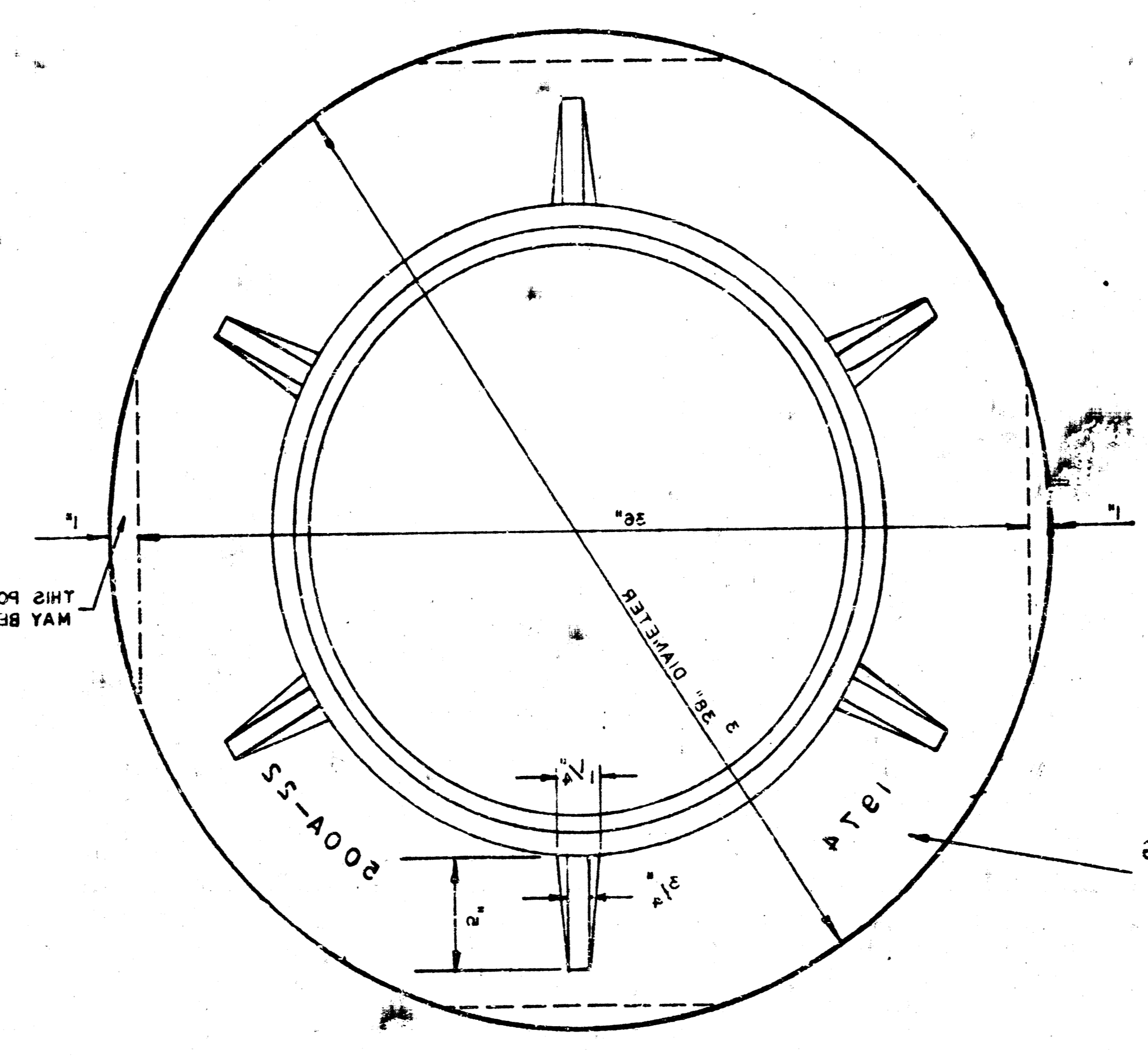
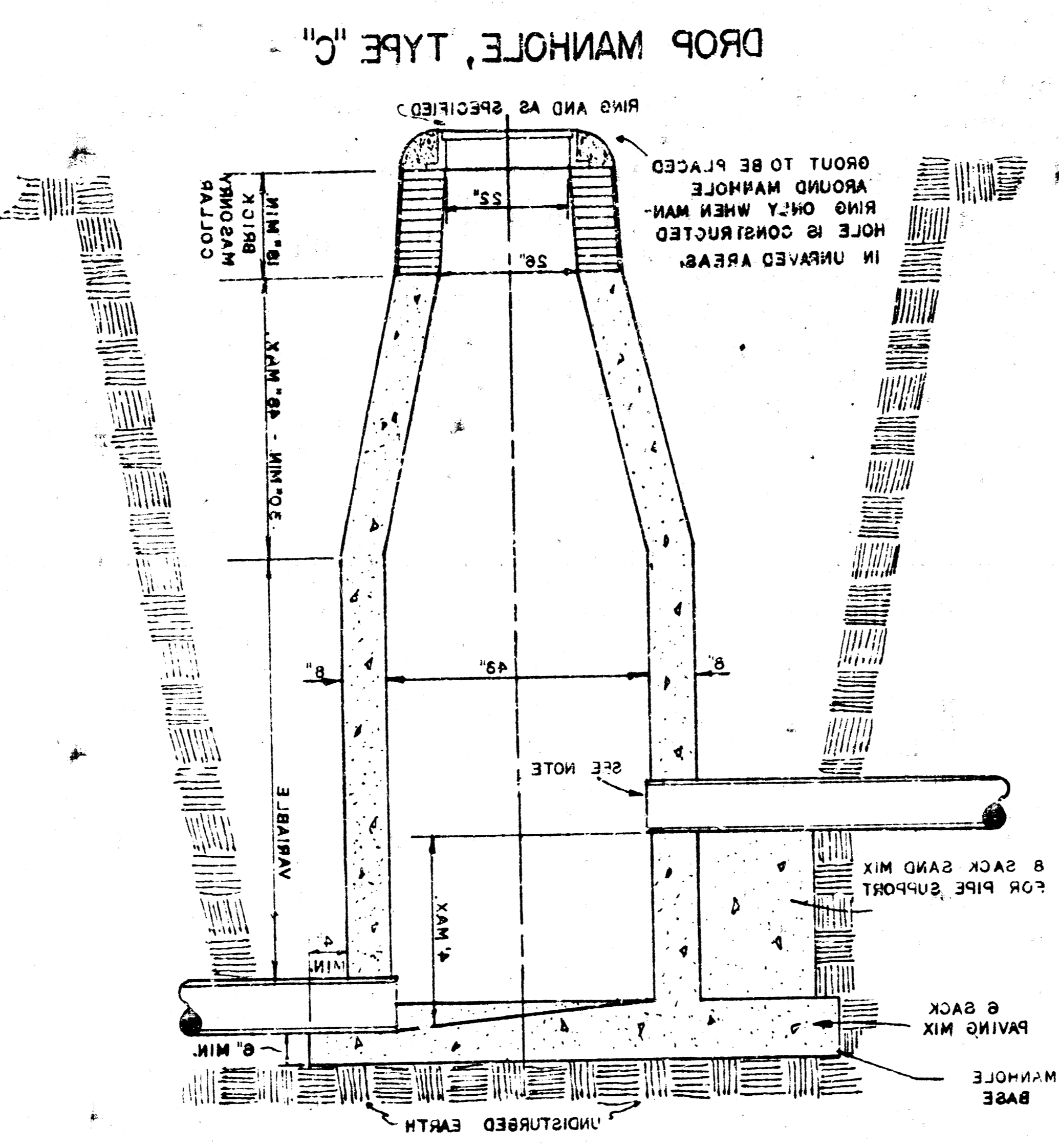
1924  
 R. W. LINN  
 CITY ENGINEER  
 CITY OF WICHITA, KANSAS  
 ENGINEERING DIVISION  
 BY  
 ADOPTED AS STANDARD DESIGN  
 SEWER APPURTENANCES  
 DETAILS OF

CONCRETE BARREL.  
 REQUIRE MODIFICATION OF THE CON-  
 WHICH MAY BE NECESSARY WILL NOT  
 THE MANHOLE TOP ELEVATION  
 OBSERVATIONS THAT ANY ADJUSTMENT  
 GAS AND IN LOCATIONS WHERE IT  
 FORMATION OF HYDROGEN SULFIDE  
 DETERIORATION OF CONCRETE DUE TO  
 ONLY ON SEWERS NOT SUBJECT TO  
 MANHOLES ARE TO BE CONSTRUCTED  
 CAST IN PLACE CIRCULAR CONCRETE  
 SAND MIX CONCRETE.  
 HYDRAULIC EFFICIENCY USING 8 SACK  
 SHALL BE SHAPED TO INCREASE  
 THE FLOWS OF ALL MANHOLES  
 24" SHALL BE 2 FT DIAMETER.  
 WITH PIPE SIZES LARGER THAN  
 INDICATED OTHERWISE MANHOLES  
 DIAMETERS WILL BE 4 FT UNLESS  
 INDICATED. ALL MANHOLE  
 HOLE FOR THE TYPE AND DIAMETER  
 SHALL BE BID AS STANDARD MAN  
 AND STANDARD DROP MANHOLES TYPE  
 STANDARD MANHOLES TYPE "C"  
 PER CUBIC YARD.  
 TION SHALL CONTAIN 8 SACKS OF CEM  
 MORTAR USED IN MASONRY CONSTRUC



SECTIONAL ELEVATION - INVERT

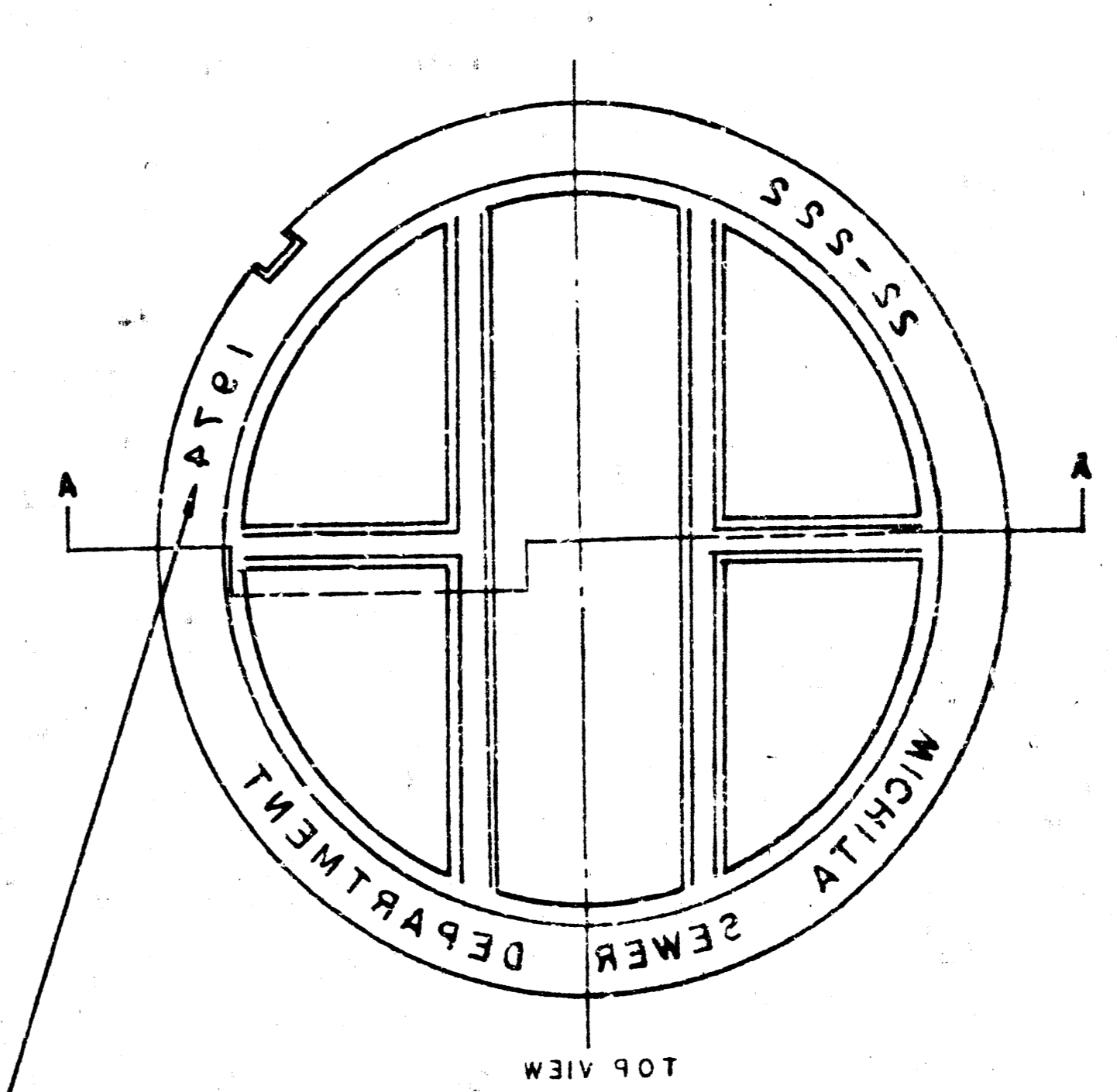
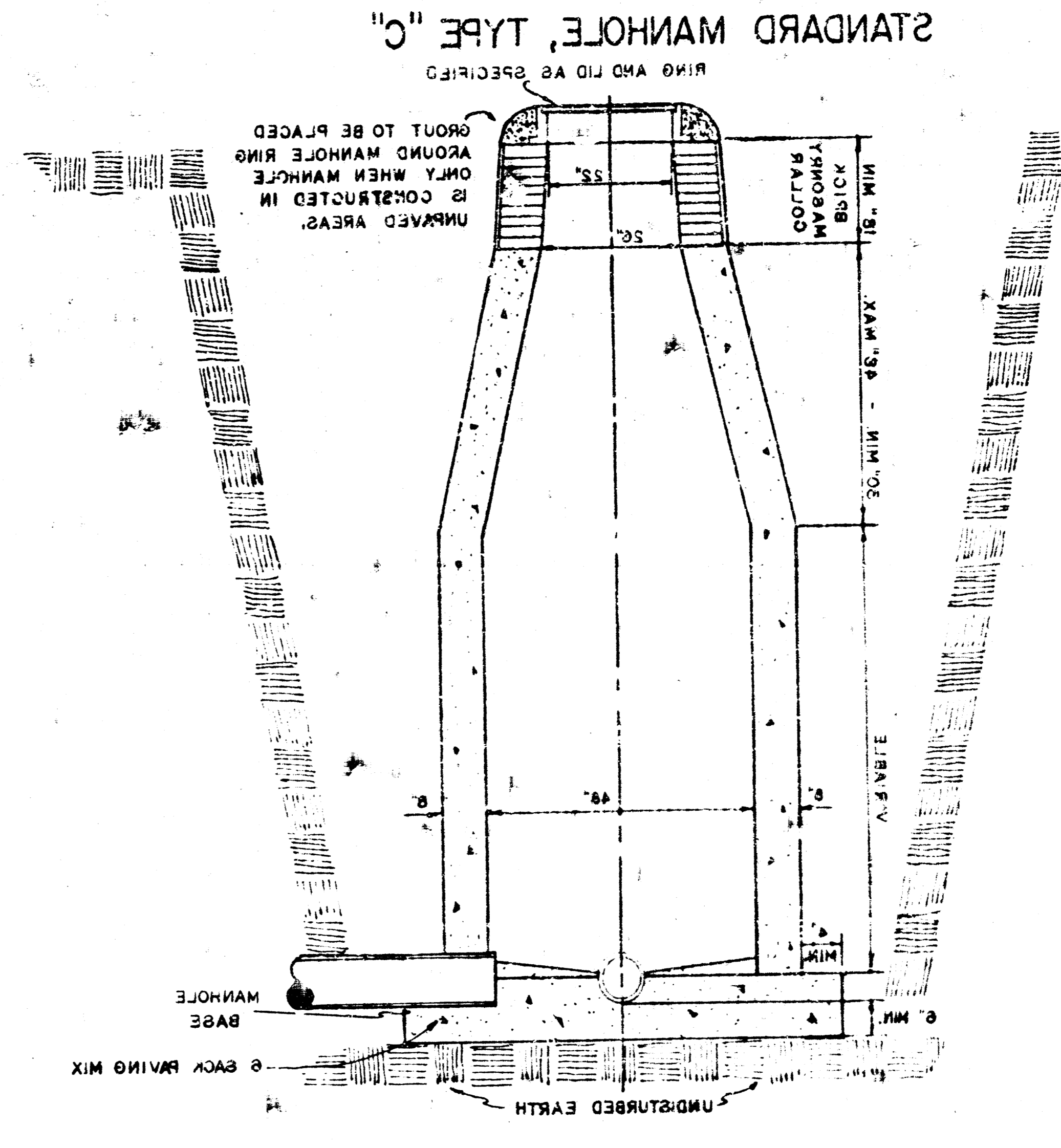
NOTE: OPENING FOR INLET PIPE CUT IN MANHOLE WALL AND PIPE GROUTED IN PLACE WITH NON-SHRINKING GROUT. EXTERIOR OF COMPLETED CONNECTION TO BE SEALED WITH APPROVED COATING.



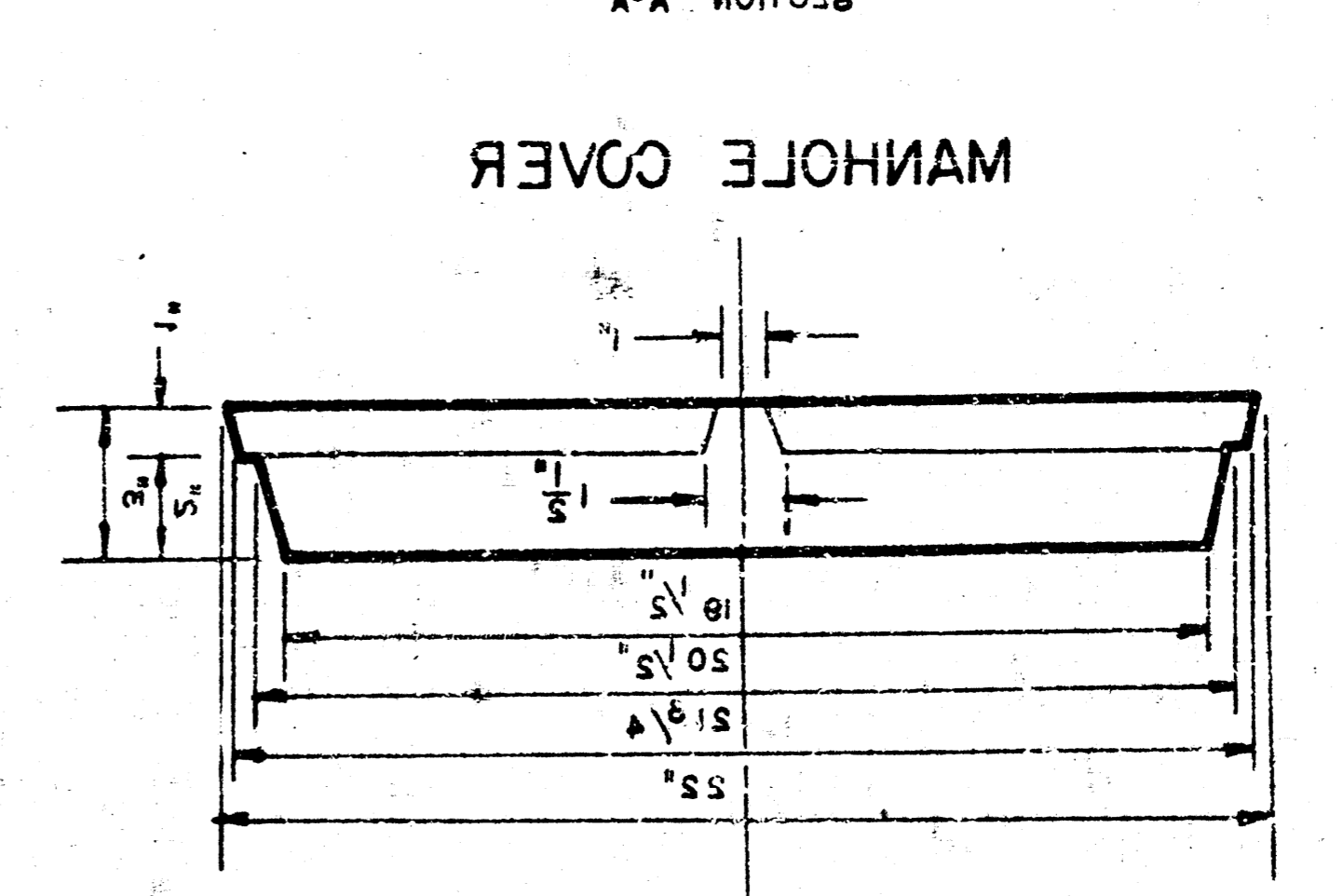
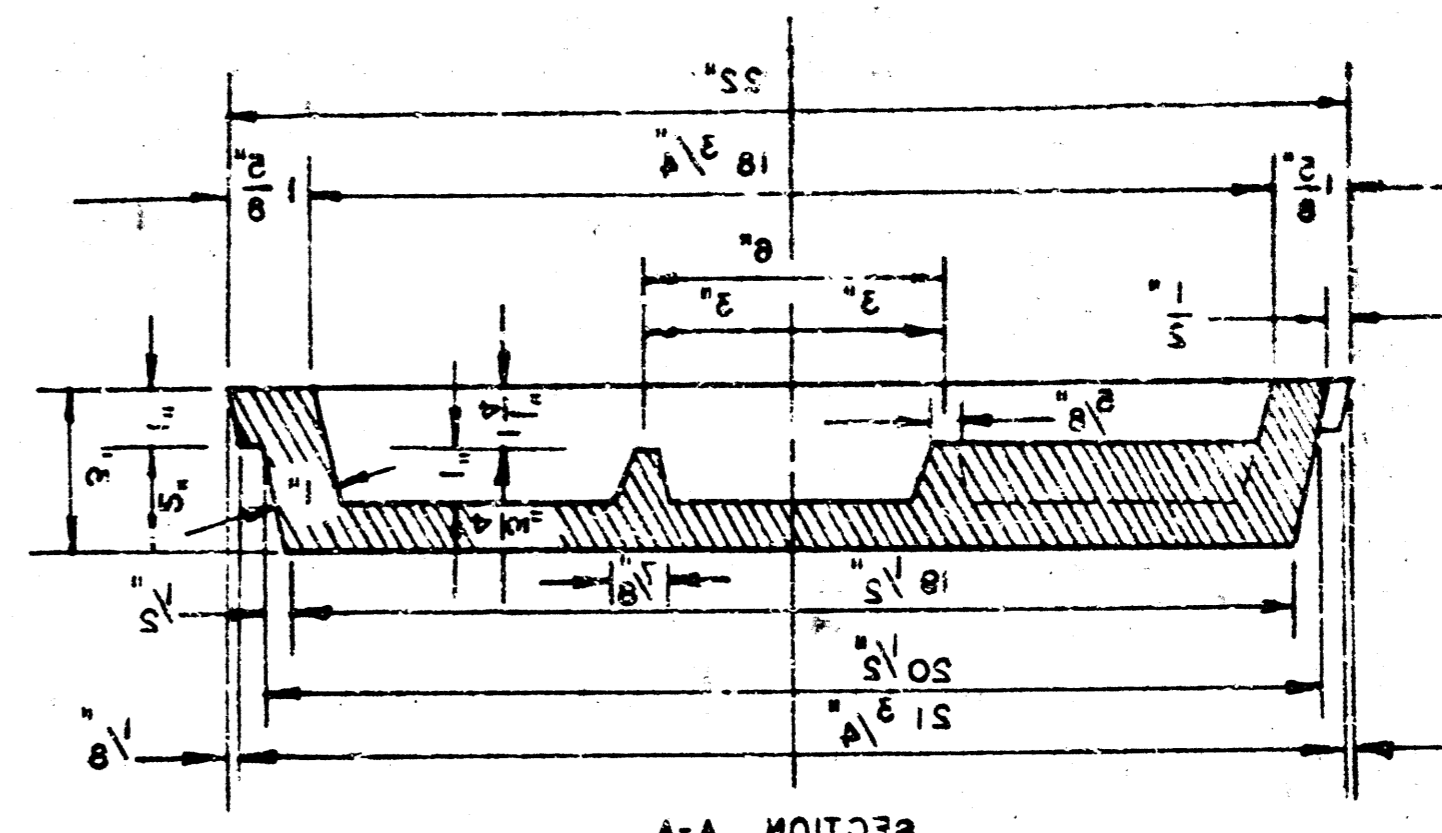
MANHOLE RING  
 WEIGHT 355 LBS. RING NO. 5004  
 WEIGHT 800 LBS. RING NO. 8005

YEAR CASTING IS MADE

OUTSIDE CIRCUMFERENCE OF COVER AND THE INNER FACE AND SEAT OF RING TO BE MACHINE FIT.



MANHOLE COVER  
 WEIGHT 110 LBS.



MANHOLE COVER

STANDARD MANHOLE, TYPE "C"

DROP MANHOLE, TYPE "C"

OUTSIDE DROP MANHOLE, TYPE "C"