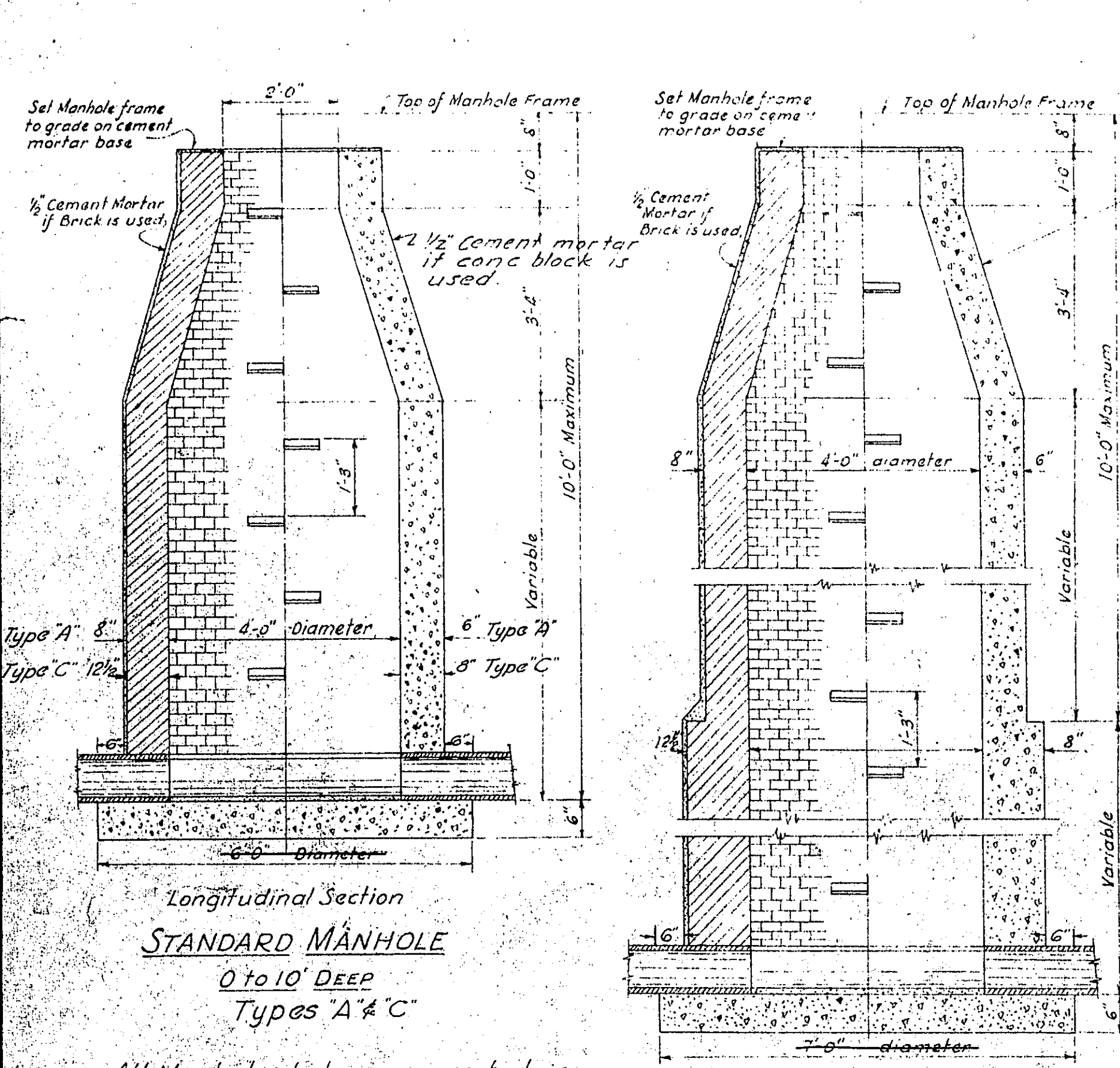
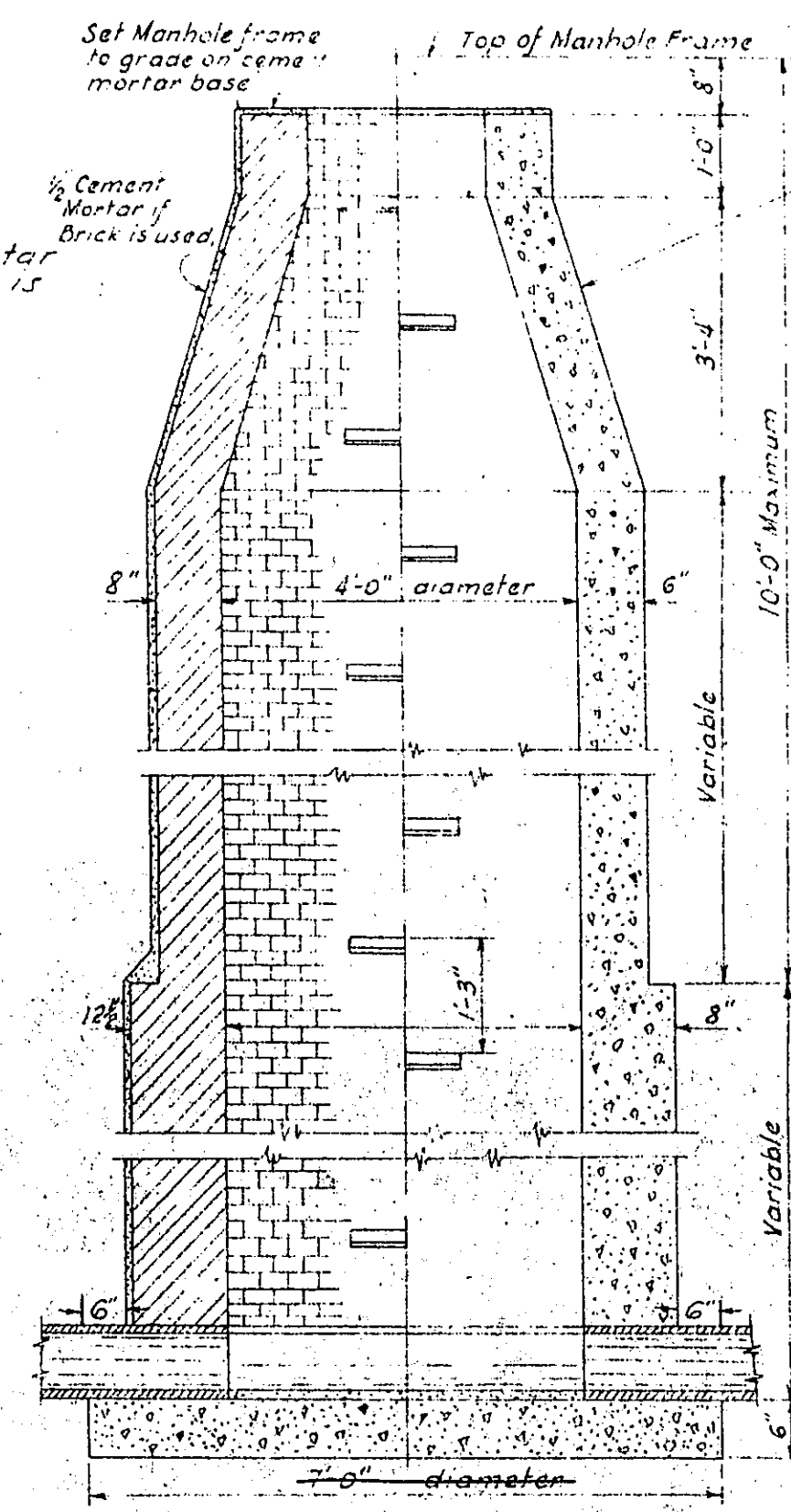
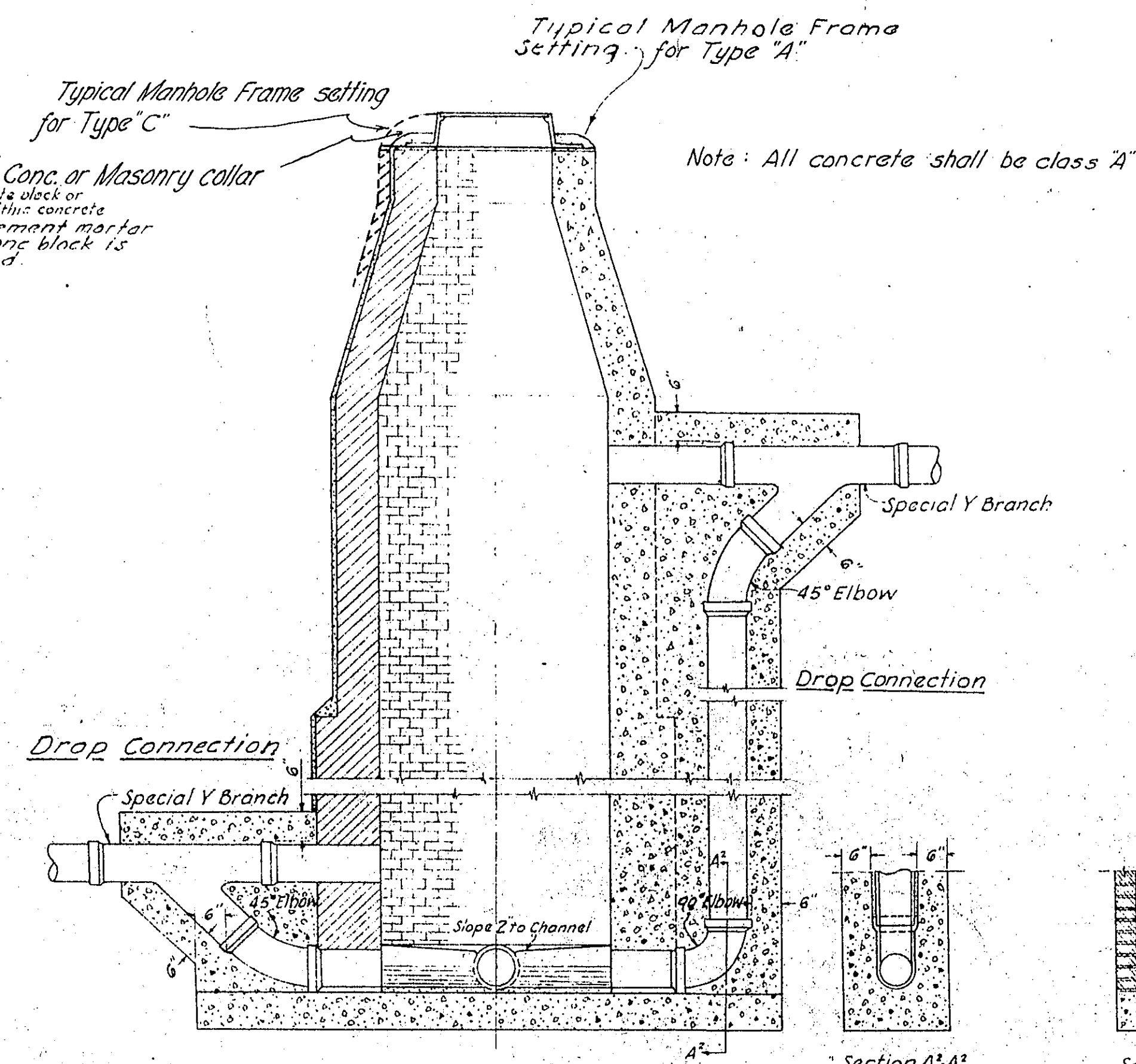




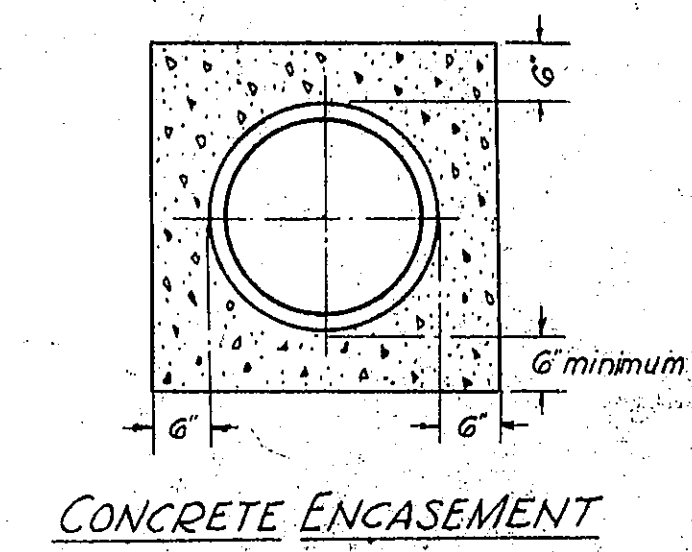
All Manholes to have concrete base
All brick laid generally as headers



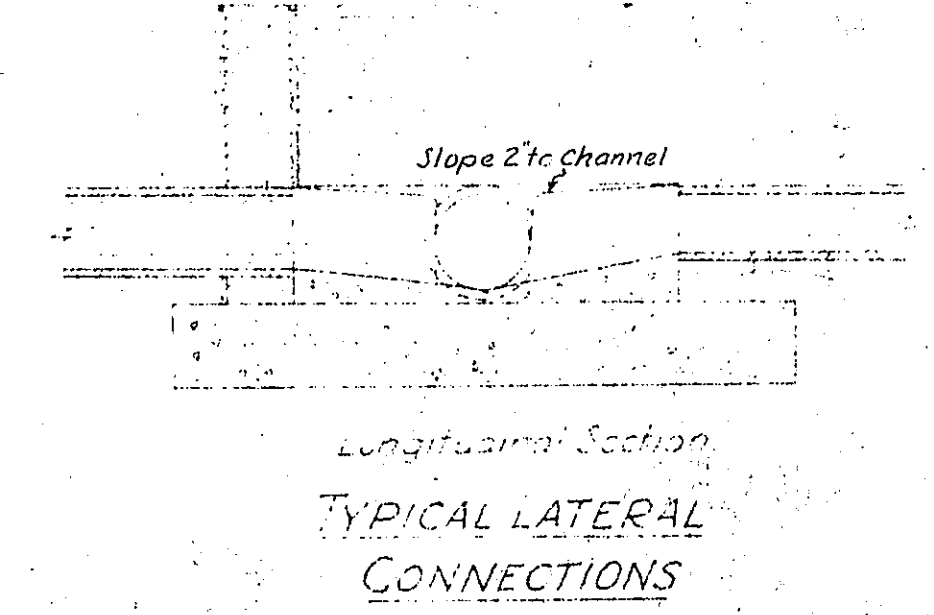
Longitudinal Section
STANDARD MANHOLE
OVER 10' DEEP
Type A



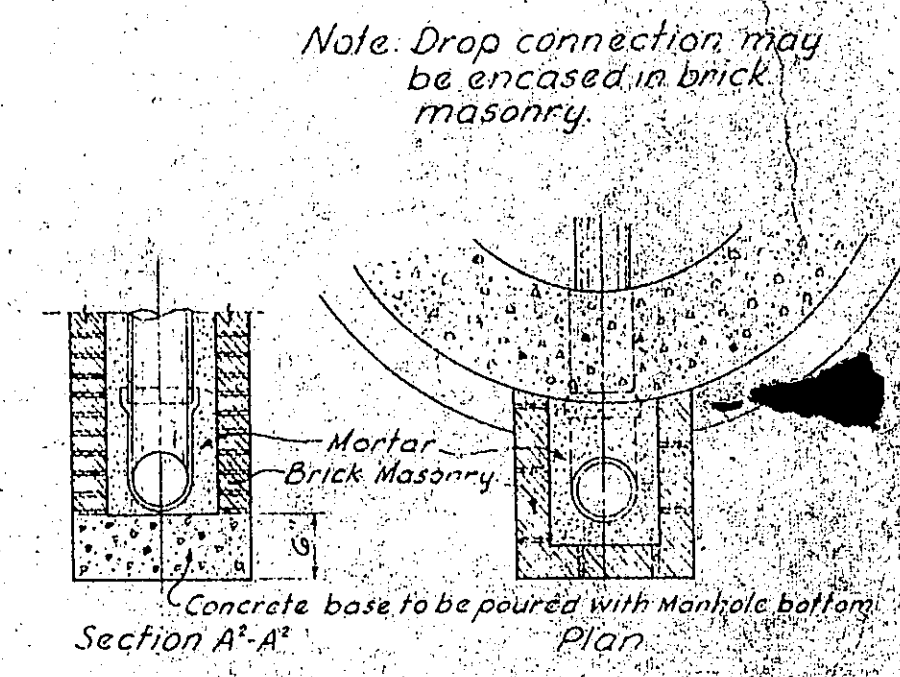
Cross Section
TYPICAL DROP CONNECTIONS
FOR ALL MANHOLES AND ALL PIPE SIZES
Types A & C



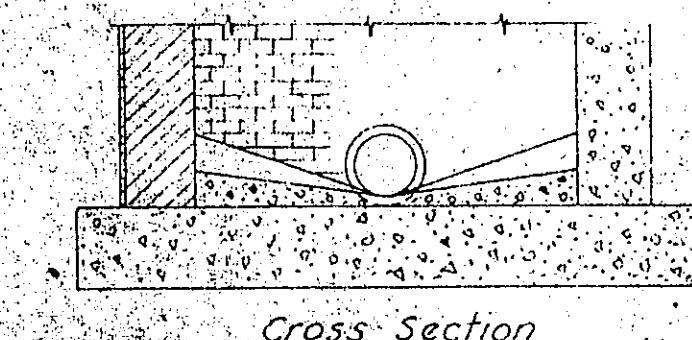
CONCRETE ENCASEMENT



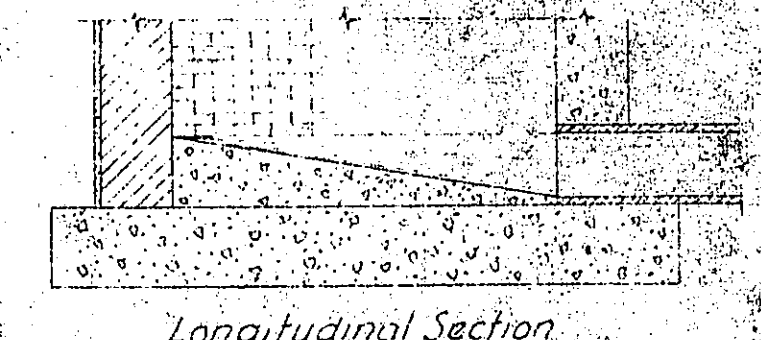
Longitudinal Section
TYPICAL LATERAL
CONNECTIONS



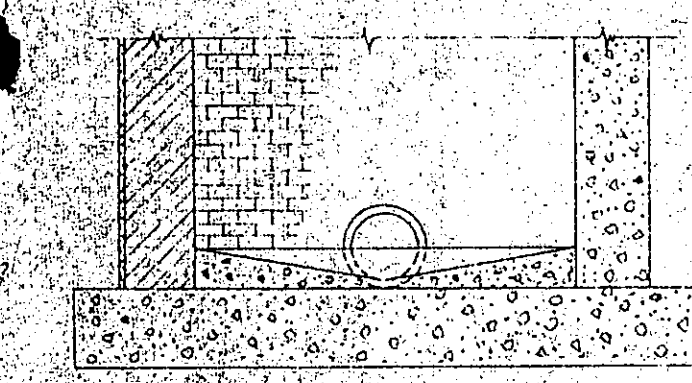
MASONRY ENCASEMENT
OF DROP CONNECTIONS



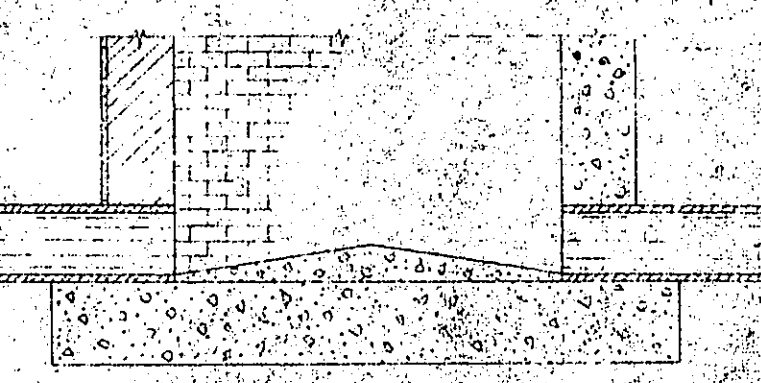
Cross Section
SINGLE TERMINAL MANHOLE
ALL MANHOLES



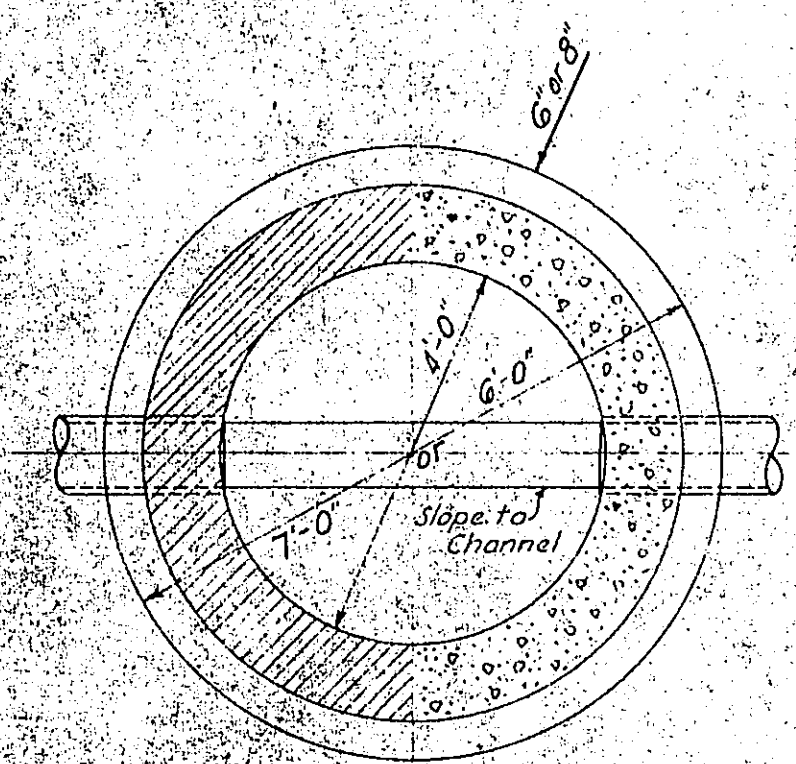
Longitudinal Section
SINGLE TERMINAL MANHOLE
ALL MANHOLES



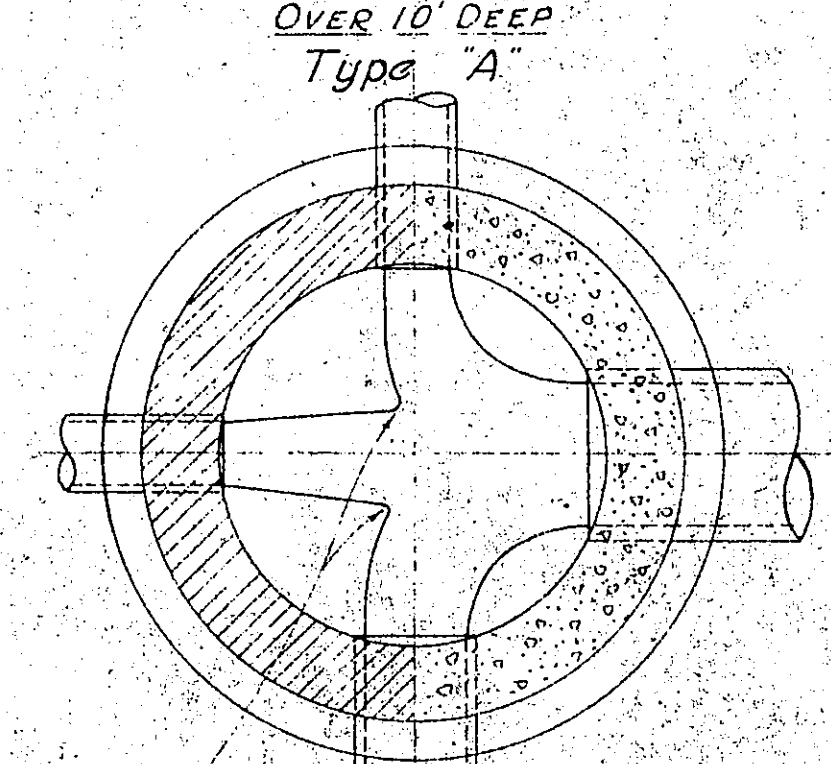
Cross Section
DOUBLE TERMINAL MANHOLE
ALL MANHOLES



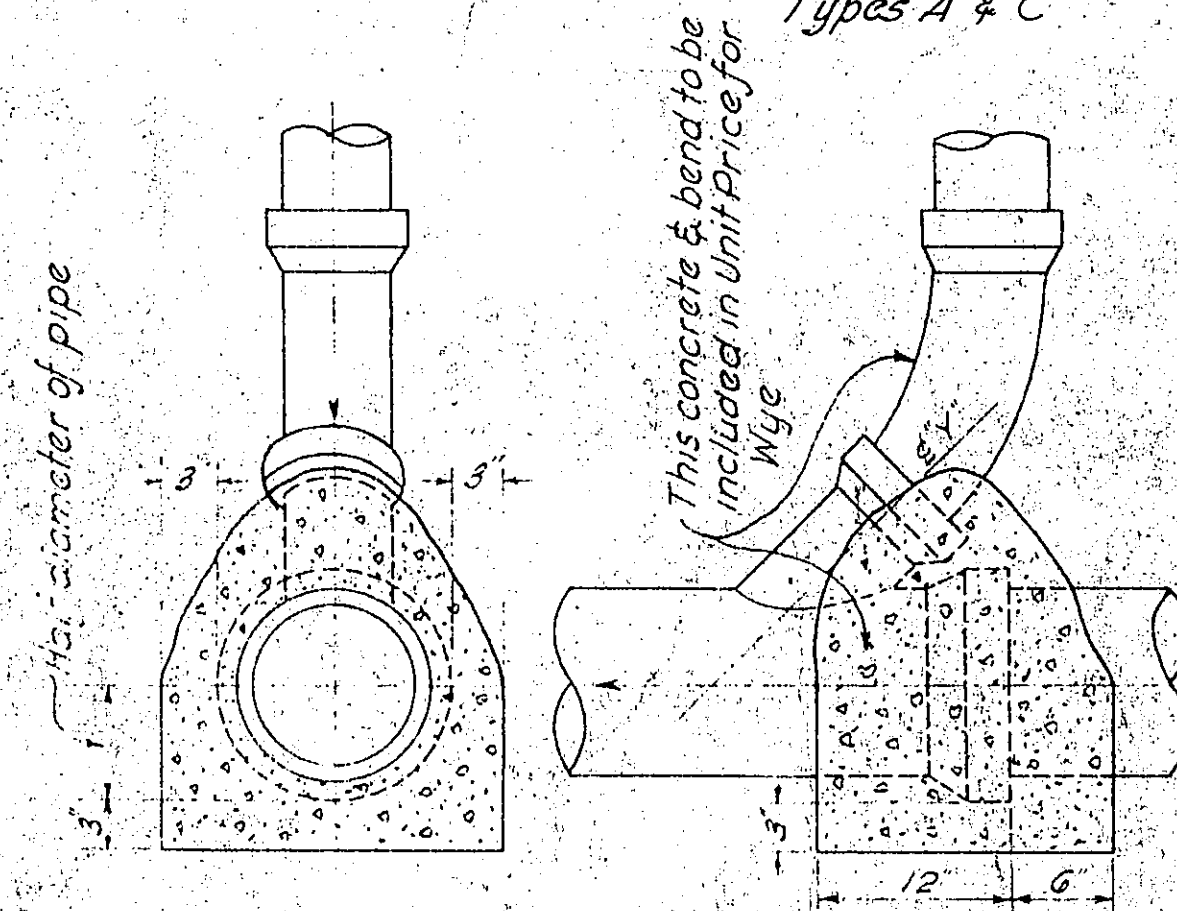
Longitudinal Section
DOUBLE TERMINAL MANHOLE
ALL MANHOLES



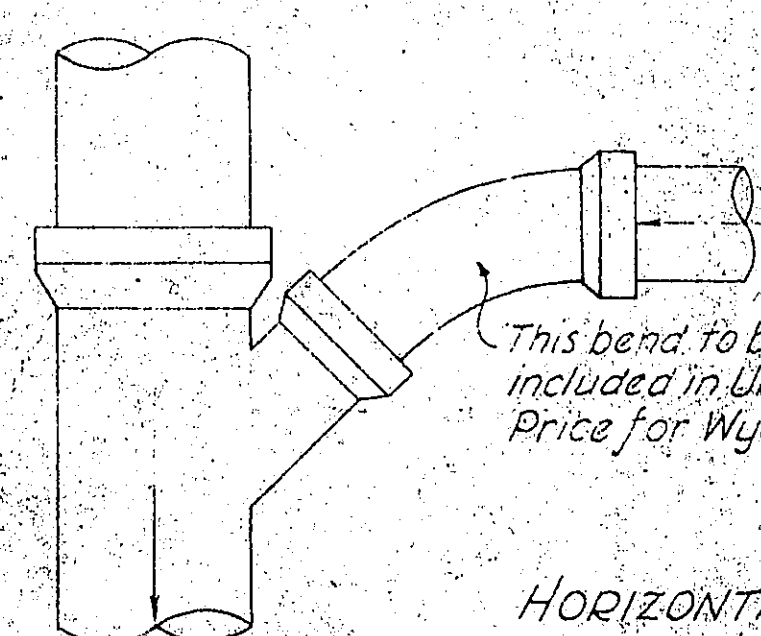
TYPICAL CHANNEL DIAGRAMS
STANDARD MANHOLE



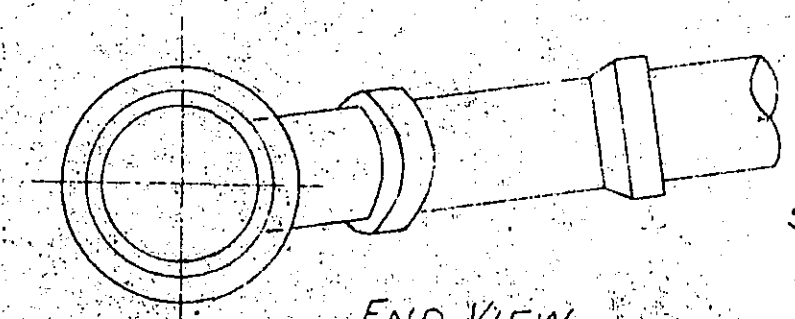
All corners to be rounded.



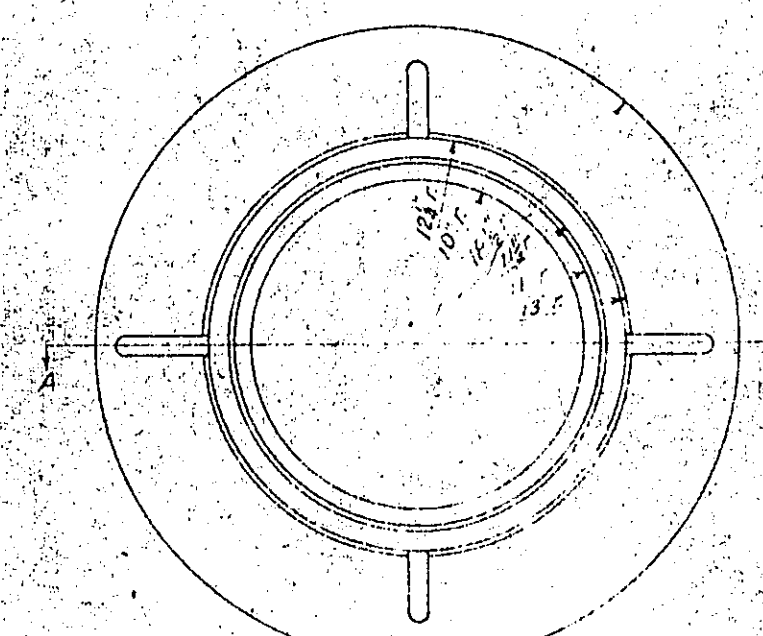
VERTICAL RISER



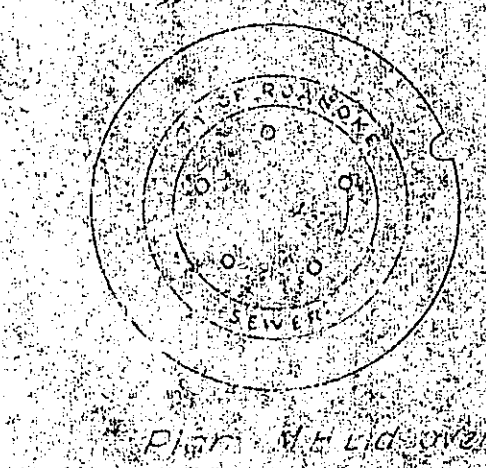
HORIZONTAL WYE



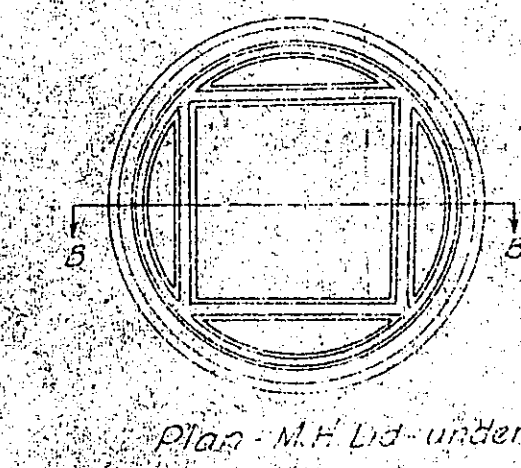
END VIEW



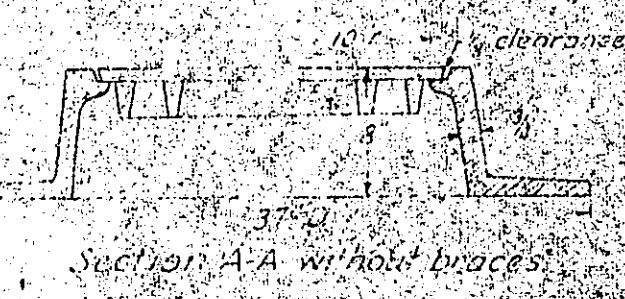
Plan Standard M.H. Top



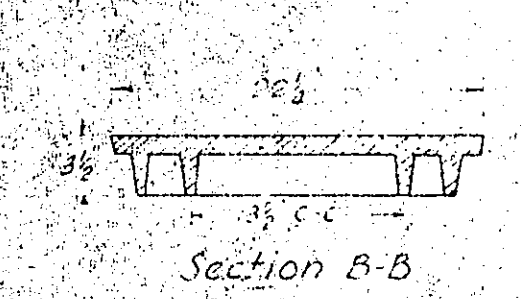
Plan M.H. Lid - over



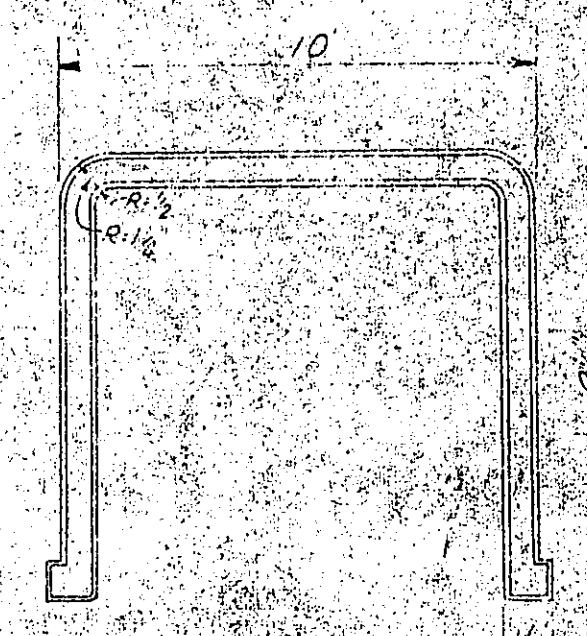
Plan M.H. Lid - under



Section A-A without braces



Section B-B



DETAILS MANHOLE STEPS

- Special Note:
1. All covers to have machined fit.
 2. All covers to be bolted to frame except those located in traveled streets, method to be approved by Engineers.
 3. All covers to be solid except where noted on drawings.
 4. Frames for Type B manholes to be similar design and weight as above, except flange to be of upset type as shown on Type B 51d Detail.
 5. Alternate frame and cover design may be submitted to Engineers for approval.
 6. All covers, except on manholes in traveled streets, to be sealed on with asphaltic material.

Contract D

ALVORD, BURDICK & HOWSON		MATTEN & MATTEN	
CHICAGO, ILL.		ROANOKE, VA.	
STANDARD DETAILS SANITARY SEWERS City of Roanoke, Virginia			
DESIGNED BY	<i>Sfd</i>	SCALE	<i>1/2" = 1'-0" except as noted</i>
DRAWN BY	<i>EBR</i>		COM. NO. <i>28 of 28</i>
CHECKED BY	<i>EKM</i>	DATE	<i>12 August 1950</i>
			SHEET NO. <i>28 of 28</i>