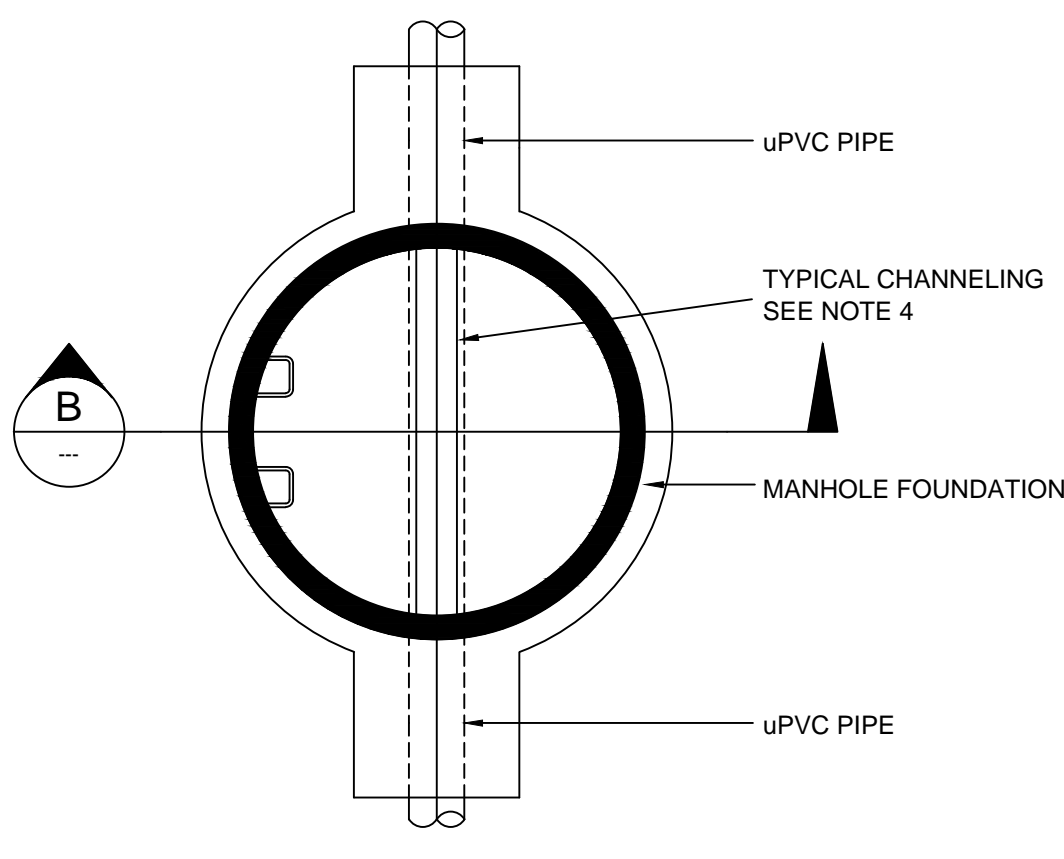
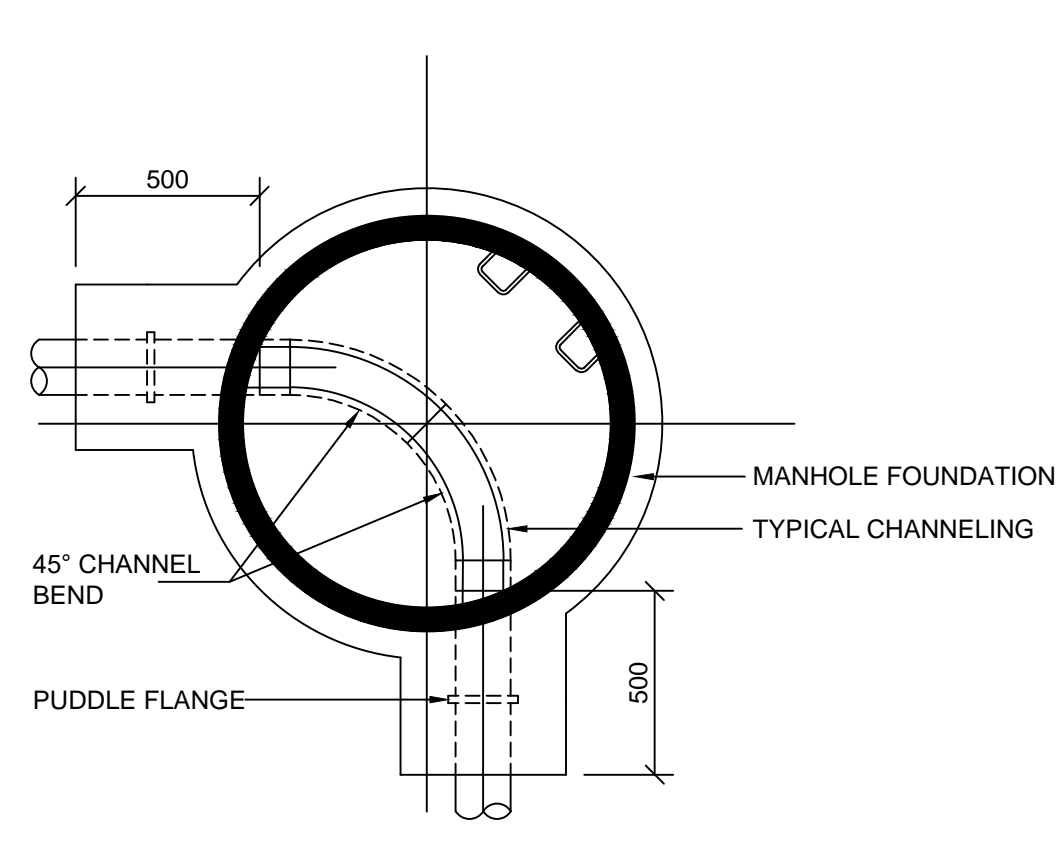


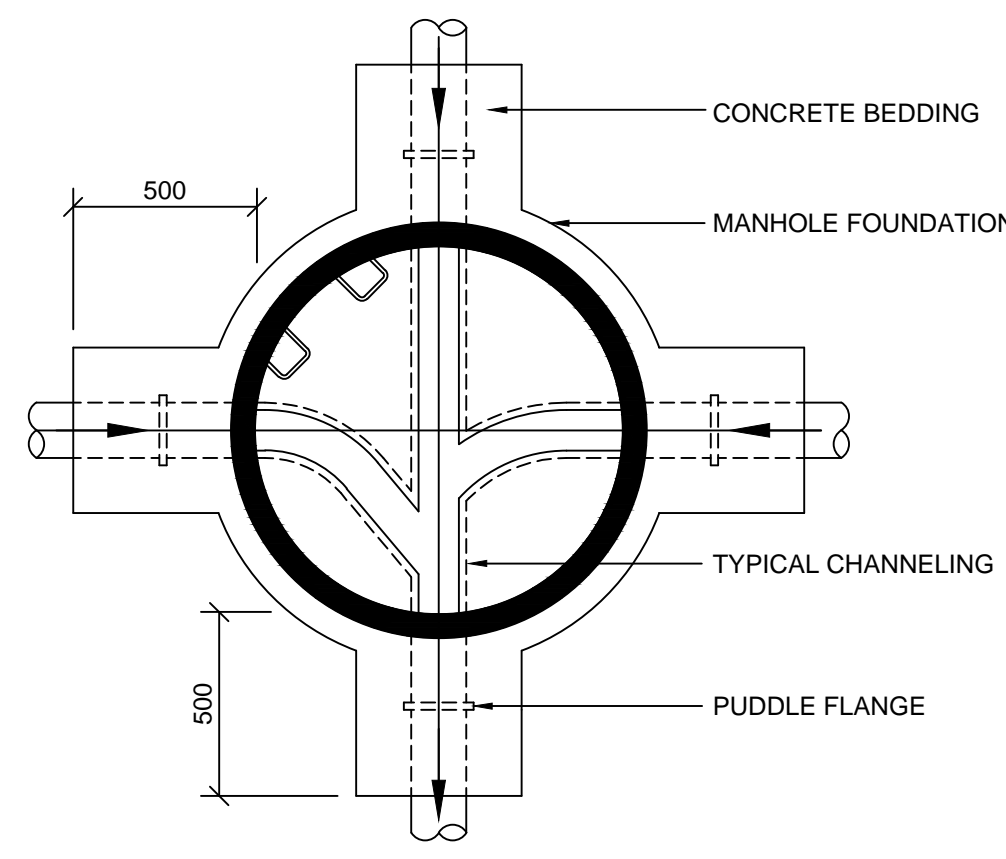
PLAN
(TYPICAL EXAMPLE WHERE CLAY PIPES ARE USED)



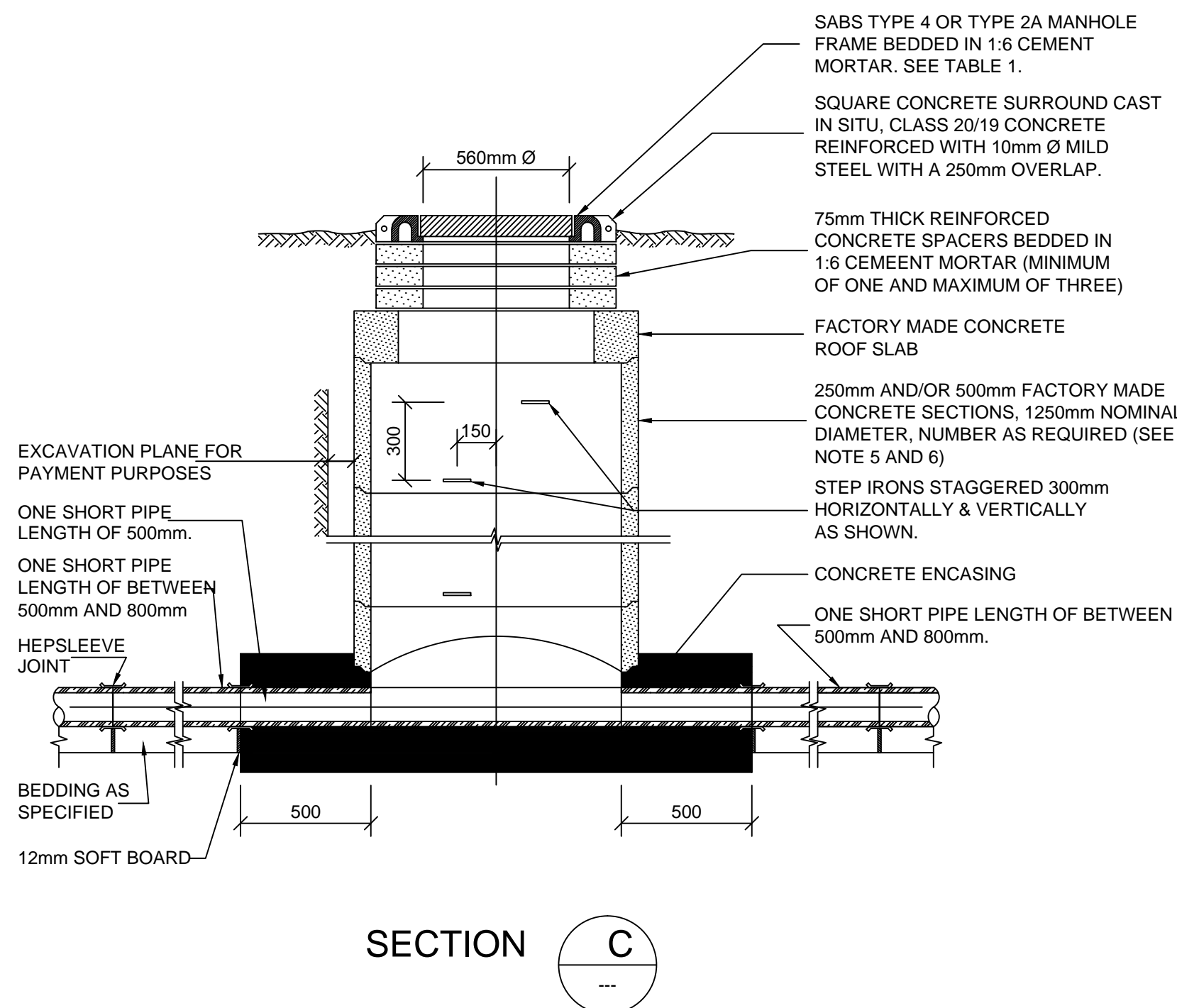
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(TYPICAL EXAMPLE WHERE uPVC PIPES ARE USED)



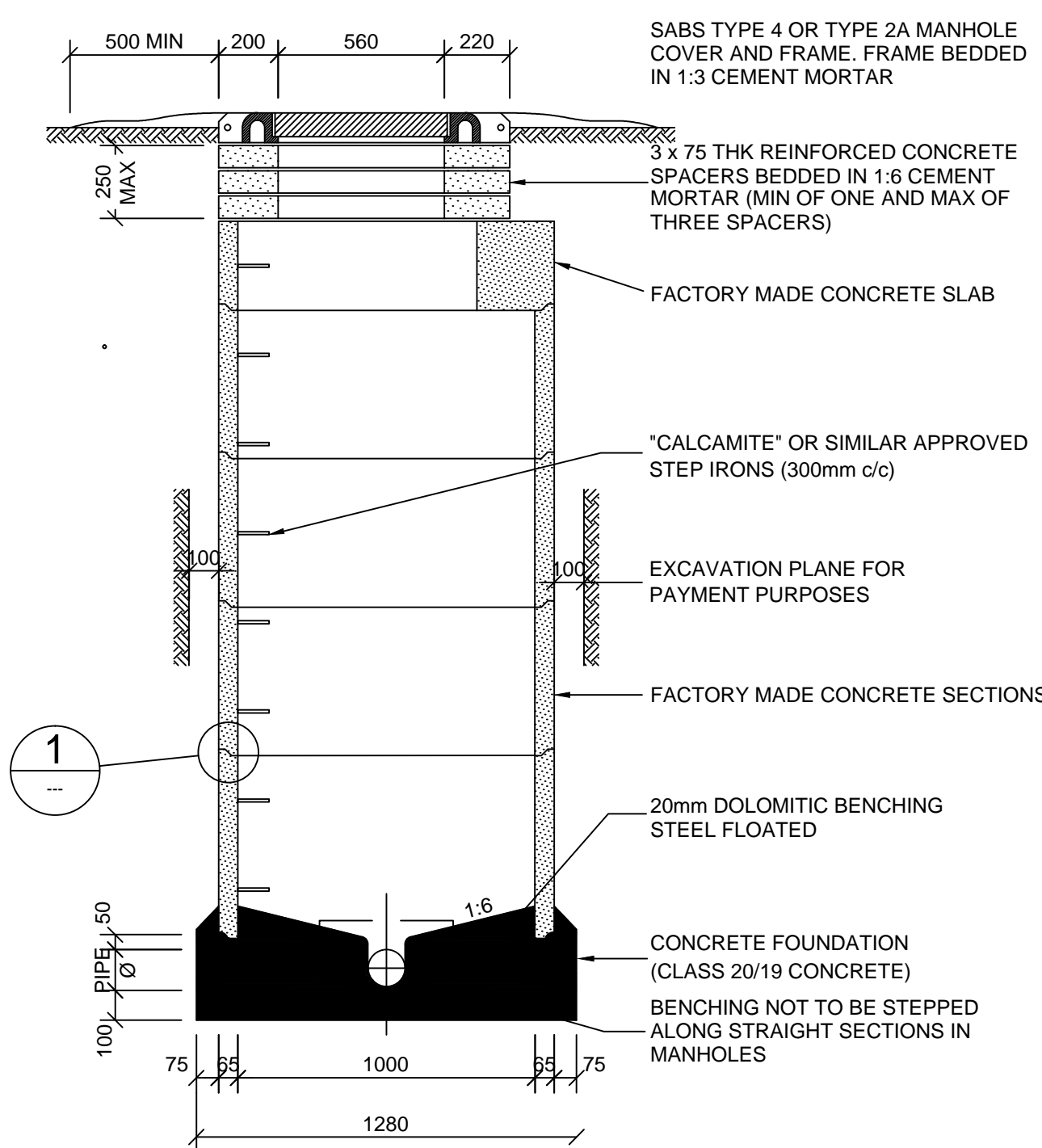
PLAN
(TYPICAL EXAMPLE WHERE HDPE PIPES ARE USED)



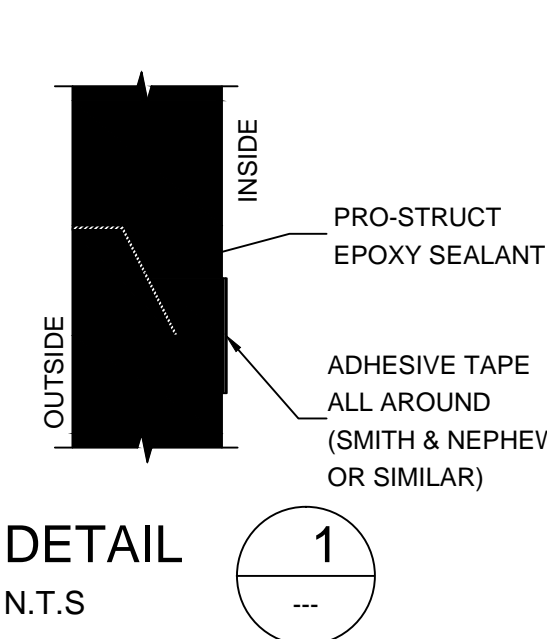
PLAN



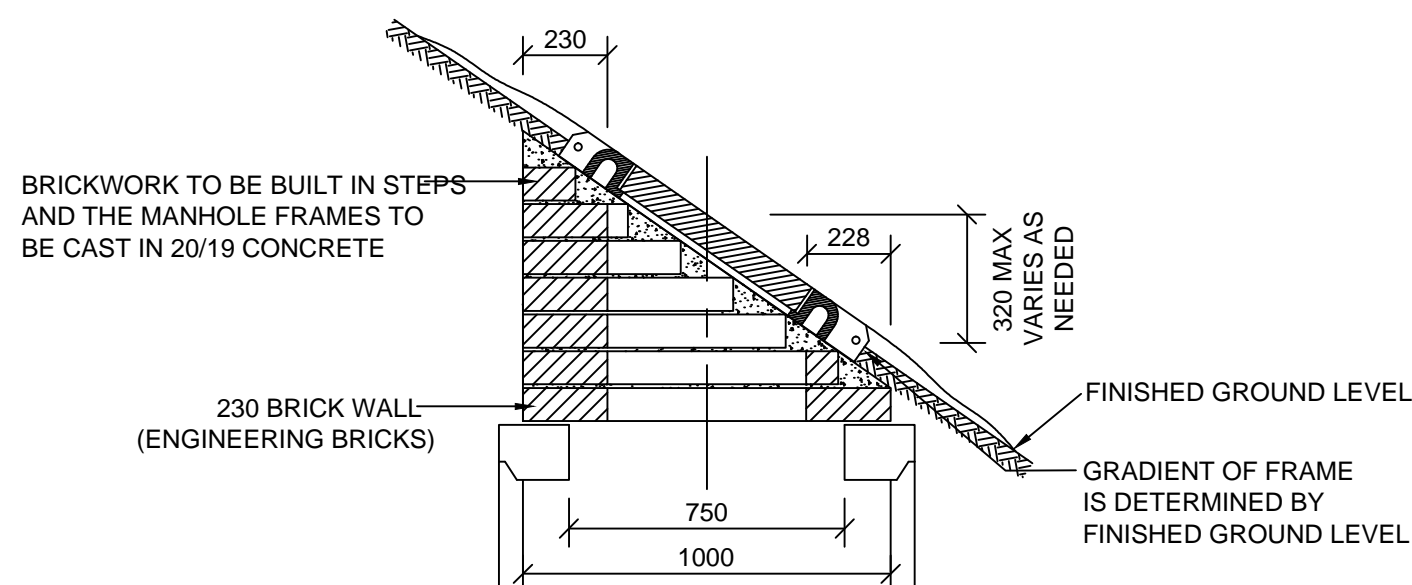
SECTION C



SECTION B
SCALE 1 : 20



DETAIL 1
N.T.S



BUILT IN MANHOLE FRAME
AT FINISHED SLOPED SIDEWALKS
(WITH WRITTEN PERMISSION FROM THE CITY
ENGINEER ONLY)

MANHOLE COVERS (S.A.B.S. 558/1965)	
POSITION OF MANHOLE	TYPE OF COVER
CARRIAGE WAY	S.A.B.S. TYPE 2A CAST IRON FRAME AND COVER
STREET RESERVE	S.A.B.S. TYPE 4 CAST IRON OR CONCRETE FRAME AND COVER
ERVEN	S.A.B.S. TYPE 4 CAST IRON OR CONCRETE FRAME AND COVER
GENERAL	ONLY S.A.B.S. TYPE 2A MANHOLE COVERS MAY BE USED FOR SEWERS 3000 AND GREATER
NOTE : CONCRETE COVERS ARE USED ONLY WITH WRITTEN INSTRUCTION FROM THE ENGINEER.	

NOTES

- CONCRETE FOR MANHOLES MUST BE OF DOLOMITIC ORIGIN.
- MID-BLOCK SEWERS: TOP OF FRAME MUST BE 150mm ABOVE NATURAL GROUND LEVEL AND SURROUNDED BY GROUND.
- GRAVEL SIDEWALKS:
 - TOP OF THE FRAME MUST BE 50mm ABOVE FINISHED GROUND LEVEL OF SIDEWALKS,
 - IN CASE SIDEWALK IS NOT FINISHED OFF, THE HEIGHT OF THE FRAME MUST BE DETERMINED BY THE ENGINEER.
- CHANNELING MUST BE BUILT WITH GLAZED EARTHENWARE PIPES.
- CONCRETE SECTIONS MUST BE FIXED WITH AN EPOXY AND SILICA MIXTURE (WHICH HAS BEEN APPROVED BY AN ENGINEER).
- FACTORY MADE MANHOLE SECTIONS MUST BE IN ACCORDANCE WITH S.A.B.S. 1924-1981.
- MANHOLE FRAMES MAY ONLY BE BUILT IN ON SLOPED FINISHED SIDEWALKS ON A WRITTEN INSTRUCTION BY THE ENGINEER.
- OVER EXCAVATION MAY ONLY BE FILLED AFTER APPROVAL BY THE ENGINEER WITH GRADE 20/19 CONCRETE OR SUITABLE MATERIAL AS DIRECTED BY THE ENGINEER.
- NO PART OF THE MANHOLE MAY BE FINISHED OFF WITH CEMENT-WASH OR MORTAR.

GENERAL

- ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT STANDARDS.
- ALL DIMENSIONS ARE IN MILLIMETERS (UNLESS OTHERWISE SPECIFIED).
- ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR MUNICIPAL CIVIL ENGINEERING WORKS, SECOND EDITION 1991.
- THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE SPECIFICATIONS.
- COORDINATES ARE BASED ON W.G.S 48 SYSTEM.

SEWER

- ALL SEWERS PIPELINES MUST BE MANHOLE uPVC CLASS 400.
- PIPE BEDDING TO BE CLASS B BEDDING UNLESS OTHERWISE SPECIFIED.
- ALL EXCAVATIONS AND BEDDING MUST BE INSPECTED BY ENGINEER BEFORE LAYING OF PIPES.
- ALL BEDDING SHALL BE OF AN APPROVED SELECTED GRAVEL MATERIAL WITH A P.I. NOT EXCEEDING 8 AND SHALL BE COMPACTED TO 95% MOD AASHTO DENSITY STATED BY THE ENGINEER ON.

REV	DATE	AMENDMENT	DONE BY:
A	AUG 23	FOR INFORMATION	BNH

Drawing Cross References:	
Discipline	Drawing No.
(Architectural)	(N/A)
(Mechanical)	(N/A)
(Electrical)	(N/A)

Drawing Cross References:	
Discipline	Drawing No.
(Structural)	(N/A)
(Civil Eng.)	(N/A)
(etc.)	(N/A)

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