

12

75

NO. VII
N2-A

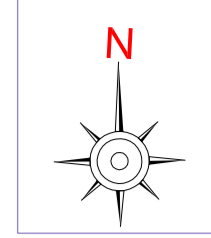
74

76

77

78

23



FOR ONLY TENDER PURPOSE

NOTES :-

- YEAR - 2030
- YEAR - 2045
- ZONING LINE
- WARD BOUNDRY

SEWER PIPELINE DETAILS

DIAMETER	SEWER PIPELINE
150 mm	—
200 mm	—
250 mm	—
300 mm	—
350 mm	—
400 mm	—
450 mm	—
500 mm	—
600 mm	—
700 mm	—
800 mm	—
900 mm	—
1000 mm	—
1100 mm	—
1400 mm	—
1500 mm	—
1600 mm	—
1800 mm	—
2000 mm	—

REFERENCE DRAWINGS

NAME OF DRAWING	REF. NO.

SHEET INDEX

1	2	3	4
5	6	7	8
9	10	11	12
13			

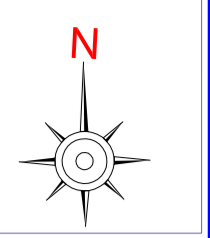
DESCRIPTION

AURANGABAD MUNICIPAL CORPORATION

CONSULTANT
FORTRESS INFRASTRUCTURE ADVISORY SERVICES

DWG. BY	SBR	NAME OF PROJECT	DRG. NO.
CHEK. BY	SSJ	UNDER GROUND SEWERAGE SYSTEM FOR AURANGABAD CITY	12/13
APP. BY	ARV	DRAWING TITLE	SCALE
DATE	APR -12	PLAN SHOWING UNDERGROUND SEWERAGE SYSTEM	1:6000

URBAN INFRASTRUCTURE DEVELOPMENT SCHEME FOR SMALL AND MEDIUM TOWN



FOR ONLY TENDER PURPOSE
NOTES :-

- YEAR - 2030
- YEAR - 2045
- ZONING LINE
- WARD BOUNDARY

SEWER PIPELINE DETAILS

DIAMETER	SEWER PIPELINE
150 mm	—
200 mm	—
250 mm	—
300 mm	—
350 mm	—
400 mm	—
450 mm	—
500 mm	—
600 mm	—
700 mm	—
800 mm	—
900 mm	—
1000 mm	—
1100 mm	—
1400 mm	—
1500 mm	—
1600 mm	—
1800 mm	—
2000 mm	—

REFERENCE DRAWINGS

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SHEET INDEX

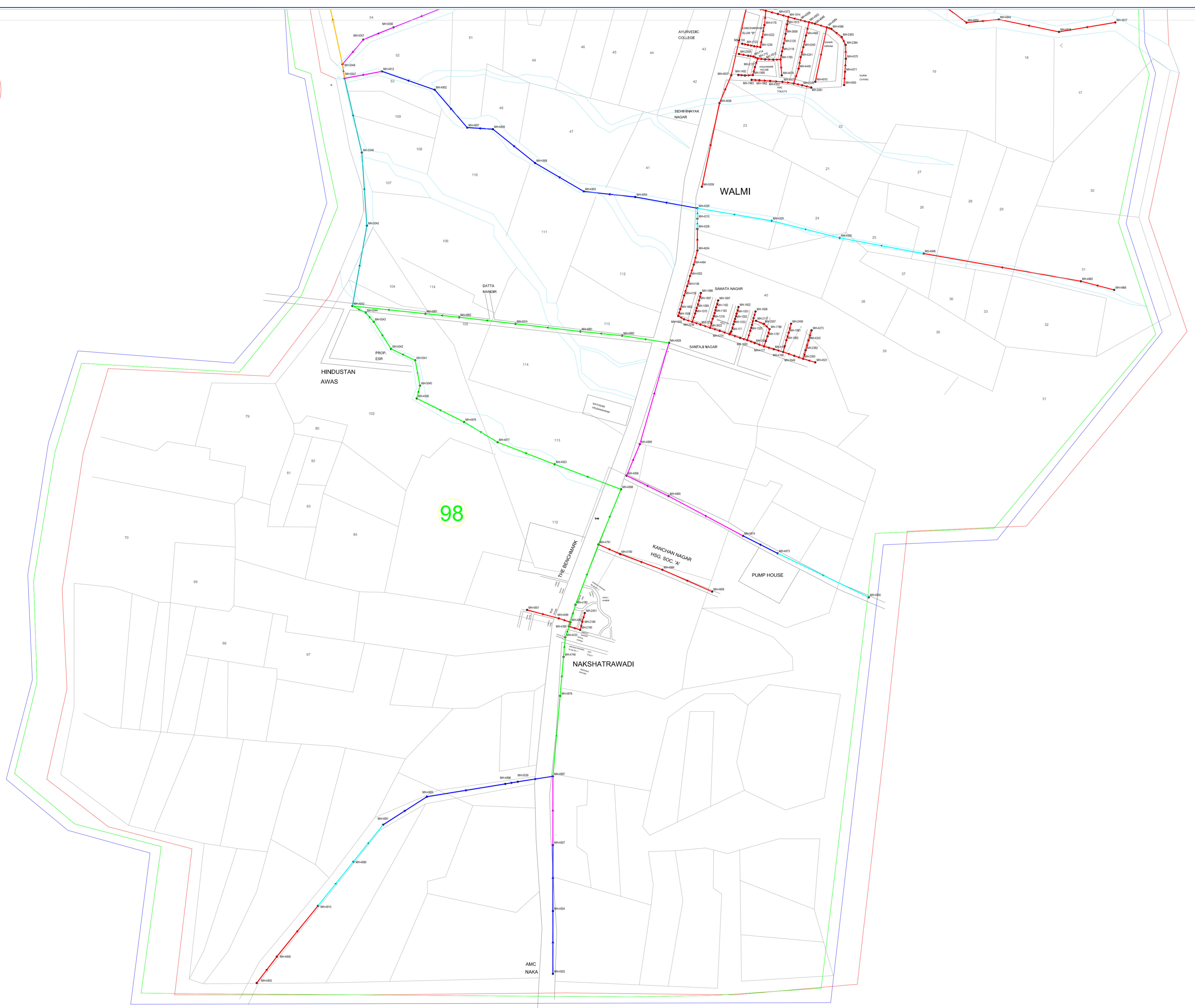
1	2	3	4
5	6	7	8
9	10	11	12
13			

DESCRIPTION -

AURANGABAD MUNICIPAL CORPORATION
CONSULTANT
FORTRESS INFRASTRUCTURE ADVISORY SERVICES

DWG. BY	SBR	NAME OF PROJECT	DRG. NO.
CHEK. BY	SSJ	UNDER GROUND SEWERAGE SYSTEM FOR AURANGABAD CITY	13/13
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URBAN INFRASTRUCTURE DEVELOPMENT SCHEME FOR SMALL AND MEDIUM TOWN



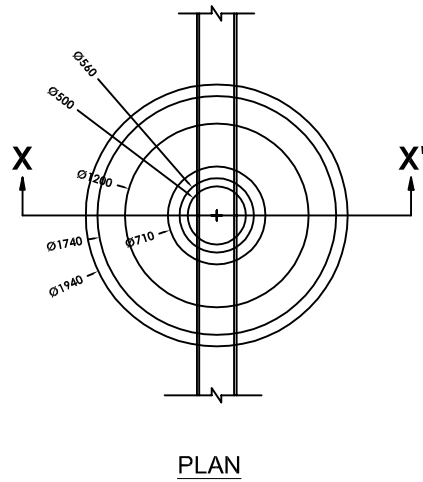
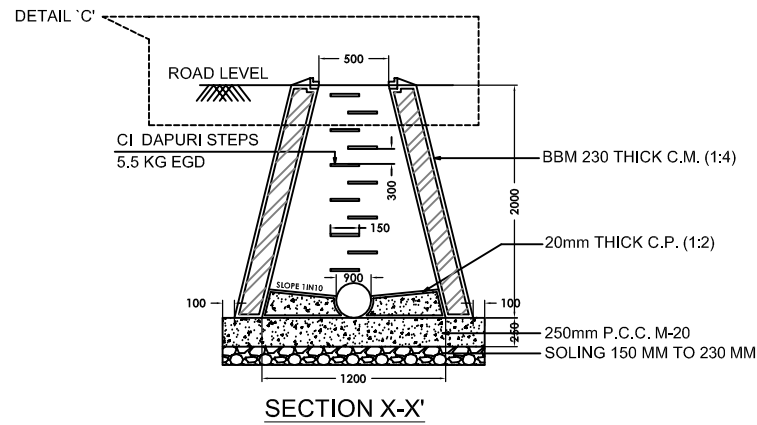
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FOR ONLY TENDER PURPOSE

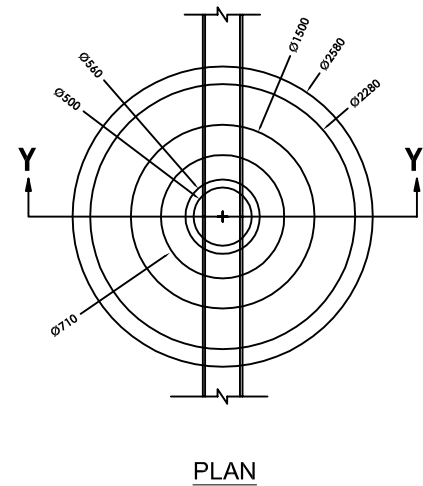
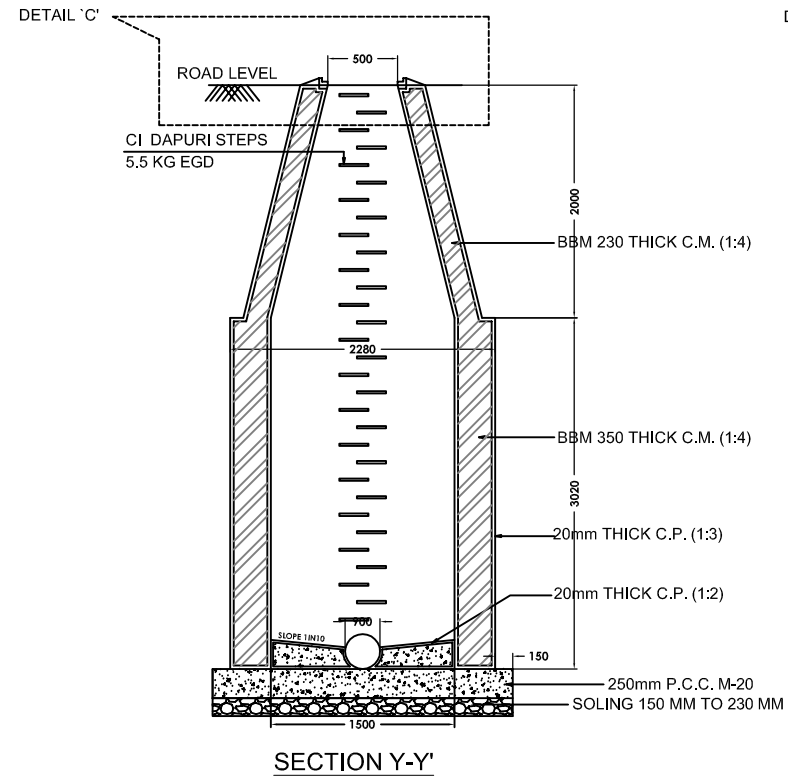
NOTES:-

1. ALL DIMENSIONS ARE IN MM.
2. 250 THICKNESS OF CONCRETE CAN BE VARIED TO FLUSH MANHOLE COVER AND FRAME WITH ROAD SURFACE
3. C.I STEP AS PER I.S. 5455. FOOT REST SHALL BE PAINTED WITH COAL TAR.
4. SFRC MANHOLE FRAME & COVER OF HEAVY DUTY AS PER I.S.12592 (PART I & II).
5. THE BENCHING AT THE SIDE OF THE CHANNEL SHALL BE AT LEAST 50mm ABOVE THE CROWN OF THE PIPE AND THEN RISE WITH A SLOPE OF 1 IN 12 TOWARDS THE SIDE OF THE MANHOLE.
6. UNLESS OTHERWISE SPECIFIED RELEVANT "IS" SHALL BE FOLLOWED.

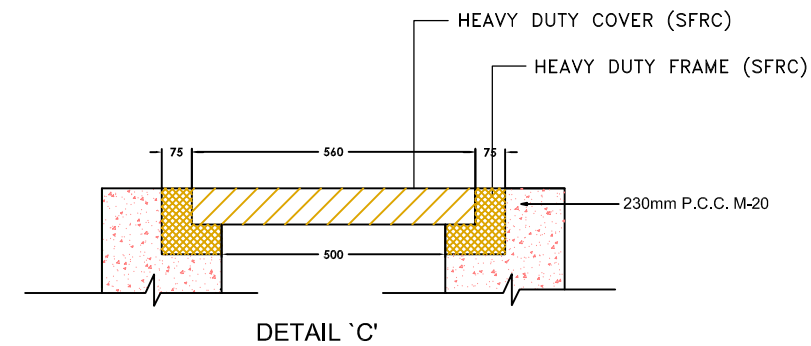
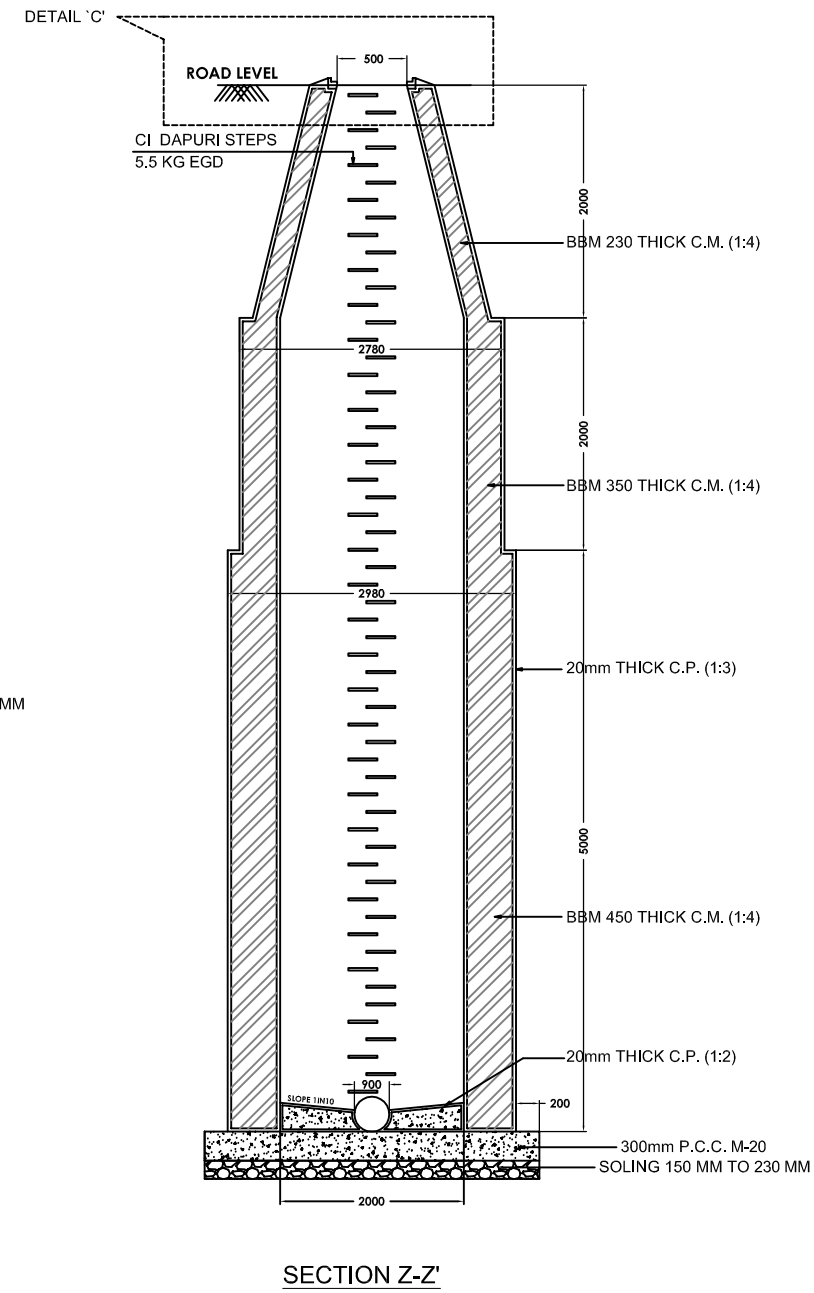
TYPICAL MANHOLE FOR DEPTH FROM 0 M TO 2M



TYPICAL MANHOLE FOR DEPTH FROM 2M TO 5M



TYPICAL MANHOLE FOR DEPTH FROM 5M TO 9M



REFERENCE DRAWINGS		
S.NO.	NAME OF DRAWING	REF. NO.
1		
2		
3		

PMC :			
0	13/5/11 ISSUED FOR APPROVAL		
REV DATE	DESCRIPTION	DRW.	APP.

CLIENT : AURANGABAD MUNICIPAL CORPORATION

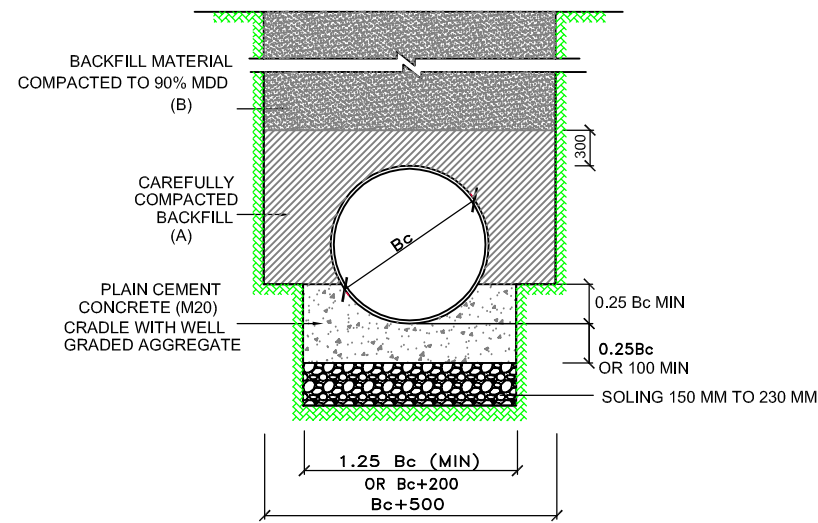
CONSULTANT : FORTRESS INFRASTRUCTURE ADVISORY SERVICES

SCALE	NTS	UNDERGROUND SEWERAGE SCHEME	DRG. NO.
DATE	13/5/11	FOR AMC	
DRN BY	SBR		
DGN BY	SSJ	TYPICAL MANHOLE DRAWING	REV. NO. 0
CHKD BY	SSJ	B.B.MASONRY	
APPD BY	AV		

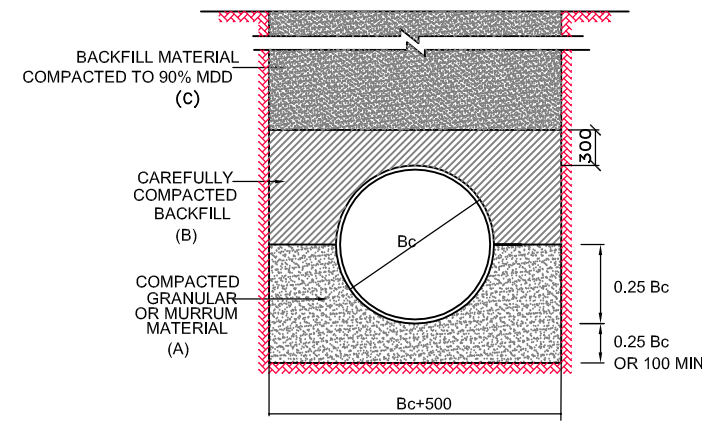
URBAN INFRASTRUCTURE DEVELOPMENT SCHEME FOR SMALL AND MEDIUM TOWN

FOR ONLY TENDER PURPOSE

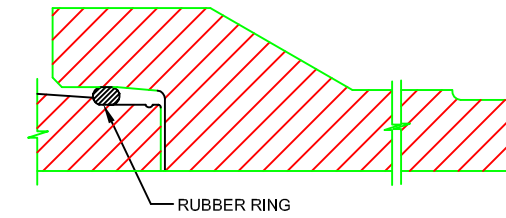
- NOTES :-
- 1) ALL DIMENSIONS ARE IN MM AND ALL LEVELS ARE IN METRES UNLESS OTHERWISE NOTED.
 - 2) UNLESS OTHERWISE SPECIFIED RELEVANT "IS" SHALL BE FOLLOWED.
 - 3) INTERNAL DIAMETER OF PIPE = D OUTER DIAMETER OF PIPE = Bc



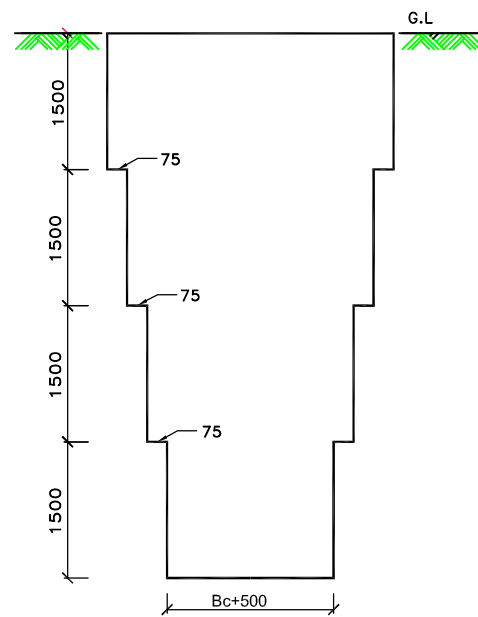
PLAIN CEMENT CONCRETE BEDDING (PCCB)
TYPE B - PCCB



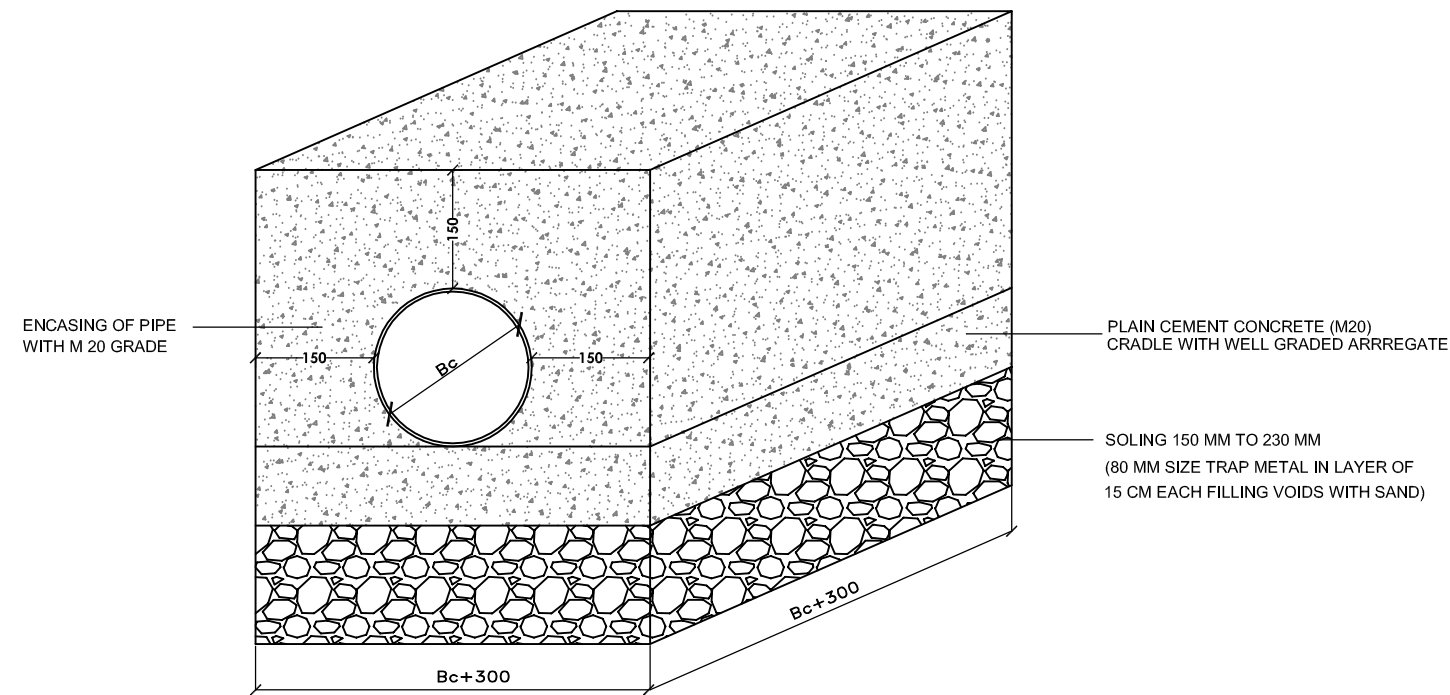
GRANULAR BEDDING (GRB)
TYPE A - GRB (Hard Rock and Murrum)



RUBBER RING ROLL ON JOINT
FOR R.C.C. PIPES



TYPICAL SECTION OF SEWER TRENCH
FOR 6.0m TRENCH DEPTH



ENCASEMENT OF PIPE AT EVERY 3rd JOINT

LAYER A. CAREFULLY COMPACTED BACKFILL

LAYER B. BACKFILL MATERIAL COMPACTED
TO 90% M.D.D

BACKFILLING WITH APPROVED SELECTED EXCAVATED MATERIAL AND COMPACTION SHALL BE DONE BY HAND OR APPROVED MECHANICAL METHODS IN LAYERS OF 150mm WITH SPECIAL CARE TO AVOID DAMAGE OF THE PIPE

BACKFILLING SHALL BE DONE WITH EXCAVATED MATERIAL AND OR GOOD QUALITY OF MURUM BROUGHT FROM OUTSIDE BY HAND OR APPROVED MECHANICAL METHODS IN LAYERS NOT EXCEEDING 15 CM THICKNESS AFTER COMPACTING, WETTED AND COMPACTED TO A DENSITY OF NOT LESS THAN 90% OF MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT OF THE SURROUNDING MATERIAL.

BC/ CLAY/ MARSHY SOIL SHALL NOT BE USED FOR BACKFILLING.

REFERENCE DRAWINGS		
S.NO.	NAME OF DRAWING	REF. NO.
1		
2		
3		

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REV DATE	DESCRIPTION	DRW.	APP.

CLIENT: AURANGABAD MUNICIPAL CORPORATION

CONSULTANT
FORTRESS INFRASTRUCTURE ADVISORY SERVICES

SCALE	NTS	UNDERGROUND SEWERAGE SCHEME	DRG. NO.
DATE	13/5/11	FOR AMC	
DRN BY	SBR		
DGN BY	SSJ	BEDDING ARRANGEMENT	REV. NO. 0
CHKD BY	SSJ	3rd JOINT ENCASEMENT	
APPD BY	AV		

URBAN INFRASTRUCTURE DEVELOPMENT SCHEME
FOR SMALL AND MEDIUM TOWN

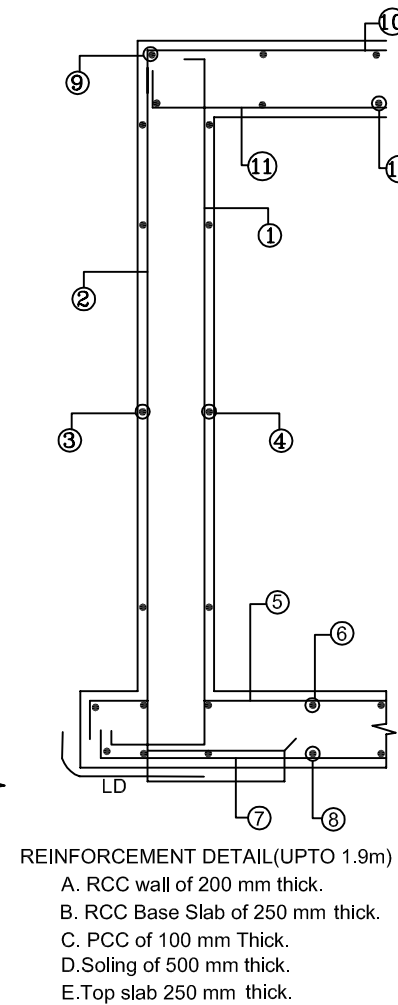
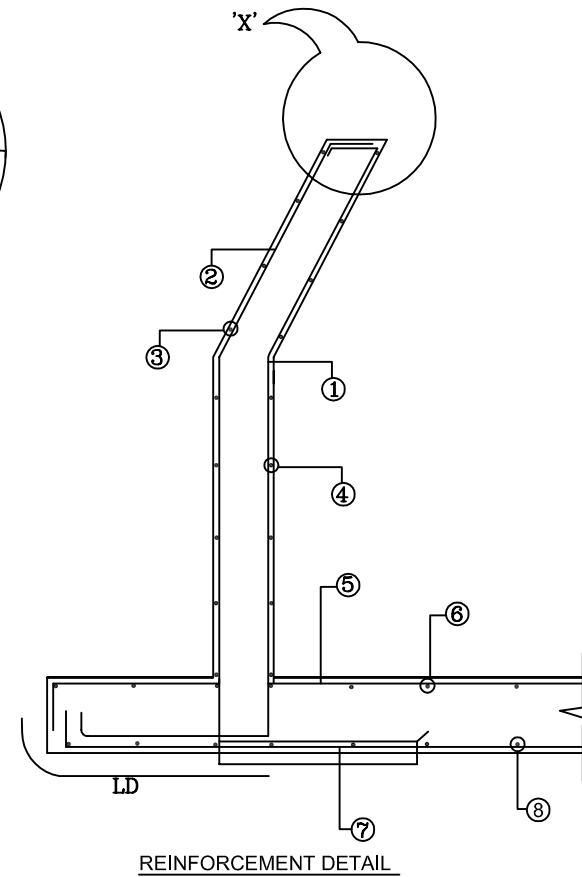
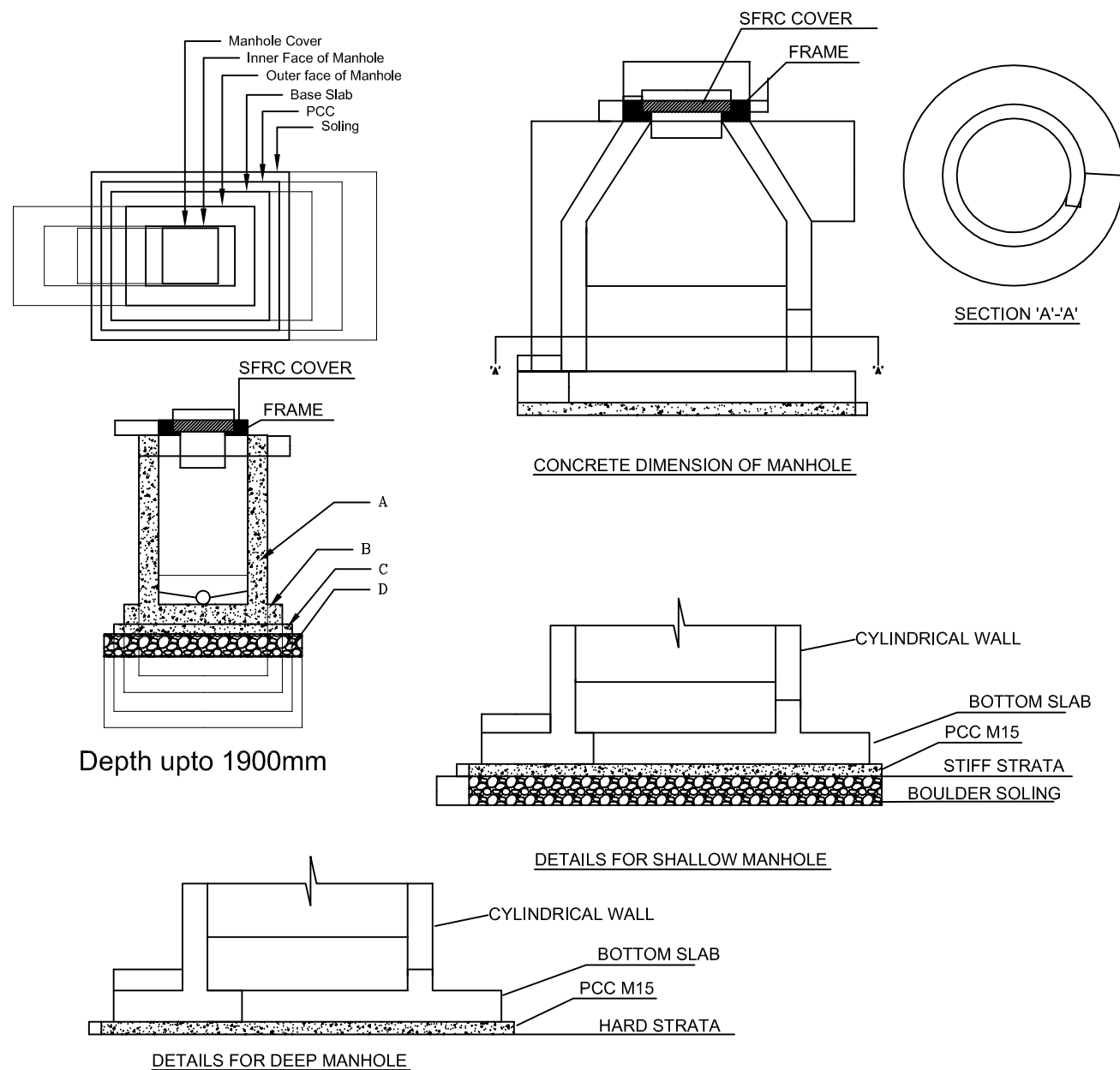
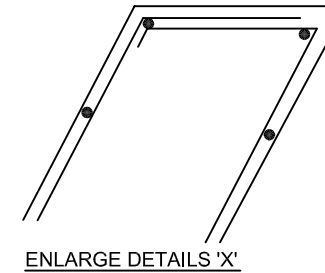
FOR ONLY TENDER PURPOSE

TABLE

HEIGHT 'H' IN 'm'	REINF. DETAILS								t (mm)	t1 (mm)	b1 (mm)	d (mm)	REINF. DETAILS (TOP SLAB)			
	①	②	③	④	⑤	⑥	⑦	⑧					9	10	11	12
1.9M	T8@150	T8@150	T8@150	T8@150	T10@100	T10@100	T10@100	T10@100					T10@100	T10@100	T16@100	T16@100
2M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	1200				
3M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	1500				
4M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	1500				
5M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	1500				
6M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	2100				
7M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	2100				
8M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	2100				
9M	T10@200	T10@200	T10@200	T10@200	T10@100	T10@100	T10@100	T10@100	200	250	550	2100				

NOTES:-

- GRADE OF CONCRETE FOR STRUCTURAL WORKS SHALL BE M25 WITH MIN. CEMENT CONTENT 360 KG/CUM OPC CEMENT WITH W/C RATIO 0.45 CONCRETE FOR PCC SHALL BE M15 WITH MIN. CEMENT CONTENT 240 kg/cum.
- USE APPROVED CORROSION INHIBITING ADMIXTUR IN THE CONCRETE. THIS ADMIXTURE IS TO BE ADDED INTO WET CONCRETE AS PER MANUFACTURER'S SPECIFICATIONS.
- STEEL REINF. SHALL BE Fe415 TMT OF APPROVED VENDOR
- ALL WORKS SHALL CONFORM TO IS456:2000, IS3370, & IS12592.
- DIMENSIONS NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
- ANY DISCREPANCY SHALL BE BROUGHT TO NOTICE OF DESIGN TEAM BEFORE PROCEEDING.
- THE FOUNDATION SHALL REST ON STRATA AS INDICATE IN DRAWING.
- DEVELOPMENT LENGTHS / LAP LENGTHS OF BARS ARE DESIGNATED BY Ld & IS EQUAL TO 50XDIA OF BAR.
- CLEAR COVER TO REINF SHALL BE AS FOLLOWS
A: TANK WALLS AND FOUNDATIONS : 50 mm
B: TOP SLAB : 30 mm
- THE EXCAVATION SHALL BE SUITABLY PROTECTED IN CASE OF LOOSE SOILS BY MEANS OF TEMP. PROPS AND SHORING
- THE DRAWING TO BE REFERRED WITH RELEVANT DRAWING.
- UNLESS OTHERWISE SPECIFIED RELEVANT "IS" SHALL BE FOLLOWED.



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CLIENT: AURANGABAD MUNICIPAL CORPORATION			
CONSULTANT: FORTRESS INFRASTRUCTURE ADVISORY SERVICES			
SCALE	NTS	UNDERGROUND SEWERAGE SCHEME FOR AMC	DRG. NO.
DATE	13/5/2011		
DRN BY	SBR		
DGN BY	SSJ	TYPICAL MANHOLE DRAWING	REV. NO. 0
CHKD BY	SSJ	R.C.C MANHOLE	
APPD BY	AV		
URBAN INFRASTRUCTURE DEVELOPMENT SCHEME FOR SMALL AND MEDIUM TOWN			

