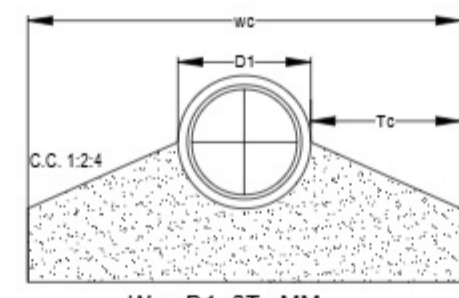


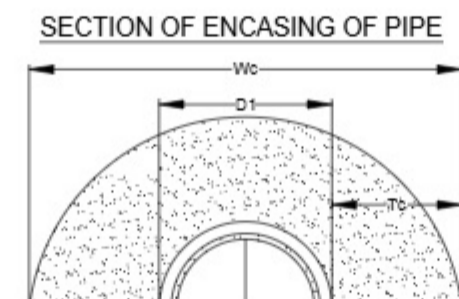
**SEWER LINE PLAN**  
SCALE -1:100

Where D1 is external diameter of pipe  
100 mm for pipe up to nominal dia 150 mm  
150 mm for pipe over nominal dia 150 mm

SECTION OF HAUNCHING



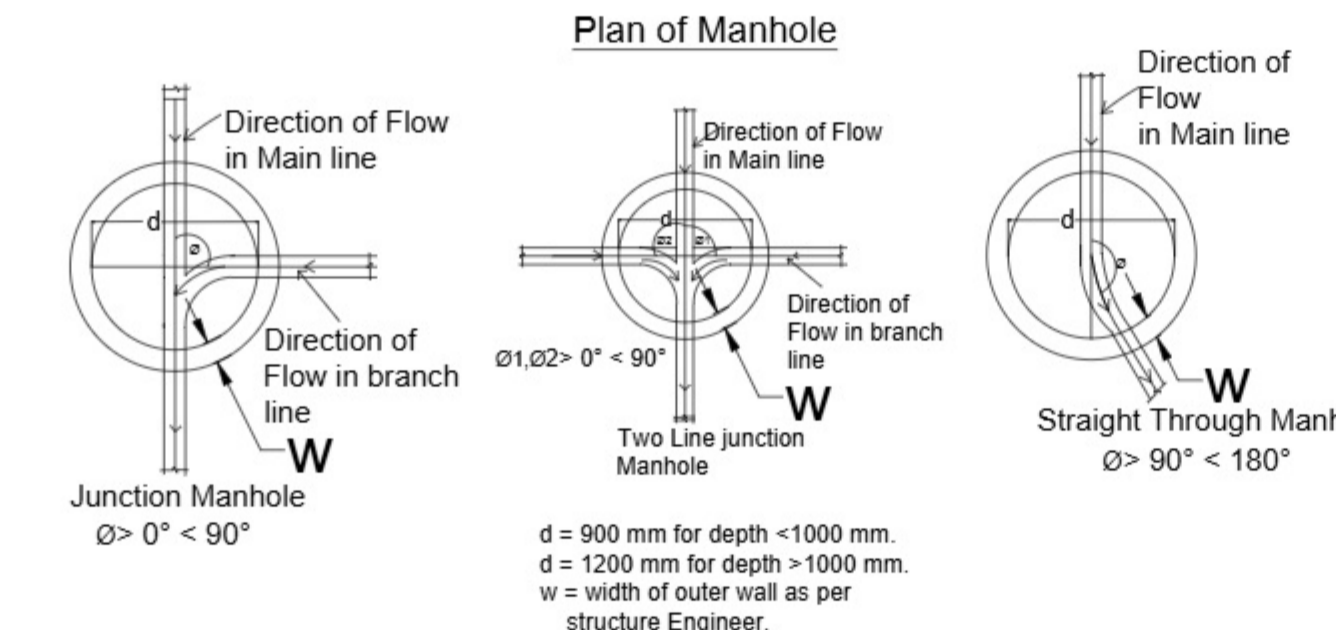
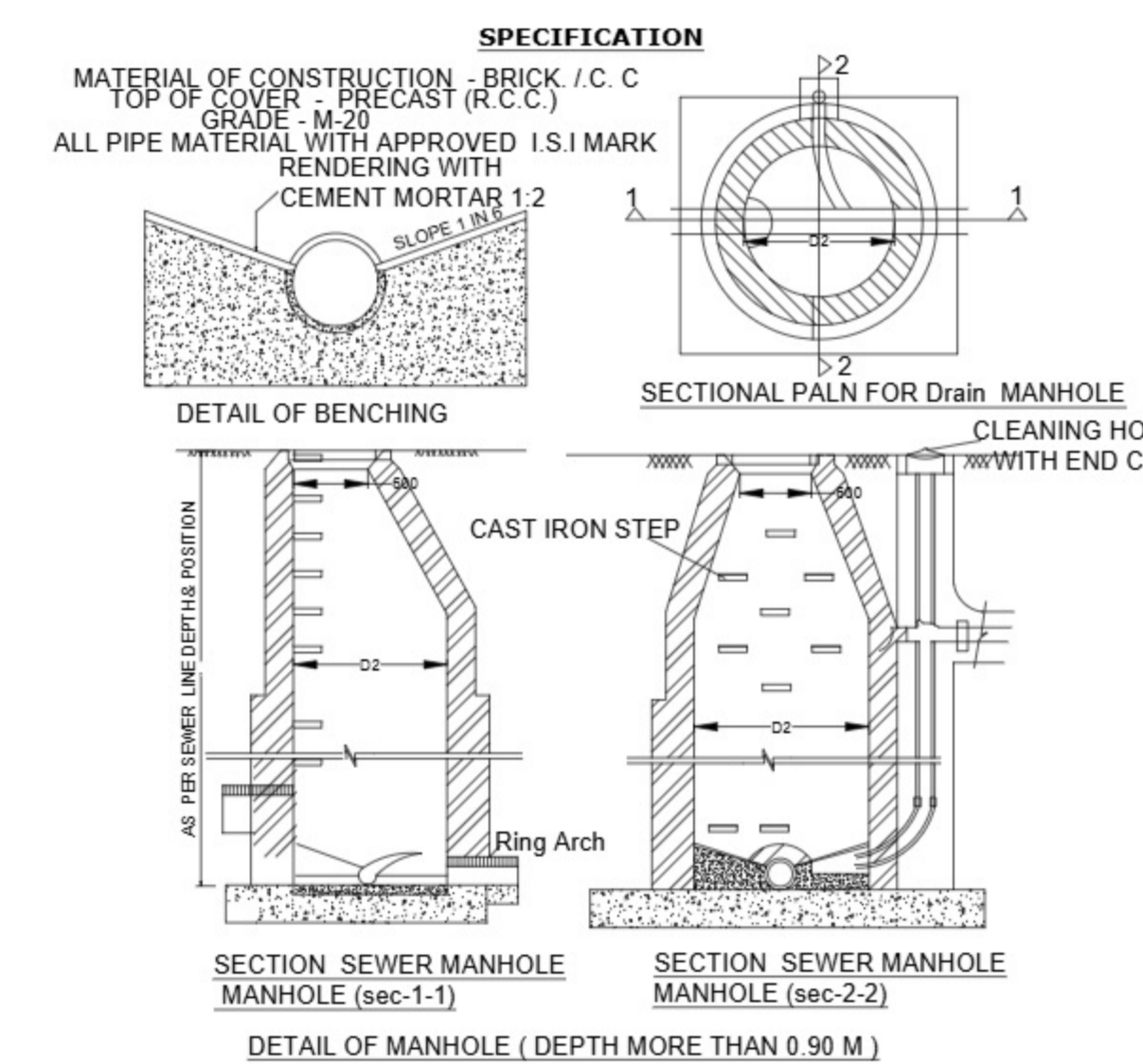
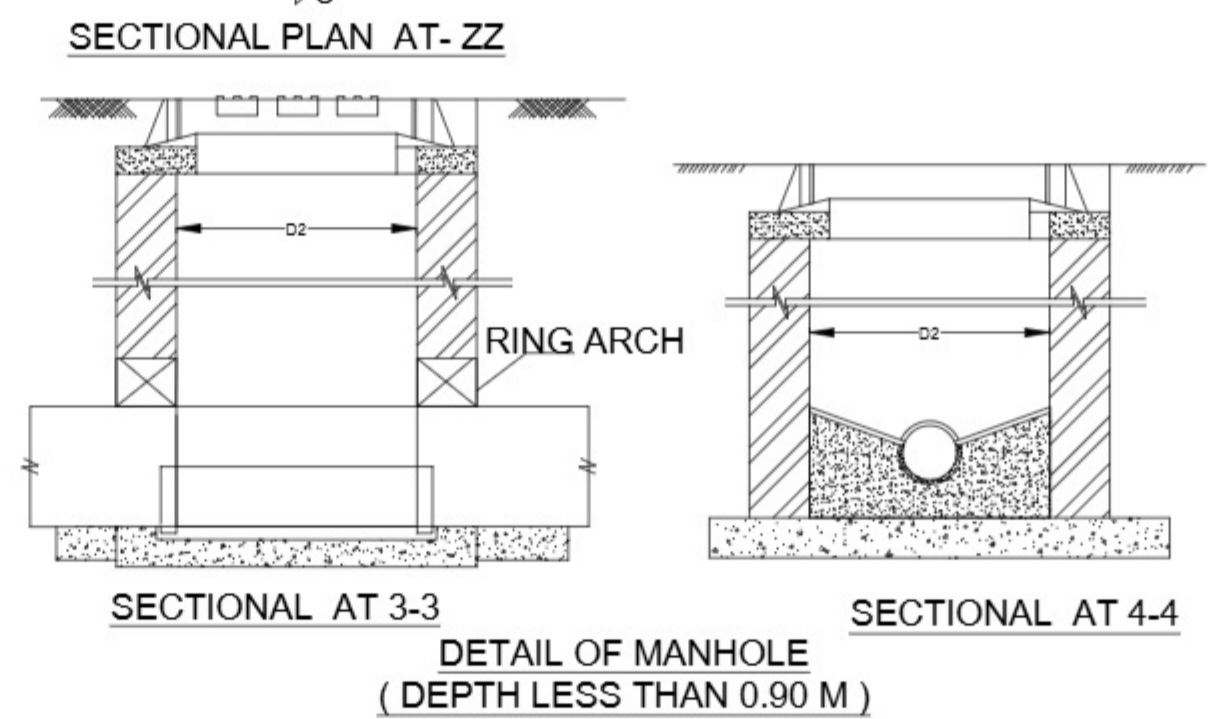
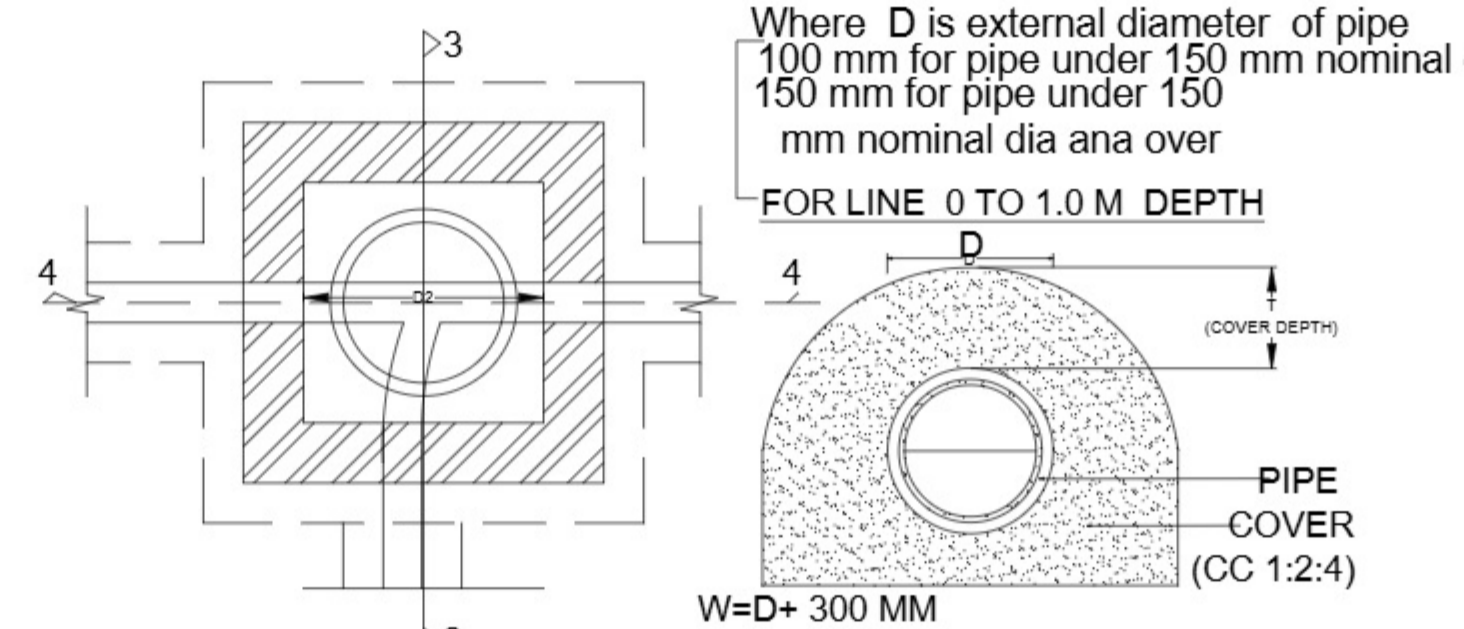
SECTION OF ENCASING OF PIPE



**NOTES-**

- THE SEWER LINE SHALL BE LAID ON P.C.C. (150THK) OVER COMPACTED EARTH.
- SEWER LINE SHALL BE TESTED FOR ITS LEAKAGE/ INFILTRATION AS RELEVANT IS CODE/MANUAL BEFORE ITS COMMISSIONING.
- ALL MANHOLES SHOULD HAVE UNCUT PIPE INSIDE AT BASE WHICH SHALL BE CUT DURING COMMISSIONING.
- THE MINIMUM INVERT LEVEL SHALL BE 500 MM BELOW EXISTING GROUND.
- MAXIMUM DISTANCE BETWEEN TWO MANHOLES SHALL BE AS PER THE GIVEN TABLE OR AS PER DESIGN.
- DROP MANHOLE SHALL BE PROVIDED WHERE THE DIFFERENCE OF TWO INVERT LEVEL AT A JOINT IS MORE THAN 600 MM.
- ALL PIPES USED UPTO DIAMETER 160MM SHOULD BE SWR CONFORMING TO IS 13592:92 & FITTINGS SHOULD CONFORM TO IS 14735:99 & DIAMETER MORE THAN 160MM SHOULD BE uPVC PRESSURE PIPES & CONFORM TO IS 4985:2000 CLASS B. THE WIDTH/DIAMETER OF THE MANHOLE SHOULD NOT BE LESS THAN INTERNAL DIAMETER OF THE SEWER + 150MM BENCHING ON BOTH SIDES (150MM + 150MM).
- MANHOLES SHOULD BE BUILT AT EVERY CHANGE OF ALIGNMENT , GRADIENT OR DIAMETER, AT THE HEAD OF ALL SEWERS & BRANCHES & AT EVERY JUNCTION OF TWO OR MORE SEWERS.
- ON SEWERS WHICH ARE TO BE CLEANED MANUALLY, WHICH CANNOT BE ENTERED FOR CLEANING OR INSPECTION, THE MAXIMUM DISTANCE BETWEEN MANHOLES CAN BE AT 30M MAXIMUM.
- LOCATION OF HOUSE CONNECTION MANHOLE ARE INDICATIVE ONLY, FINAL LOCATION IS TO BE DETERMINE BY SITE ENGINEER AS PER THE INTERNAL PLUMBING OF SAID HOUSE

line element no.	starting point	end point	pipe size in inches	pipe length in meter	level of pipe line at start point in M from BM	level of pipe line at end in M from BM	FFL of start point from BM	Expected depth of manhole in MM from Road FFL
<b>TRUNK LINE</b>								
SL-1	MH-1	MH-2	6	11.70	100.15	100.10	100.60	0.45
SL-2	MH-2	MH-3	6	12.20	100.10	100.05	100.60	0.50
SL-3	MH-3	MH-4	6	13.69	100.05	100.00	100.60	0.55
SL-4	MH-4	MH-5	6	11.83	100.00	99.95	100.60	0.60
SL-5	MH-5	MH-6	6	14.90	99.95	99.89	100.60	0.65
SL-6	MH-6	MH-7	6	13.91	99.89	99.83	100.60	0.71
SL-7	MH-7	MH-8	6	12.91	99.83	99.78	100.60	0.77
SL-8	MH-8	MH-9	6	10.10	99.78	99.74	100.60	0.82
SL-9	MH-9	MH-10	6	8.37	99.74	99.70	100.60	0.86
SL-10	MH-10	MH-11	6	8.63	99.70	99.67	100.60	0.90
SL-11	MH-11	MH-12	6	12.08	99.67	99.62	100.60	0.93
SL-12	MH-12	MH-13	6	11.21	99.62	99.57	100.60	0.98
SL-13	MH-13	STP	6	4.17	99.57	99.56	100.60	1.03
<b>BRANCH LINE-1 AT MH-9</b>								
SL-9.1	MH-9.1	MH-9.2	6	10.05	100.15	100.11	100.60	0.450
SL-9.2	MH-9.2	MH-9	6	13.99	100.11	100.05	100.60	0.491
<b>BRANCH LINE-2 AT MH-10</b>								
SL-10.1	MH-10.1	MH-10.2	6	8.58	100.15	100.12	100.60	0.450
SL-10.2	MH-10.2	MH-10	6	13.79	100.12	100.06	100.60	0.485
<b>BRANCH LINE-3 AT MH-12</b>								
SL-12.1	MH-12.1	MH-12.2	6	9.22	100.15	100.11	100.60	0.450
SL-12.2	MH-12.2	MH-12	6	11.65	100.11	100.06	100.60	0.488
<b>BRANCH LINE-4 AT MH-13</b>								
SL-13.1	MH-13.1	MH-13.2	6	12.01	100.15	100.10	100.60	0.450
SL-13.2	MH-13.2	MH-13.3	6	12.26	100.10	100.05	100.60	0.499
SL-13.3	MH-13.3	MH-13.4	6	12.18	100.05	100.00	100.60	0.549
SL-13.4	MH-13.4	MH-13.5	6	12.13	100.00	99.95	100.60	0.598
SL-13.5	MH-13.5	MH-13.6	6	8.59	99.95	99.92	100.60	0.648
SL-13.6	MH-13.6	MH-13.7	6	14.05	99.92	99.86	100.60	0.683
SL-13.7	MH-13.7	MH-13.8	6	11.03	99.86	99.81	100.60	0.740
SL-13.8	MH-13.8	MH-13	6	6.25	99.81	99.79	100.60	0.785
<b>SUB BRANCH LINE-1 AT MH-13.6</b>								
SL-13.6.1	MH-13.6.1	MH-13.6	6	9.73	100.15	100.11	100.60	0.450
<b>SUB BRANCH LINE-2 AT MH-13.8</b>								
SL-13.8.1	MH-13.8.1	MH-13.8.2	6	9.20	100.15	100.11	100.60	0.450
SL-13.8.2	MH-13.8.2	MH-13.8.3	6	10.98	100.11	100.07	100.60	0.487
SL-13.8.3	MH-13.8.3	MH-13.8	6	11	100.07	100.02	100.60	0.532
				<b>342.39</b>				



**LEGEND**

	150 mm ID Sewer Line (DWC pipe confirming to IS:16098-2)
	Manhole
MH-15.8	Manhole Number
	Direction of Flow
	Dimension

**Dimension of Manhole**

S. No.	Depth	Width
1.	Upto 900 mm	900 x 800 mm
2.	0.9 And Upto 2.5 m	900 mm

OWNER SIGN:-  
  
For Shri Giriraj Infra Planner LLP  
Authorised Partner

ARCHITECT'S SIGN:-

**SUBMISSION DRG.**  
**AXIS CONSULTANTS, AGRA**  
Architect, Interior Designer, Project manager, Planner  
BLOCK NO-21 SHOP NO-12,  
SANJAY PLACE,AGRA-2  
0562-4058537