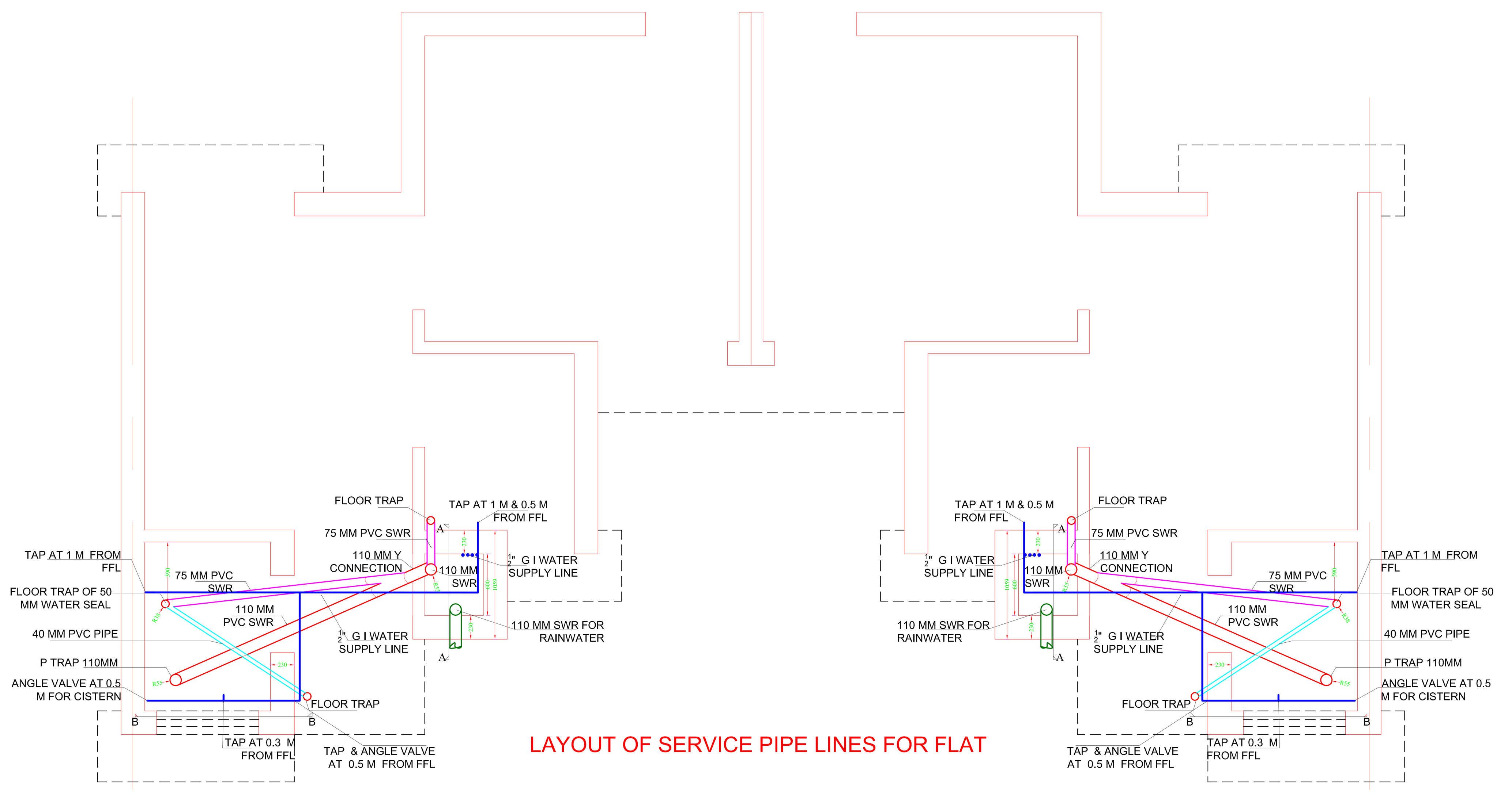
SEWER DRAINAGE LAY OUT PLAN

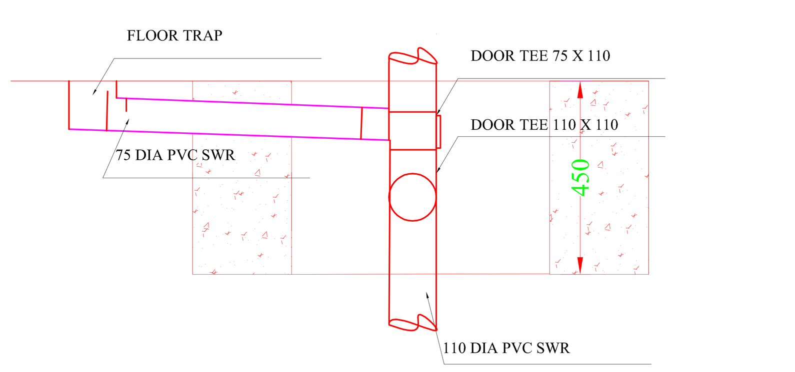
LEGENDS

(arrow)	DIRECTION OF WASTEWATER FLOW
8.465m.	LENGTH OF SEWER LINE UNIT ELEMENT
(dot)	SEWER LINE VENTILATION POLE
MH	SEWER LINE MANHOLE SHAPE & SIZE AS PER DEPTH

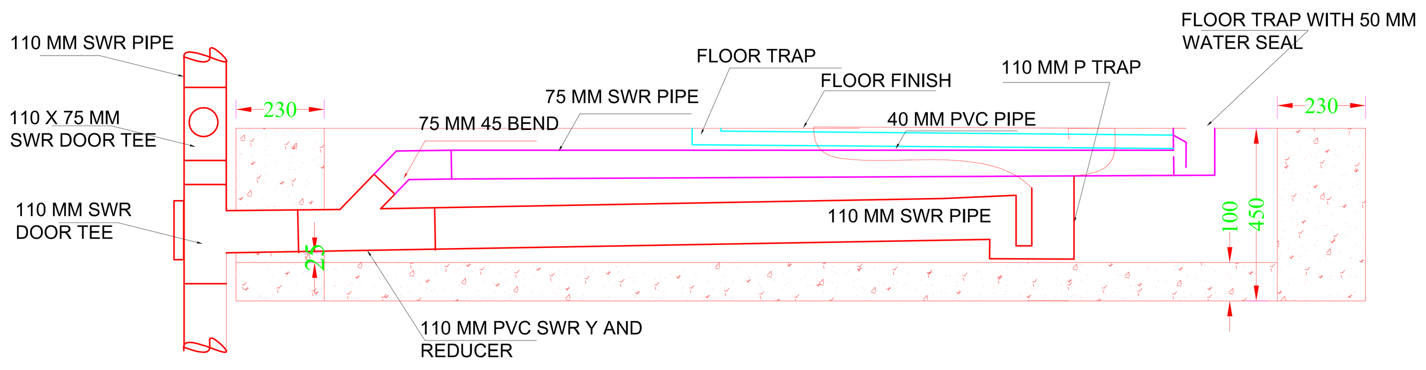
HUDA



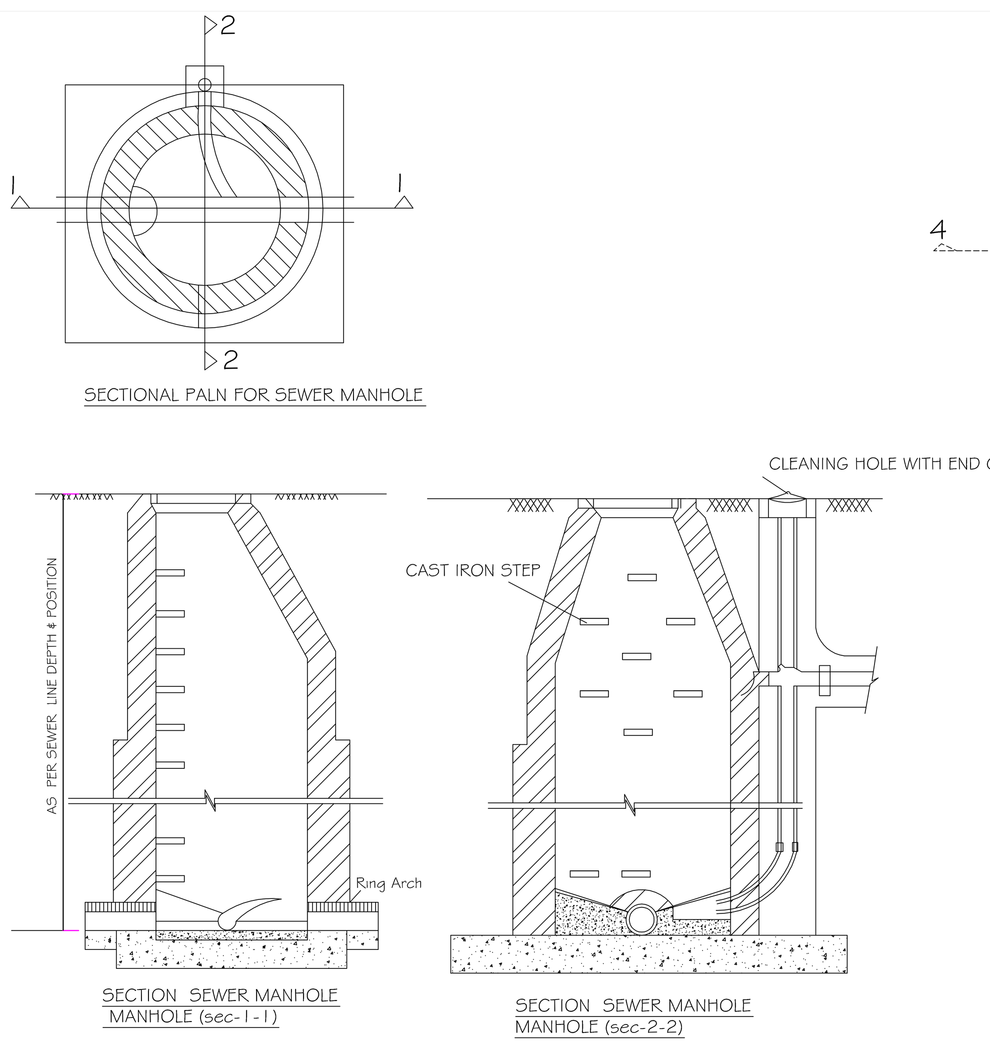
LAYOUT OF SERVICE PIPE LINES FOR FLAT



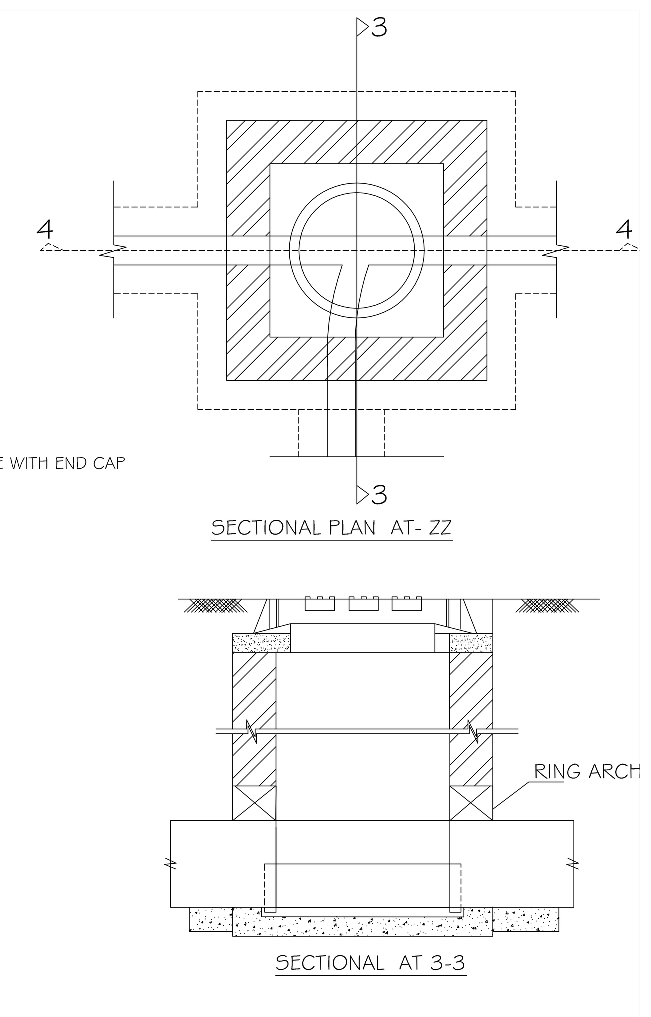
TYPICAL SECTIONAL ELEVATION OF DUCT AT A A



SECTION OF SUNKEN AREA AT B B



DETAIL OF MANHOLE (DEPTH MORE THAN 0.90 M)

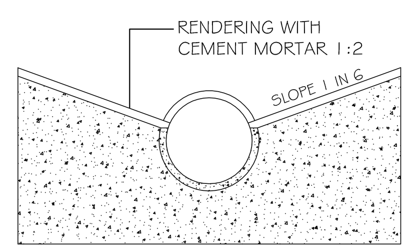


DETAIL OF MANHOLE (DEPTH LESS THAN 0.90 M)

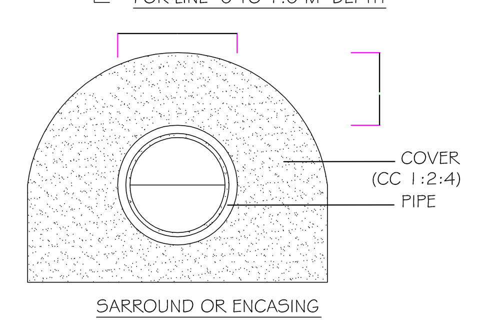
SPECIFICATION

MATERIAL OF CONSTRUCTION - BRICK. /C. C
TOP OF COVER - PRECAST (R.C.C.)
GRADE - M-20
ALL PIPE MATERIAL WITH APPROVED I.S.I MARK

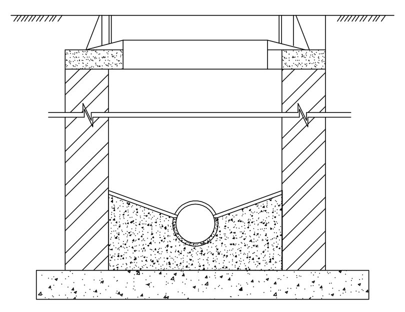
W=D+ 300 MM
Where D is external diameter of pipe
100 mm for pipe under 150 mm nominal dia
150 mm for pipe under 150 mm nominal dia ana over
FOR LINE 0 TO 1.0 M DEPTH



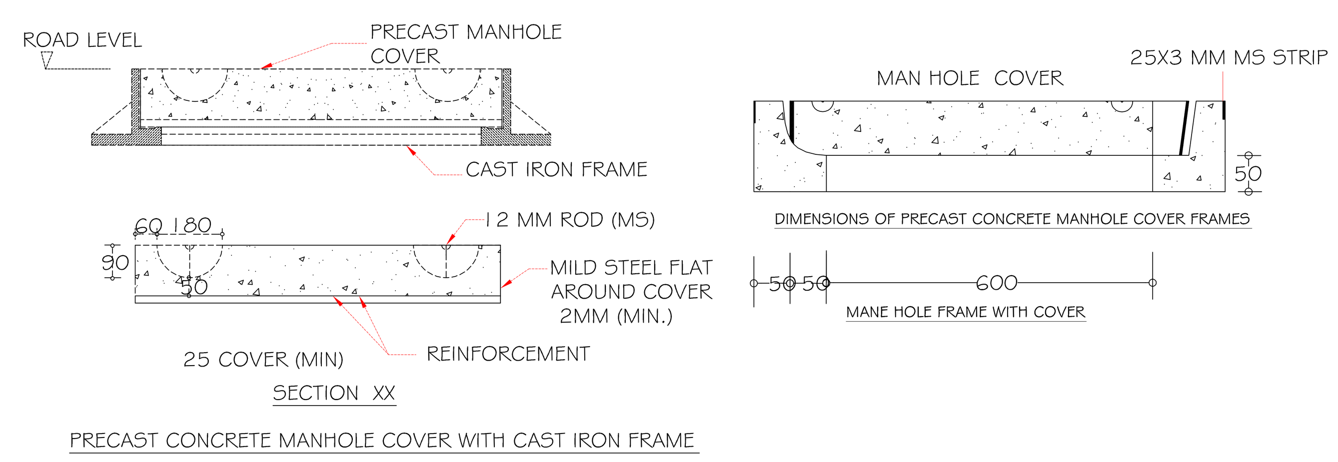
DETAIL OF BENCHING



SARROUND OR ENCASING



SECTIONAL AT4-4



SECTION XX

PRECAST CONCRETE MANHOLE COVER WITH CAST IRON FRAME

DIMENSIONS OF PRECAST CONCRETE MANHOLE COVER FRAMES

Slope ratio 1 in	Manhole	Invert Level in M
262	MH-2.1	-0.450
262	MH-1.1	-0.457
262	MH-1.2	-0.546
262	MH-1.3	-0.579
262	MH-1.4	-0.672
262	MH-1.5	-0.704
262	MH-1.6	-0.747
262	MH-1.7	-0.791
262	MH-1.8	-0.823
262	MH-1.9	-0.848
262	MH-1.10	-0.880
262	MH-1.11	-0.924
262	MH-1.12	-0.967
262	MH-1.13	-1.000
262	MH-1.14	-1.032
262	MH-1.15	-1.076
262	MH-1.16	-1.119
262	MH-1.17	-1.152
262	MH-1.18	-1.184
262	MH-1.19	-1.228
262	MH-1.20	-1.271
262	MH-1.21	-1.304
262	MH-1.22	-1.336
262	MH-1.23	-1.380
262	MH-1.24	-1.423
262	MH-1.25	-1.455
262	MH-1.26	-1.480
262	MH-1.27	-1.513
262	MH-1.28	-1.567
262	MH-1.29	-1.611
262	MH-1.30	-1.643
262	MH-1.31	-1.676
262	MH-1.32	-1.719
262	MH-1.33	-1.763
302	MH-1.34	-1.813
302	MH-1.35	-1.828
302	MH-1.36	-1.866
302	MH-1.37	-1.904
302	MH-1.38	-1.925
302	MH-1.39	-1.994
302	MH-1.40	-2.086
302	MH-1.41	-2.105
302	MH-1.42	-2.125
262	MH-2.1	-0.450
262	MH-1.3	-0.457
262	MH-1.2	-0.45
262	MH-2.6	-0.450
262	MH-2.8	-0.473
262	MH-2.10	-0.51631
262	MH-1.4	-0.5598
262	MH-2.8	-0.45
262	MH-2.10	-0.45

Line Element no	Pipe size in Inches	Slope ratio 1 in	Manhole	Invert Level in M
SL 2.11	8"	262	MH-1.5	-0.450
SL 2.12	8"	262	MH-1.6	-0.450
SL 2.13	8"	262	MH-1.7	-0.450
BRANCH LINE -3				
SL 2.17	8"	262	MH-2.16	-0.450
SL 2.16	8"	262	MH-2.15	-0.457
SL 2.15	8"	262	MH-2.14	-0.489
SL 2.14	8"	262	MH-1.8	-0.4983
SUB BRANCH				
SL 2.19	8"	262	MH-2.18	-0.450
SL 2.18	8"	262	MH-2.14	-0.45668
BRANCH -4				
SL 2.20	8"	262	MH-1.10	-0.45
SL 2.21	8"	262	MH-1.11	-0.45
SL 2.22	8"	262	MH-1.12	-0.450
BRANCH -5				
SL 2.25	8"	262	MH-2.24	-0.45
SL 2.24	8"	262	MH-2.23	-0.457
SL 2.23	8"	262	MH-1.13	-0.489
SUB BRANCH				
SL 2.27	8"	262	MH-2.26	-0.450
SL 2.26	8"	262	MH-2.23	-0.457
BRANCH -6				
SL 2.28	8"	262	MH-1.14	-0.450
SL 2.29	8"	262	MH-1.15	-0.450
SL 2.30	8"	262	MH-1.16	-0.450
BRANCH -7				
SL 2.33	8"	262	MH-2.32	-0.450
SL 2.32	8"	262	MH-2.31	-0.45668
SL 2.31	8"	262	MH-1.17	-0.48948
SUB BRANCH				
SL 2.35	8"	262	MH-2.34	-0.45
SL 2.34	8"	262	MH-2.31	-0.45649
BRANCH -8				
SL 2.36	8"	262	MH-1.18	-0.45
SL 2.37	8"	262	MH-1.19	-0.45
SL 2.38	8"	262	MH-1.20	-0.450
BRANCH -9				
SL 2.41	8"	262	MH-2.40	-0.450
SL 2.40	8"	262	MH-2.39	-0.457
SL 2.39	8"	262	MH-1.21	-0.489
SUB BRANCH				
SL 2.43	8"	262	MH-2.42	-0.45
SL 2.42	8"	262	MH-2.39	-0.47283
BRANCH -10				
SL 2.44	8"	262	MH-1.22	-0.45
SL 2.45	8"	262	MH-1.23	-0.45
SL 2.46	8"	262	MH-1.24	-0.45

Line Element no	Pipe size in Inches	Slope ratio 1 in	Manhole	Invert Level in M
SUB BRANCH -10				
SL 2.49	8"	262	MH-2.48	-0.450
SL 2.48	8"	262	MH-2.47	-0.457
BRANCH -11				
SL 2.52	8"	262	MH-2.51	-0.450
SL 2.51	8"	262	MH-2.50	-0.457
SL 2.50	8"	262	MH-2.47	-0.489
SL 2.47	8"	262	MH-1.26	-0.49837
BRANCH 12				
SL 2.53	8"	262	MH-1.27	-0.450
SL 2.54	8"	262	MH-1.28	-0.450
SL 2.55	8"	262	MH-1.29	-0.45
BRANCH-13				
SL 2.58	8"	262	MH-2.57	-0.45
SL 2.57	8"	262	MH-2.56	-0.45668
SL 2.56	8"	262	MH-1.30	-0.489
SUB BRANCH				
SL 2.60	8"	262	MH-2.59	-0.45
SL 2.59	8"	262	MH-2.56	-0.457
BRANCH -14				
SL 2.61	8"	262	MH-1.31	-0.450
SL 2.62	8"	262	MH-1.32	-0.450
SL 2.63	8"	262	MH-1.33	-0.450
BRANCH 15				
SL 2.72	8"	262	MH-2.71	-0.45
SL 2.71	8"	262	MH-2.69	-0.457
SL 2.69	8"	262	MH-2.65	-0.500
SL 2.65	8"	262	MH-2.64	-0.53285
SL 2.64	8"	262	MH-1.34	-0.54136
SUB BRANCH				
SL 2.68	8"	262	MH-2.67	-0.450
SL 2.67	8"	262	MH-2.65	-0.457
BRANCH 16				
SL 2.70	8"	262	MH-2.69	-0.450
SL 2.66	8"	262	MH-2.64	-0.450
SL 2.73	8"	262	MH-1.35	-0.450
SL 2.74	8"	262	MH-1.36	-0.450
SL 2.75	8"	262	MH-1.37	-0.450
BRANCH 17				
SL 2.85	8"	262	MH-2.83	-0.450
SL 2.83	8"	262	MH-2.80	-0.470
SL 2.80	8"	262	MH-2.77A	-0.559
SL 2.77A	8"	262	MH-2.75A	-0.634
SL 2.75A	8"	262	MH-1.39	-0.722
SUB -BRANCH				
SL 2.84	8"	262	MH-2.83	-0.45
SL 2.81	8"	262	MH-2.80	-0.45
SL 2.78	8"	262	MH-2.77A	-0.45
SL 2.76	8"	262	MH-2.75A	-0.45
SL 2.82	8"	262	MH-2.80	-0.45
SL 2.79	8"	262	MH-2.77A	-0.45
SL 2.77	8"	262	MH-2.75A	-0.45

Line Element no	Pipe size in Inches	Slope ratio 1 in	Manhole	Invert Level in M
BRANCH 18				
SL 2.109	8"	262	MH-2.108	-0.450
SL 2.108	8"	262	MH-2.106	-0.457
SL 2.106	8"	262	MH-2.103	-0.500
SL 2.103	8"	262	MH-2.99	-0.526
SL 2.99	8"	262	MH-2.97	-0.569
SL 2.97	8"	262	MH-2.94	-0.612
SL 2.94	8"	262	MH-2.90	-0.648
SL 2.90	8"	262	MH-2.86	-0.683
SL 2.86	8"	262	MH-1.40	-0.726
SL 2.110	8"	262	MH-1.41	-0.450
SUB - BRANCH				
SL 2.107	8"	262	MH-2.106	-0.450
SL 2.104	8"	262	MH-2.103	-0.450
SL 2.102	8"	262	MH-2.99	-0.450
SL 2.101	8"	262	MH-2.99	-0.450
SL 2.98	8"	262	MH-2.97	-0.450
SL 2.96	8"	262	MH-2.94	-0.450
SL 2.93	8"	262	MH-2.90	-0.450
SL 2.91	8"	262	MH-2.90	-0.450
SL 2.89	8"	262	MH-2.86	-0.450
SL 2.87	8"	262	MH-2.86	-0.450
BRANCH 19				
SL 2.111	8"	262	MH-2.111	-0.450
SL 2.43	8"	262	MH-1.43	-0.457
SUB - BRANCH				
SL 2.118	8"	262	MH-2.117	-0.450
SL 2.117	8"	262	MH-2.115	-0.4565
SL 2.116	8"	262	MH-2.115	-0.45
SL 2.115	8"	262	MH-2.114	-0.5457
SL 2.112	8"	262	MH-2.113	-0.45
SL 2.113	8"	262	MH-2.114	-0.4565
SL 2.114	8"	262	MH-2.94	-0.5819

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SHEET NO. : 1/1

DRG.NO.: A086-ES/SW/D1

DATE: 24.01.09

DRN.BY:

CHKD.BY:

REVISION NOTES:

No.	DATED	DISCRIPTION

PROJECT:

EWS HOUSING SCHEME AT SECTOR - 47, GURGAON FOR HUDA.

DRG. TITLE:

SEWER DARINAGE LAYOUT & DETAILS OF APPARTANCES

DESIGN AND BUILD CONTRACTOR

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