



24M WIDE ROAD

1100 EXCESS TREATED WATER
TO DRAINAGE SYSTEM

EXTERNAL LIGHTING
FEEDER PILLAR - 1

1100 EXCESS TREATED WATER
TO DRAINAGE SYSTEM

Drainage
Top LVL = 28.70
Inv LVL = 28.70

Drainage
Top LVL = 28.70
Inv LVL = 28.70

ROAD LVL. +450 MM

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INTERNAL PLUMBING DETAIL
ALL MANHOLE SIZE = 600x600
ALL GULLY TRAP SIZE = 300x300
PIPE DIA = 1500
SLOPE 1 IN 100

DETAILS OF SEWER LINES									
Manhole No.	Length	Dia.	MH Top		MH Top		MH Top		Depth
			Slope	Level	Invert	Level	Depth	Invert	
From	To	(mm)	1 in	(m)	(m)	(m)	(m)	(m)	(m)
S1	S2	33	250	200	0.45	-0.75	1.20	0.45	-0.92
S2	S3	35	250	200	0.45	-0.92	1.37	0.45	-1.09
S3	S4	56	250	200	0.45	-1.09	1.54	0.45	-1.31
S4	S5	33	250	200	0.45	-1.31	1.76	0.45	-1.38
S5	S7	16	250	200	0.45	-1.31	1.76	0.45	-0.97
S6	S7	43	250	200	0.45	-1.38	1.83	0.45	-1.41
S7	S8	8	250	250	0.45	-1.41	1.86	0.45	-1.48
S8	S10	18	250	250	0.45	-1.41	1.86	0.45	-1.48
S9	S10	45	250	200	0.45	-0.75	1.20	0.45	-0.98
S10	STP	5	250	250	0.45	-1.48	1.93	0.45	-1.50

SEWAGE TREATMENT PLANT
TOTAL CAP - 280 KLD
2 MODULES OF 140 KLD EACH

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S. No.	SYMBOL	DESCRIPTION
1.		MANHOLE
2.		SEWER LINE
3.		BASMENT RETAINING WALL

4.	FL.	FORMATION LEVEL
5.	IL.	INVERT LEVEL
6.	C.L.	CONNECTION LEVEL
7.		
8.		
9.		

NOTES : SEWERAGE SYSTEM

- THE SIZE OF MANHOLE SHALL BE AS UNDER (INNER SIZES)
 - Up to 500 m.m. depth 600 x 600 m.m.
 - 500 to 1500 m.m. depth 900 m.m. dia.
 - 1500 to 2250 m.m. depth 1200 m.m. dia.
 - Above 2250 m.m. depth 1500 m.m. dia.
- The levels of sewer lines has been worked out on the basis of existing ground level and for certain pipe lengths between two manholes. The invert levels has to be strictly followed. However, the slope of line may be slightly changed.
- For any discrepancy / omission the matter should refer to the consultants before execution.
- Manholes shall be provided at following places :-
 - At the start of each sewer line.
 - At every junction and position where there is change of size, gradient and alignment.
 - At not more than 45 meter interval to stippled length.
- Where the diameter of pipe is increased the crown of the pipe shall be fixed at the same level and necessary slope shall be given to the invert of the manhole diameter.
- The structural design of manholes / pipe bedding has to be done for local field conditions such as filled up soil / black cotton soil / high sub soil conditions.
- This drawing shall be read along with the detailed landscape plan & ground floor plan of respective building for exact location of appurtenances / man holes etc.
- Sewer line under the road shall be excavated with 150 mm. pcc 1:2:4 around.
- Manhole cover should be finished with finished formation level as per landscape drawing. The cover of manholes shall be square as per appurtenances drawing & should be coordinate with landscape drawing.
- This drawing shall be coordinate with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.
- Material of pipe :- R.C.C. Pipe 21 pipe with rubber ring joint
- In the areas subject to subsidence or filled up soil (due to loose excavation at site for foundation or other reasons) the manholes shall be constructed on concrete foundation or concrete cable supported on piles or suitable foundation as per structural design.
- In case where sewers are laid in high sub soil conditions manholes should be constructed in r.c.c. grade m25.
- The width of trench for sewer and drainage should be 600mm. (600 dia. of pipe).
- Storage / Inventory should be adequate to prevent clogging of the trench walls of subsidence of areas adjacent to the trench, an engineer-in-charge in consultation with a structural engineer should provide adequate arrangement to prevent clogging.

REFERENCE LEVEL
100.00 = 0.00

Rev. No.	Date	Revision
R0	21-09-2016	ISSUED AS G.C.F.C

Project :
PROPOSED SAMAJWADI AWASTHYA YOUNIA
AT KOYAL ENCLAVE, GHAZIABAD

Title :
LAYOUT PLAN (GH-11812)

Subtitle :
EXTERNAL SEWERAGE SYSTEM

Drawing Released For :

- ☐ APPROVAL
- ☐ TENDER
- ☐ ADVANCE COPY
- ☒ CONSTRUCTION

Dwg. No : SMAY / ES - 01

Scale : 1 : 350

Date : Sep. 2015

Cld By : Anand Kamboj

Design By : Nilesh Kumar

Architects : ANB CONSULTANTS

Architects : ANB CONSULTANTS

Services Consultant : Consummate Engineering Services (P) Ltd.

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