

**LEGEND :**

S. No.	SYMBOL	DESCRIPTION
1.	M.H.	MANHOLE
2.	—	SEWER LINE
3.	○	600 x 600 x 6 MM G.I. PLATE EARTHING
4.	▽	MAINTENANCE FREE EARTHING
5.	---	BASEMENT RETAINING WALL
6.		

- NOTES : SEWAGE**
- THE SIZE OF MANHOLE SHALL BE AS UNDER ( INNER SIZES )
    - a) UPTO 900 M.M. DEPTH 600 X 600 M.M.
    - b) 900 TO 1650 M.M. DEPTH 900 M.M. DIA.
    - c) 1650 TO 2250 M.M. DEPTH 1200 M.M. DIA.
    - d) ABOVE 2250 M.M. DEPTH 1500 M.M. DIA.
  - THE LEVELS OF SEWER LINES HAS BEEN WORKED OUT ON THE BASIS OF CERTAIN 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.
  - MANHOLE SHALL BE PROVIDED AT FOLLOWING PLACES -
    - a) AT THE START OF EACH SEWER LINE.
    - b) AT EVERY JUNCTION AND POSITION WHERE THERE IS CHANGE OF SIZE, GRADIENT AND ALIGNMENT.
    - c) AT NOT MORE THAN 45 METER INTERVAL IN STRAIGHT 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 IN THE INVERT OF THE MANHOLE CHAMBER.
  - 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 GROUND FLOOR PLAN OF RESPECTIVE BUILDING FOR EXACT LOCATION OF APPURTENANCES / MANHOLES ETC.
  - SEWER LINE UNDER THE ROAD SHALL BE ENCASED WITH 150 TH, PCC 1:2:4 ALLROUND.
  - MANHOLE COVER SHOULD BE FINISHED WITH FINISHED FORMATION LEVEL AS PER LANDSCAPE DRAWING.
  - THIS DRAWING SHALL BE COORDINATED WITH OTHER DRAWING I.E. ARCHITECTURE, STRUCTURAL, ELECTRICAL, LANDSCAPE & OTHER RELEVANT DRAWING.
  - MATERIAL OF PIPE :- RCC (RP 2) PIPE
  - IN THE AREAS SUBJECT TO SUBSIDENCE OR FILLED UP SOIL (DUE TO EXCESS EXCAVATION AT SITE FOR CONSTRUCTION OF BASEMENTS) THE SEWER LINES & MANHOLE SHOULD BE LAID ON SUITABLE SUPPORT OR CONCRETE CRADLE SUPPORTED ON PILES OR SUITABLE FOUNDATION AS PER STRUCTURAL DESIGN.
  - IN CASE WHERE SEWERS ARE LAID IN HIGH SUBSOIL CONDITIONS MANHOLES SHOULD BE CONSTRUCTED IN R.C.C. GARDE M-25.
  - THE WIDTH OF TRENCH FOR SEWER AND DRAINAGE SHOULD BE D+400MM. (D= O.D. OF PIPE).
  - SHORING / TIMBERING SHOULD BE ADEQUATE TO PREVENT CAVING-IN 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 CAVING-IN.

Rev. No.	Date	Revision
R4	15.Jan.2015	SEWERAGE BYE PASS DETAILS ADDED.
R3	20.June.2013	TOWER-L HEADER LINE ADDED
R2	06.MAR.2013	ISSUED G.F.C.
R1	11.FEB.2013	ISSUED ADVANCE COPY

Project : **PROPOSED GROUP HOUSING AT PLOT NO.-7B, SECTOR- 137, NOIDA, FOR - AJNARA CONSTRUCTIONS**

Title : **SITE PLAN**

Subtitle : **EXTERNAL SEWERAGE SYSTEM**

Drawing Released For :  
 APPROVAL     SUBMISSION  
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Drg. No. : **DD-00 / ES-01 / R5**

Scale : **1:475**    Drawn By : **Amit Kamboj**

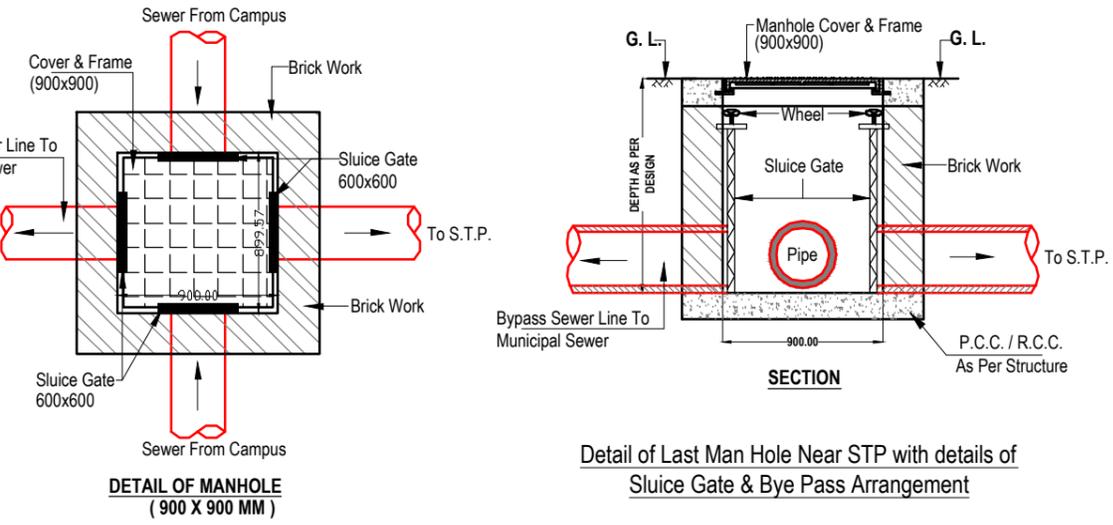
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THE SEWAGE AND DRAINAGE MANHOLE LOCATIONS IN FRONT OF TOWER-K AS SHOWN IN THE GFC IS TENTATIVE. THEREFORE THE SITE EXECUTION TEAM HAS TO MAKE SURE THAT ONCE THE TOWER-K WORK IS BEING EXECUTED THEY NEED TO INFORM OUR OFFICE FOR THE EXACT LOCATION OF THE SEWAGE AND DRAINAGE MANHOLES.



**DETAILS OF SEWER LINES**

Manhole No.	Length (m)	Dia. (mm)	Slope 1 in	MH Top Level		Depth	MH Top Level		Depth	
				(m)	(m)		(m)	(m)		
From S1	To S2	34	250	160	0.75	-1.45	2.20	0.75	-1.66	2.41
S2	S3	48	250	200	0.75	-1.66	2.41	0.75	-1.90	2.65
S3	S4	80	250	250	0.75	-1.90	2.65	0.75	-2.22	2.97
S4	S5	73	250	250	0.75	-2.22	2.97	0.75	-2.51	3.26
S5	S6	86	250	250	0.75	-2.51	3.26	0.75	-2.86	3.61
S6	S12	38	250	250	0.75	-2.86	3.61	0.75	-3.01	3.76
S7	S8	61	250	160	0.75	-1.45	2.20	0.75	-1.83	2.58
S8	S9	67	250	200	0.75	-1.83	2.58	0.75	-2.17	2.92
S9	S10	63	250	250	0.75	-2.17	2.92	0.75	-2.42	3.17
S10	S11	77	250	250	0.75	-2.42	3.17	0.75	-2.73	3.48
S11	S12	75	250	250	0.75	-2.73	3.48	0.75	-3.03	3.78
S12	S.T.P.	5	300	250	0.75	-3.06	3.81	0.75	-3.08	3.83