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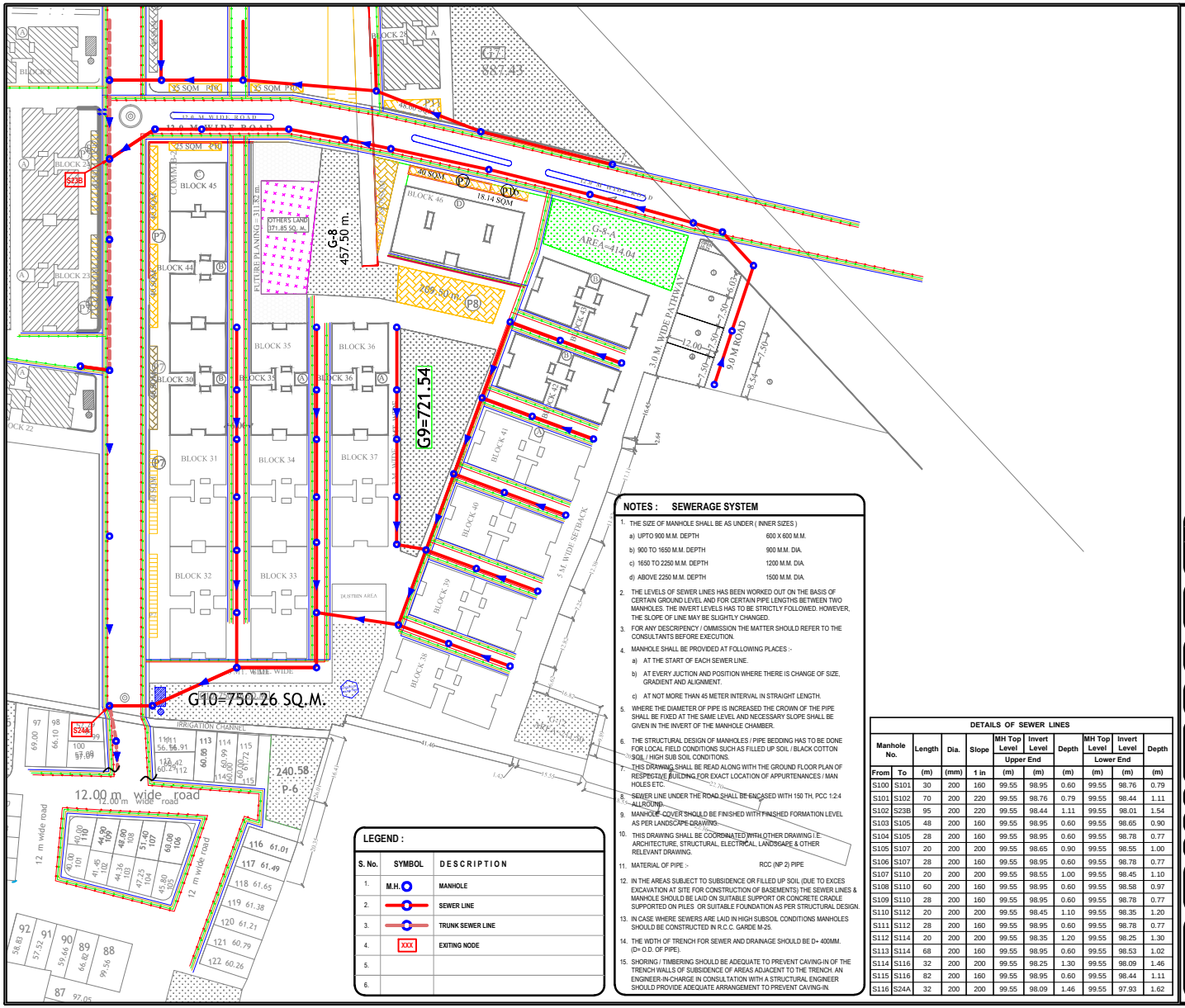


LEGEND :

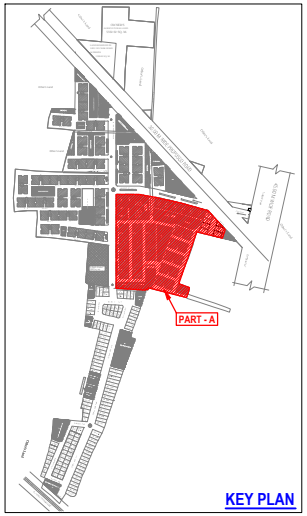
S. No.	SYMBOL	DESCRIPTION
1.	M.H.	MANHOLE
2.		SEWER LINE
3.		TRUNK SEWER LINE
4.	XXX	EXITING NODE
5.		
6.		

NOTES : SEWERAGE SYSTEM

1. 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.
2. 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.
3. FOR ANY DESCRIPENCY / OMMISSION THE MATTER SHOULD REFER TO THE CONSULTANTS BEFORE EXECUTION.
4. MANHOLE SHALL BE PROVIDED AT FOLLOWING PLACES :-
   a) AT THE START OF EACH SEWER LINE.
   b) AT EVERY JUCTION AND POSITION WHERE THERE IS CHANGE OF SIZE, GRADIENT AND ALIGNMENT.
   c) AT NOT MORE THAN 45 METER INTERVAL IN STRAIGHT LENGTH.
5. 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.
6. 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.
7. THIS DRAWING SHALL BE READ ALONG WITH THE GROUND FLOOR PLAN OF RESPECTIVE BUILDING FOR EXACT LOCATION OF APPURTENANCES / MAN HOLES ETC.
8. SEWER LINE UNDER THE ROAD SHALL BE ENCASED WITH 150 TH, PCC 1:2:4 ALLROUND.
9. MANHOLE COVER SHOULD BE FINISHED WITH FINISHED FORMATION LEVEL AS PER LANDSCAPE DRAWING.
10. THIS DRAWING SHALL BE COORDINATED WITH OTHER DRAWING I.E. ARCHITECTURE, STRUCTURAL, ELECTRICAL, LANDSCAPE & OTHER RELEVANT DRAWING.
11. MATERIAL OF PIPE :- RCC (NP 2) PIPE
12. IN THE AREAS SUBJECT TO SUBSIDENCE OR FILLED UP SOIL (DUE TO EXCES 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.
13. IN CASE WHERE SEWERS ARE LAID IN HIGH SUBSOIL CONDITIONS MANHOLES SHOULD BE CONSTRUCTED IN R.C.C. GARDE M-25.
14. THE WDTH OF TRENCH FOR SEWER AND DRAINAGE SHOULD BE D+ 400MM. (D= O.D. OF PIPE).
15. 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.

DETAILS OF SEWER LINES

Manhole No.		Length	Dia.	Slope	MH Top Level	Invert Level	Depth	MH Top Level	Invert Level	Depth
					Upper End			Lower End		
From	To	(m)	(mm)	1 in	(m)	(m)	(m)	(m)	(m)	(m)
S100	S101	30	200	160	99.55	98.95	0.60	99.55	98.76	0.79
S101	S102	70	200	220	99.55	98.76	0.79	99.55	98.44	1.11
S102	S23B	95	200	220	99.55	98.44	1.11	99.55	98.01	1.54
S103	S105	48	200	160	99.55	98.95	0.60	99.55	98.65	0.90
S104	S105	28	200	160	99.55	98.95	0.60	99.55	98.78	0.77
S105	S107	20	200	200	99.55	98.65	0.90	99.55	98.55	1.00
S106	S107	28	200	160	99.55	98.95	0.60	99.55	98.78	0.77
S107	S110	20	200	200	99.55	98.55	1.00	99.55	98.45	1.10
S108	S110	60	200	160	99.55	98.95	0.60	99.55	98.58	0.97
S109	S110	28	200	160	99.55	98.95	0.60	99.55	98.78	0.77
S110	S112	20	200	200	99.55	98.45	1.10	99.55	98.35	1.20
S111	S112	28	200	160	99.55	98.95	0.60	99.55	98.78	0.77
S112	S114	20	200	200	99.55	98.35	1.20	99.55	98.25	1.30
S113	S114	68	200	160	99.55	98.95	0.60	99.55	98.53	1.02
S114	S116	32	200	200	99.55	98.25	1.30	99.55	98.09	1.46
S115	S116	82	200	160	99.55	98.95	0.60	99.55	98.44	1.11
S116	S24A	32	200	200	99.55	98.09	1.46	99.55	97.93	1.62



rev. no.	date	revision
R0	18-02-2015	ISSUED AS G.F.C.

project
DINESH NAGAR
AT PILAKHUWA., DISTT.- GAZIABAD, UP

title
LAYOUT PLAN (PART - A)

subtitle
EXTERNAL SEWERAGE SYSTEM

drawing released for
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- ■ CONSTRUCTION

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