



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			Upper End	Lower End		
From	To	(m)	(mm)	1 in	(m)	(m)	(m)	(m)	(m)	(m)	(m)
S1	S2	66	250	200	0.60	-1.10	1.70	0.60	-1.43	2.03	2.03
S2	S3	56	250	250	0.60	-1.43	2.03	0.60	-1.65	2.25	2.25
S3	S4	78	250	250	0.60	-1.65	2.25	0.60	-1.97	2.57	2.57
S4	S5	47	250	250	0.60	-1.97	2.57	0.60	-2.15	2.75	2.75
S5	S6	55	250	300	0.60	-2.15	2.75	0.60	-2.34	2.94	2.94
S6	S7	27	250	300	0.60	-2.34	2.94	0.60	-2.43	3.03	3.03
S7	S8	69	250	300	0.60	-2.43	3.03	0.60	-2.66	3.26	3.26
S8	S9	55	250	300	0.60	-2.66	3.26	0.60	-2.84	3.44	3.44
S9	S10	63	300	350	0.60	-2.89	3.49	0.60	-3.07	3.67	3.67
S10	S11	74	300	350	0.60	-3.07	3.67	0.60	-3.28	3.88	3.88
S11	S12	66	300	350	0.60	-3.28	3.88	0.60	-3.47	4.07	4.07
S12	S13	78	300	350	0.60	-3.47	4.07	0.60	-3.69	4.29	4.29
S13	S24	12	300	350	0.60	-3.69	4.29	0.60	-3.73	4.33	4.33
S14	S15	74	250	250	0.60	-0.70	1.30	0.60	-1.00	1.60	1.60
S15	S16	37	250	250	0.60	-1.00	1.60	0.60	-1.14	1.74	1.74
S16	S17	49	250	250	0.60	-1.14	1.74	0.60	-1.34	1.94	1.94
S17	S18	71	250	250	0.60	-1.34	1.94	0.60	-1.62	2.22	2.22
S18	S19	96	250	250	0.60	-1.34	1.94	0.60	-1.72	2.32	2.32
S19	S20	80	250	250	0.60	-1.72	2.32	0.60	-2.04	2.64	2.64
S20	S21	39	250	250	0.60	-2.04	2.64	0.60	-2.20	2.80	2.80
S21	S22	81	250	250	0.60	-2.20	2.80	0.60	-2.52	3.12	3.12
S22	S23	24	250	250	0.60	-2.52	3.12	0.60	-2.62	3.22	3.22
S23	S24	87	250	250	0.60	-2.62	3.22	0.60	-2.97	3.57	3.57
S24	STP	6	300	350	0.60	-3.73	4.33	0.60	-3.74	4.34	4.34

EXACT LOCATION OF SEWER MANHOLE TO BE CO-ORDINATED WITH LANDSCAPE

LEGEND :		
S. No.	SYMBOL	DESCRIPTION
1	M.H.	MANHOLE
2	---	SEWER LINE
3	---	BASEMENT RETAINING WALL
4	I.R.L. (+100)	INTERNAL ROAD LEVEL
	O.R.L. (+100)	OUTSIDE ROAD LEVEL

- NOTES : SEWERAGE SYSTEM**
- THE SIZE OF MANHOLE SHALL BE AS UNDER (INNER SIZES)
 - (i) UP TO 900 M.M. DEPTH 800 X 600 M.M.
 - (ii) 900 TO 1500 M.M. DEPTH 900 M.M. DIA.
 - (iii) 1500 TO 2250 M.M. DEPTH 1200 M.M. DIA.
 - (iv) 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 :
 - (i) AT THE START OF EACH SEWER LINE.
 - (ii) AT EVERY JUNCTION AND POSITION WHERE THERE IS CHANGE OF SIZE, GRADE AND ALIGNMENT.
 - (iii) 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 APERTURES / MAN HOLES ETC.
 - SEWER LINE UNDER THE ROAD SHALL BE ENCASED WITH 150 TH. RCC 1:2:4 ALLROUND.
 - MANHOLE COVER SHOULD BE FINISHED WITH FINISHED FORMATION LEVEL AS PER LANDSCAPE DRAWING.
 - THIS DRAWING SHALL BE CO-ORDINATED WITH OTHER DRAWING I.E. ARCHITECTURE, STRUCTURAL, ELECTRICAL, LANDSCAPE & OTHER RELEVANT DRAWINGS.
 - MATERIAL OF PIPE :
 - RCC (RP 2) PIPE (RING JOINTING)
 - 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 SUIABLE SUPPORT OR CONCRETE CRADLE SUPPORTED ON PILES OR SUIABLE FOUNDATION AS PER STRUCTURAL DESIGN.
 - IN CASE WHERE SEWERS ARE LAID IN HIGH SUBSOIL CONDITIONS MANHOLES SHOULD BE CONSTRUCTED IN R.C.C. (GRADE M-25).
 - THE WIDTH OF TRENCH FOR SEWER AND DRAINAGE SHOULD BE 2-400MM (2-600 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
R1 25 Aug. 2016 SEWAGE TANK WITH TRANSFER PUMP ADDED AS PER CLIENT REQUIREMENT.
R2 07 Aug. 2013 REVISED PLAN AS PER ARCH.
R3 29 July 2013 REVISED PLAN AS PER ARCH.

Project :
**GARDENIA GLORY
AT SECTOR - 46, NOIDA**

Title :
LAYOUT PLAN

Subtitle :
EXTERNAL SEWERAGE SYSTEM

Drawing Released For :
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Drg. No. : G-00 / ES-01 / R3

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