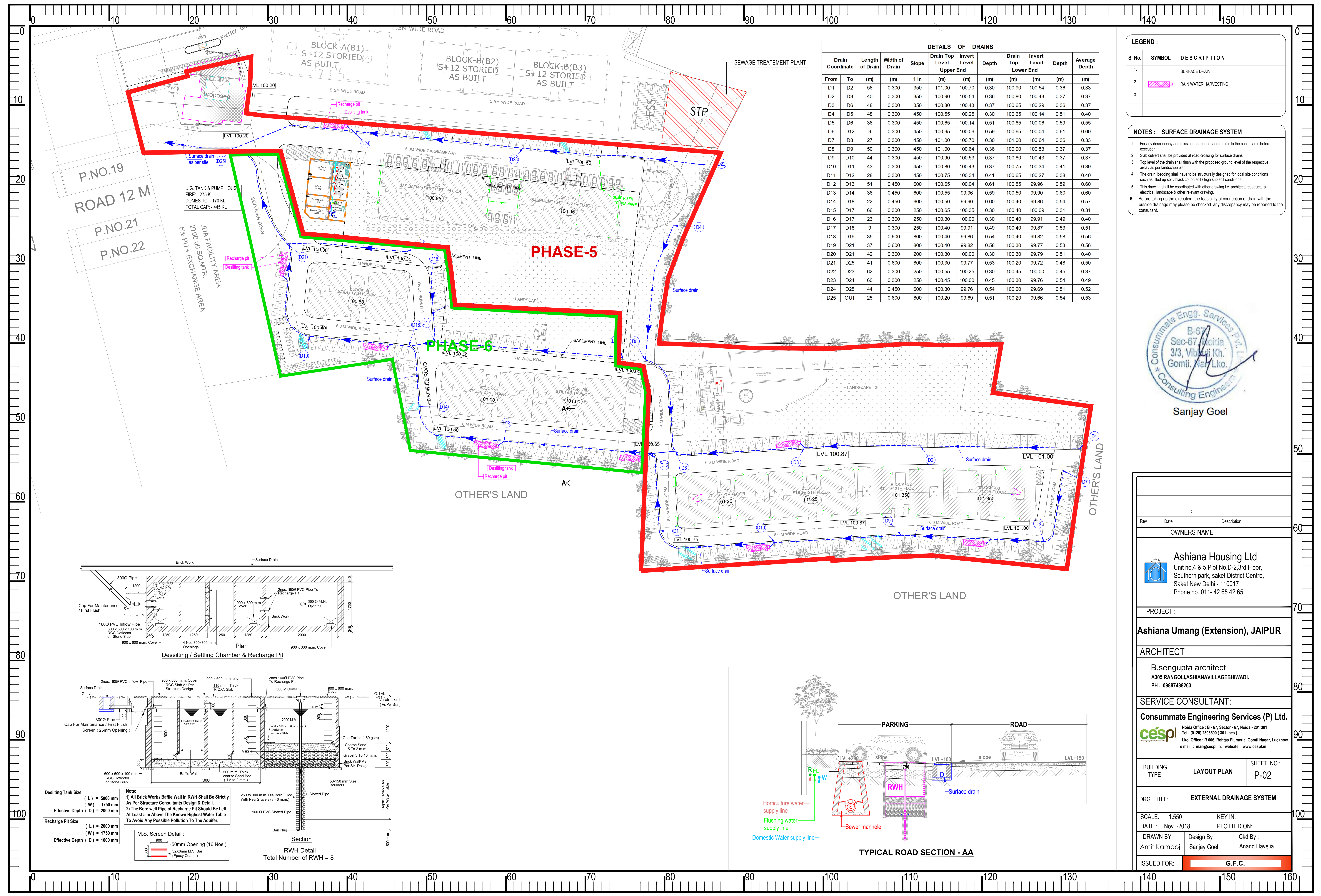
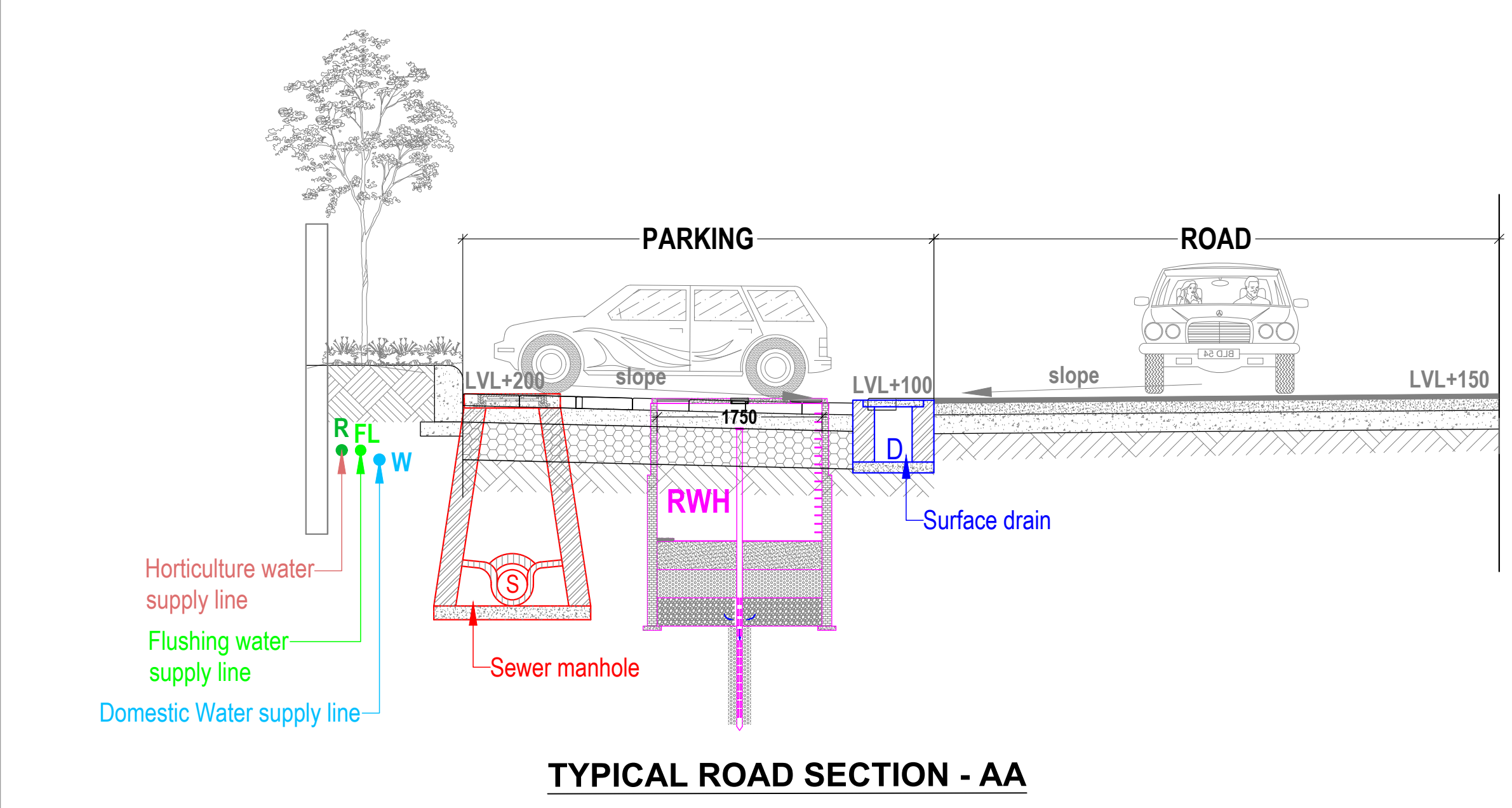
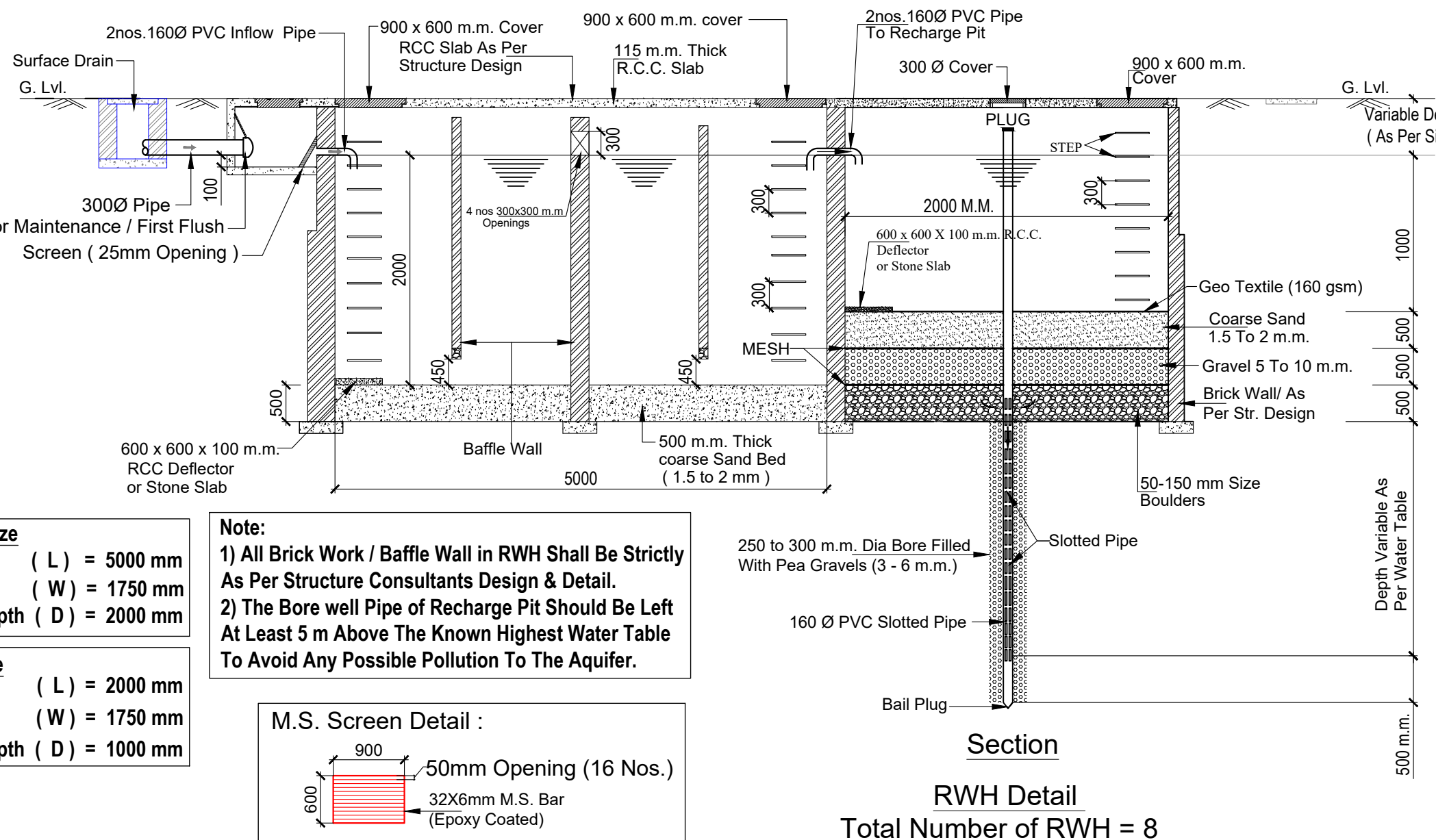
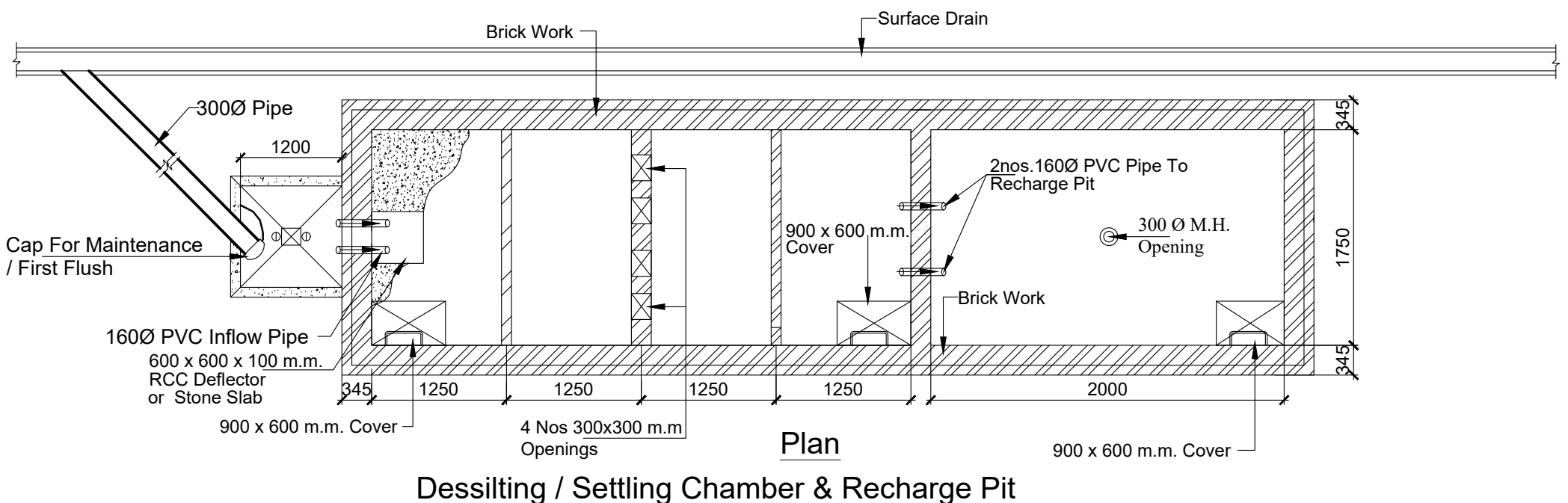




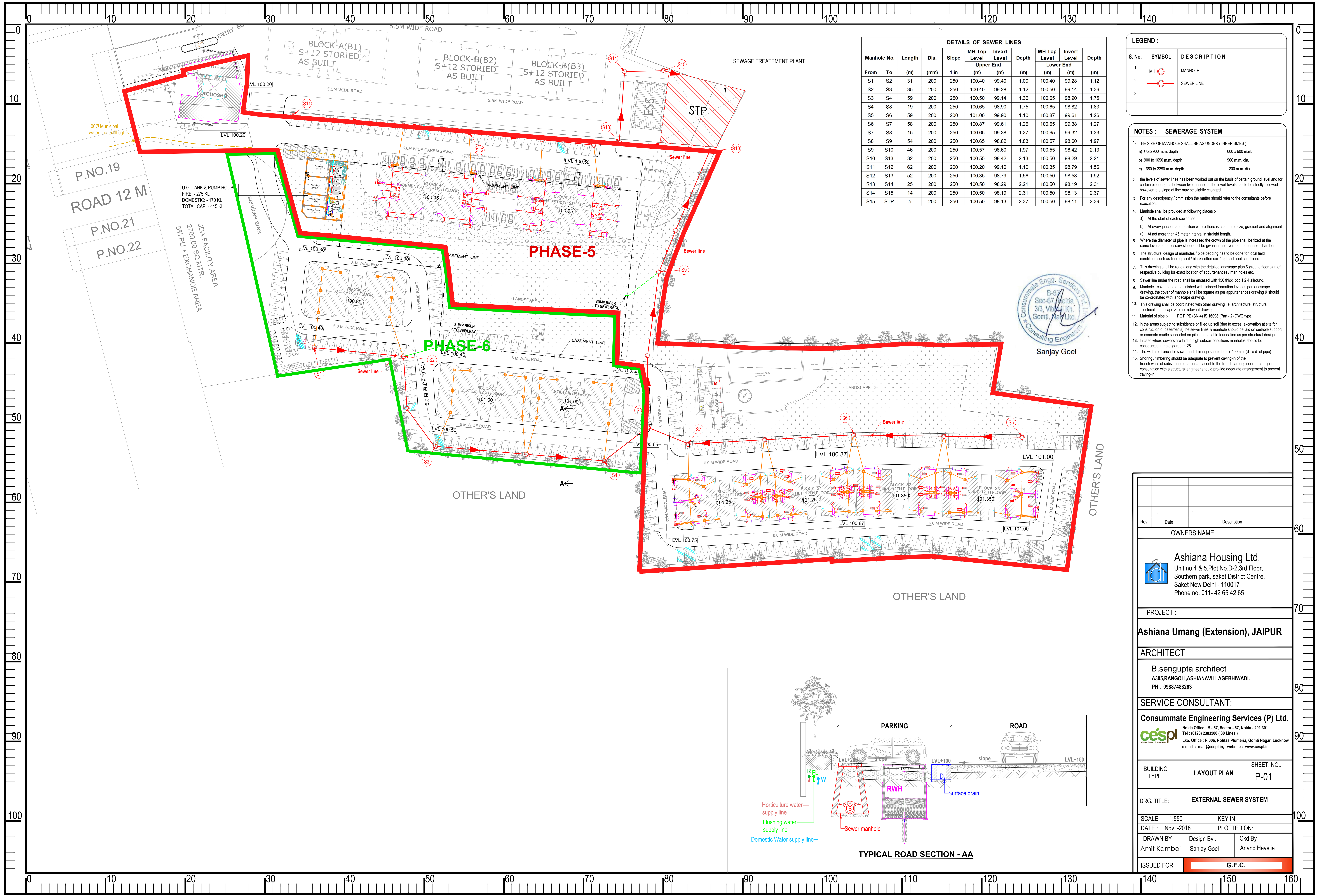
DETAILS OF DRAINS										
Drain Coordinate		Length of Drain (m)	Width of Drain (m)	Slope 1 in	Drain Top Level			Drain Invert Level		
From	To				Upper End			Lower End		
(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)	(m)
D1	D2	56	0.300	350	101.00	100.70	0.30	100.90	100.54	0.36
D2	D3	40	0.300	350	100.90	100.54	0.36	100.80	100.43	0.37
D3	D6	48	0.300	350	100.80	100.43	0.37	100.65	100.29	0.36
D4	D5	48	0.300	450	100.55	100.25	0.30	100.65	100.14	0.51
D5	D6	36	0.300	450	100.65	100.14	0.51	100.65	100.06	0.59
D6	D12	9	0.300	450	100.65	100.06	0.59	100.65	100.04	0.61
D7	D8	27	0.300	450	101.00	100.70	0.30	101.00	100.64	0.36
D8	D9	50	0.300	450	101.00	100.64	0.36	100.90	100.53	0.37
D9	D10	44	0.300	450	100.90	100.53	0.37	100.80	100.43	0.37
D10	D11	43	0.300	450	100.80	100.43	0.37	100.75	100.34	0.41
D11	D12	28	0.300	450	100.75	100.34	0.41	100.65	100.27	0.38
D12	D13	51	0.450	600	100.65	100.04	0.61	100.55	99.96	0.59
D13	D14	36	0.450	600	100.55	99.96	0.59	100.50	99.90	0.60
D14	D18	22	0.450	600	100.50	99.90	0.60	100.40	99.86	0.54
D15	D17	66	0.300	250	100.65	100.35	0.30	100.40	100.09	0.31
D16	D17	23	0.300	250	100.30	100.00	0.30	100.40	99.91	0.49
D17	D18	9	0.300	250	100.40	99.91	0.49	100.40	99.87	0.53
D18	D19	35	0.600	800	100.40	99.86	0.54	100.40	99.82	0.58
D19	D21	37	0.600	800	100.40	99.82	0.58	100.30	99.77	0.53
D20	D21	42	0.300	200	100.30	100.00	0.30	100.30	99.79	0.51
D21	D25	41	0.600	800	100.30	99.77	0.53	100.20	99.72	0.48
D22	D23	62	0.300	250	100.55	100.25	0.30	100.45	100.00	0.45
D23	D24	60	0.300	250	100.45	100.00	0.45	100.30	99.76	0.54
D24	D25	44	0.450	600	100.30	99.76	0.54	100.20	99.69	0.51
D25	OUT	25	0.600	800	100.20	99.69	0.51	100.20	99.66	0.54

LEGEND :		
S. No.	SYMBOL	DESCRIPTION
1.		SURFACE DRAIN
2.		RAIN WATER HARVESTING
3.		

- NOTES : SURFACE DRAINAGE SYSTEM
- For any discrepancy / omission the matter should refer to the consultants before execution.
 - Slab culvert shall be provided at road crossing for surface drains.
 - Top level of the drain shall flush with the proposed ground level of the respective area / as per landscape plan.
 - The drain bedding shall have to be structurally designed for local site conditions such as filled up soil / black cotton soil / high sub soil conditions.
 - This drawing shall be coordinated with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.
 - Before taking up the execution, the feasibility of connection of drain with the outside drainage may please be checked. any discrepancy may be reported to the consultant.



Rev	Date	Description
OWNERS NAME		
Ashiana Housing Ltd. Unit no.4 & 5,Plot No.D-2,3rd Floor, Southern park, saket District Centre, Saket New Delhi - 110017 Phone no. 011- 42 65 42 65		
PROJECT :		
Ashiana Umang (Extension), JAIPUR		
ARCHITECT		
B.sengupta architect A305,RANGOLI,ASHIANAVILLAGEBHIWADI. PH. : 09887488263		
SERVICE CONSULTANT:		
Consummate Engineering Services (P) Ltd. Noida Office : B - 67, Sector - 67, Noida - 201 301 Tel. : (0120) 2303500 / 30 Lines) Lko. Office : R 006, Rohas Plumeria, Gomti Nagar, Lucknow e mail : mail@cespi.in, website : www.cespi.in		
BUILDING TYPE	LAYOUT PLAN	SHEET. NO. : P-02
DRG. TITLE: EXTERNAL DRAINAGE SYSTEM		
SCALE: 1:550	KEY IN:	
DATE: Nov. -2018	PLOTTED ON:	
DRAWN BY : Amit Kamboj	Design By : Sanjay Goel	Ckd By : Anand Havelia
ISSUED FOR: G.F.C.		



DETAILS OF SEWER LINES										
Manhole No.		Length	Dia.	Slope	MH Top Level	Invert Level	Depth	MH Top Level	Invert Level	Depth
From	To	(m)	(mm)	1 in	(m)	(m)		(m)	(m)	
S1	S2	31	200	250	100.40	99.40	1.00	100.40	99.28	1.12
S2	S3	35	200	250	100.40	99.28	1.12	100.50	99.14	1.36
S3	S4	59	200	250	100.50	99.14	1.36	100.65	98.90	1.75
S4	S8	19	200	250	100.65	98.90	1.75	100.65	98.82	1.83
S5	S6	59	200	200	101.00	99.90	1.10	100.87	99.61	1.26
S6	S7	58	200	250	100.87	99.61	1.26	100.65	99.38	1.27
S7	S8	15	200	250	100.65	99.38	1.27	100.65	99.32	1.33
S8	S9	54	200	250	100.65	98.82	1.83	100.57	98.60	1.97
S9	S10	46	200	250	100.57	98.60	1.97	100.55	98.42	2.13
S10	S13	32	200	250	100.55	98.42	2.13	100.50	98.29	2.21
S11	S12	62	200	200	100.20	99.10	1.10	100.35	98.79	1.56
S12	S13	52	200	250	100.35	98.79	1.56	100.50	98.58	1.92
S13	S14	25	200	250	100.50	98.29	2.21	100.50	98.19	2.31
S14	S15	14	200	250	100.50	98.19	2.31	100.50	98.13	2.37
S15	STP	5	200	250	100.50	98.13	2.37	100.50	98.11	2.39

LEGEND :		
S. No.	SYMBOL	DESCRIPTION
1.	M.H.	MANHOLE
2.	—	SEWER LINE
3.		

- NOTES : SEWERAGE SYSTEM**
- THE SIZE OF MANHOLE SHALL BE AS UNDER (INNER SIZES)
a) Up to 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.
 - 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 detailed landscape plan & ground floor plan of respective building for exact location of appurtenances / man holes etc.
 - Sewer line under the road shall be encased with 150 thick, pcc 1:2:4 allround.
 - Manhole cover should be finished with finished formation level as per landscape drawing. the cover of manhole shall be square as per appurtenances drawing & should be co-ordinated with landscape drawing.
 - This drawing shall be coordinated with other drawing i.e. architecture, structural, electrical, landscape & other relevant drawing.
 - Material of pipe :- PE PIPE (SN-4) IS 16098 (Part-2) DVC type
 - 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. grade m-25.
 - The width of trench for sewer and drainage should be 4-400mm. (4- 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.

Sanjay Goel

Rev	Date	Description
OWNERS NAME		
Ashiana Housing Ltd. Unit no 4 & 5, Plot No D-2, 3rd Floor, Southern park, Saket District Centre, Saket New Delhi - 110017 Phone no. 011- 42 65 42 65		
PROJECT :		
Ashiana Umang (Extension), JAIPUR		
ARCHITECT		
B.sengupta architect A305,RANGOLI,ASHIANAVILLAGEBHIWADI. PH . 09887488263		
SERVICE CONSULTANT:		
Consummate Engineering Services (P) Ltd. Noida Office : B - 67, Sector - 67, Noida - 201 301 Tel : (0120) 2303500 (30 Lines) Lko. Office : R 006, Rohtas Plumeria, Gomti Nagar, Lucknow e mail : mail@cespl.in, website : www.cespl.in		
BUILDING TYPE	LAYOUT PLAN	SHEET. NO.: P-01
DRG. TITLE: EXTERNAL SEWER SYSTEM		
SCALE: 1:550	KEY IN:	
DATE: Nov.-2018	PLOTTED ON:	
DRAWN BY: Amit Kamboj	Design By: Sanjay Goel	Ckd By: Anand Havelia
ISSUED FOR:	G.F.C.	

