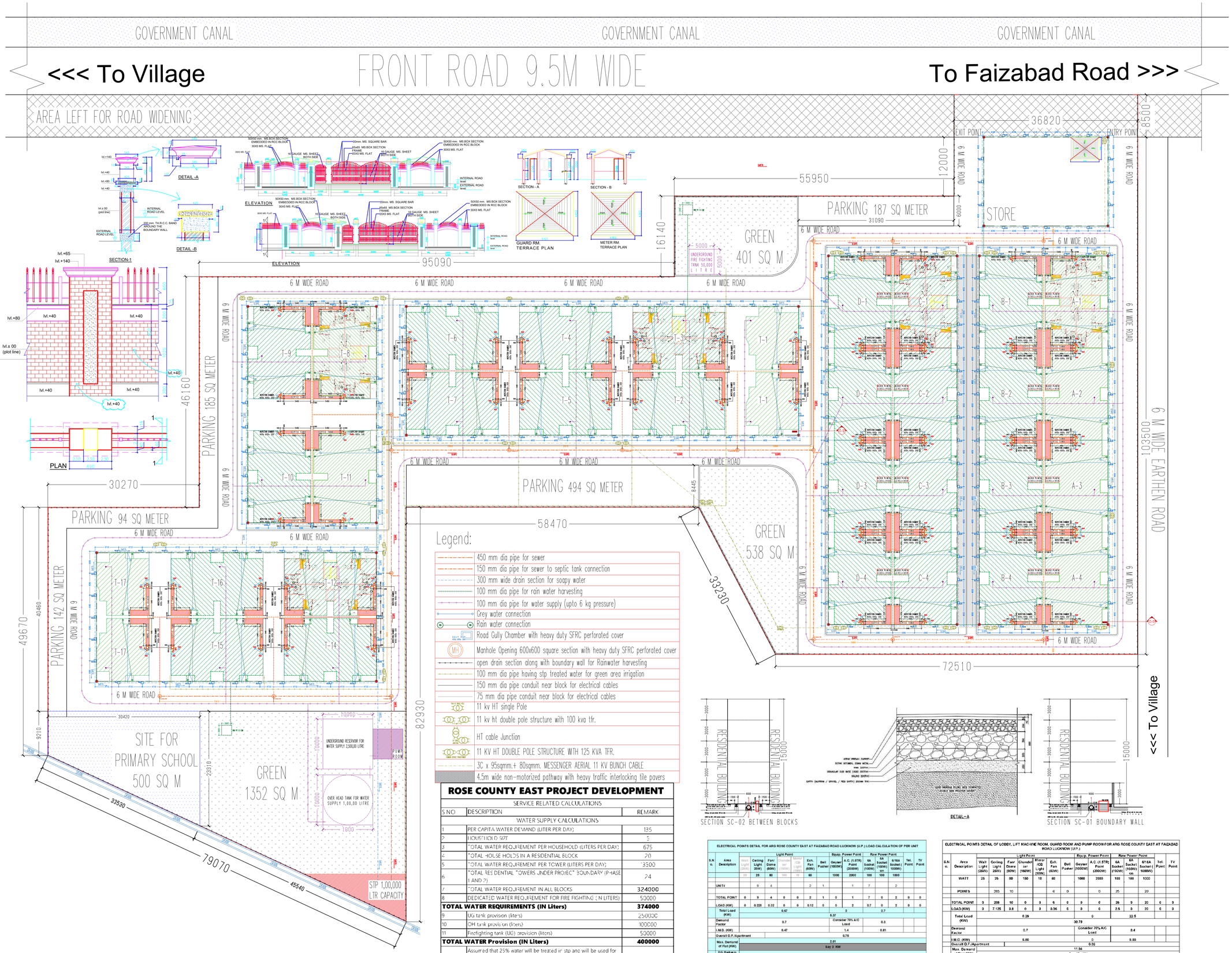

Legend:

- 450 mm dia pipe for sewer
- 150 mm dia pipe for sewer to septic tank connection
- 300 mm wide drain section for soapy water
- 100 mm dia pipe for rain water harvesting
- 100 mm dia pipe for water supply (upto 6 kg pressure)
- Grey water connection
- Rain water connection
- Road Gully Chamber with heavy duty SFRC perforated cover
- Manhole Opening 600x600 square section with heavy duty SFRC perforated cover
- open drain section along with boundary wall for Rainwater harvesting
- 100 mm dia pipe having stp treated water for green area irrigation
- 150 mm dia pipe conduit near block for electrical cables
- 75 mm dia pipe conduit near block for electrical cables
- 11 kv HT single Pole
- 11 kv ht double pole structure with 100 kva tfr.
- HT cable Junction
- 11 KV HT DOUBLE POLE STRUCTURE WITH 125 KVA TFR.
- 3C x 95sqmm.+ 80sqmm. MESSENGER AERIAL 11 KV BUNCH CABLE
- 4.5m wide non-motorized pathway with heavy traffic interlocking tile pavers

ROSE COUNTY EAST PROJECT DEVELOPMENT

S.NO	DESCRIPTION	REMARK
	SERVICE RELATED CALCULATIONS	
	WATER SUPPLY CALCULATIONS	
1	PER CAPITA WATER DEMAND (LITER PER DAY)	135
2	HOUSEHOLD SIZE	5
3	TOTAL WATER REQUIREMENT PER HOUSEHOLD (LITERS PER DAY)	675
4	TOTAL HOUSE HOLDS IN A RESIDENTIAL BLOCK	20
5	TOTAL WATER REQUIREMENT PER TOWER (LITERS PER DAY)	13500
6	TOTAL RESIDENTIAL TOWERS UNDER PROJECT BOUNDARY (PHASE 1 AND 2)	24
7	TOTAL WATER REQUIREMENT IN ALL BLOCKS	324000
8	DEDICATED WATER REQUIREMENT FOR FIRE FIGHTING (IN LITERS)	50000
TOTAL WATER REQUIREMENTS (IN Liters)		**374000**
9	UG tank provision (liters)	250000
10	OH tank provision (liters)	100000
11	Firefighting tank (UG) provision (liters)	50000
TOTAL WATER Provision (IN Liters)		**400000**
12	Assumed that 25% water will be treated in stp and will be used for irrigation and bike wash within the society, this makes the over all capacity of STP Plant (in Liters)	100000
13	capacity of septic tank per block (in liters)	2000
14	total capacity of septic tanks under project boundary (in liters)	48000

ELECTRICAL POINTS DETAIL FOR ARG ROSE COUNTY EAST AT FAIZABAD ROAD LUCKNOW (U.P.) LOAD CALCULATION OF PER UNIT

S.N o.	Area Description	Light Point: Wall Light (25W)	Light Point: Ceiling Light (25W)	Light Point: Fan/ Dome (80W)	Light Point: Chandelier (150W)	Light Point: Mirror /CB Light (15W)	Light Point: Exh. Fan (60W)	Equip. Power Point: Bell Pusher	Equip. Power Point: Geyser (1000W)	Raw Power Point: A.C. (1.5TR) Point (2000W)	Raw Power Point: 6A Socket (100W)	Raw Power Point: 6/16A Socket (100W on	Raw Power Point: 6/16A Socket (1000W)	Tel. Point	TV Point
	WATT	25	25	80	150	15	60	1000	2000	100	100	1000			
	UNIT 4		9	4			2	1		1	7	2			
	TOTAL POINT	0	9	4	0	0	2	1	0	1	7	2	0	0	0
	LOAD (KW)	0	0.225	0.32	0	0	0.12	0	0	2	0.7	2	0	0	0
	Total Load (KW)	0.67						2			2.7				
	Demand Factor	0.7						0.37		Consider 70% A/C Load		0.3			
	I.M.D. (KW)	0.47						1.4				0.81			
	Overall D.F./Apartment	0.75													
	Max. Demand of Flat (KW)	2.61													
	D.G. Backup in case of power failure	Say 2 KW													

CONNECTED LOAD FOR 1 UNIT	6.37	KW
DEMAND FOR 1 UNIT	2.00	KW
CONNECTED LOAD FOR 640 UNIT	3403.6	KW
DEMAND FOR 640 UNIT	1280	KW

ELECTRICAL POINTS DETAIL OF LOBBY, LIFT MACHINE ROOM, GUARD ROOM AND PUMP ROOM FOR ARG ROSE COUNTY EAST AT FAIZABAD ROAD LUCKNOW (U.P.)

S.N o.	Area Description	Light Point: Wall Light (25W)	Light Point: Ceiling Light (25W)	Light Point: Fan/ Dome (80W)	Light Point: Chandelier (150W)	Light Point: Mirror /CB Light (15W)	Light Point: Exh. Fan (60W)	Equip. Power Point: Bell Pusher	Equip. Power Point: Geyser (1000W)	Raw Power Point: A.C. (1.5TR) Point (2000W)	Raw Power Point: 6A Socket (100W)	Raw Power Point: 6/16A Socket (1000W)	Tel. Point	TV Point
	WATT	25	25	80	150	15	60		1000	2000	100	1000		
	POINTS		265	10			6	0		0	25	20		
	TOTAL POINT	0	265	10	0	0	6	0	0	0	25	20	0	0
	LOAD (KW)	0	7.125	0.8	0	0	0.36	0	0	0	2.5	20	0	0
	Total Load (KW)	8.29						0			22.5			
	Demand Factor	0.7						30.79		Consider 70% A/C Load		0.4		
	I.M.D. (KW)	5.80						0			9.00			
	Overall D.F./Apartment	0.82												
	Max. Demand of Flat (KW)	11.84												
	D.G. Backup in case of power failure	Say 12 KW												

CONNECTED LOAD FOR COMMON	30.79	KW
DEMAND LOAD FOR COMMON	11.84	KW

PROPOSED APARTMENTS ROSE COUNTY (EAST)

AN AFFORDABLE HOUSING VENTURE BY ARG INFRASTRUCTURE PVT LTD ON KHASRA NO.695, 697,698,700,701,711, 712,713,714,715,722,723

PROJECT : ARG ROSE COUNTY EAST FAIZABAD ROAD LUCKNOW (U.P.)

Over AllElectrical Load Calculation & Transformer Selection of 640 UNITS & COMMON SERVICES

S.No.	Description	Qty.	UNIT	ACTUAL LOAD: Connected Load (KW)	Demand Factor	Demand Load (KW)	REMARKS
A.	COMMON SERVICES						
1	Lobby, Lift Machine Room, Guard Room and Pump Room			30.79	0.42	12.93	
	TOTAL A			30.8		12.9	
B	BLOCK- APARTMENT'S DEMAND LOAD 640 UNITS						
				3436.8	0.40	1374.72	
	Sub Total (B)	0.0		3436.8		1374.7	
C	COMMON AREA LOADS						
1	Lifts-032 Nos. @ 4 KW/Lift			128.0	0.9	115.2	
2	Common Area Lighting			5.0	0.9	4.5	
3	Fire Fighting Load			18.7		11.0	
4	STP			20.0	0.7	14.0	
5	Plumbing Load			18.7	0.5	9.3	
6	BORE WELL			7.5	0.5	3.7	
7	Ventilation Load			0.0	0.8	0.0	
8	External Lighting			5.0	0.7	3.5	
	Sub Total (F)			202.8		161.3	
	Grand Total (A+B+C)			3670.4		1548.9	

Selection of Transformer		
Total Demand Load	1548.9	KW
Overal Diversity 80%		
Total Maximum Demand Load After OD	1239.1	KW
Load in KVA @ 0.85 PF	1457.8	KVA
TRANSFORMER EFFICIENCY 98%	1487.5	
Considering Loading of Transformer @85%	1750.1	KVA
SAY 1750KVA		
Suggested Transformer Size = 16 No. 11/0.433 KV; 100 KVA + 1 NO. 160KVA		

Points Detail of ARG ROSE COUNTY EAST PROJECT Lucknow (U.P.)

Total Units - 640 Nos. (PER UNIT 34.90 sq m)

S. No.	Particulars	Units	Qty. of 01 Unit	Qty. of 640 Units
1	Light Points	Nos.	9	5760
2	Fan Points	Nos.	4	2560
3	Exhaust Fan Points	Nos.	2	1280
4	Light Plug Points	Nos.	7	4480
5	Call Bell Points	Nos.	1	640
6	2 way Light Points	Nos.	0	0
7	Power Points	Nos.	2	1280
8	AC Points	Nos.	1	640

Total Points Details of Lobby, Lift Machine Room, Guard Room and Pump Room (COMMON AREAS)

S. No.	Particulars	Units	Total Qty.
1	Light Points	Nos.	225
2	Fan Points	Nos.	10
3	Exhaust Fan Points	Nos.	6
4	Light Plug Points	Nos.	15
5	Power Points	Nos.	10
6	AC Points	Nos.	0
7	Street Lights	Nos.	60

Details of Services (COMMON SERVICES)

S.No.	Particulars	Units	Qty.
1	5-stepage lift	Nos.	32
2	Borewell / Sumpump	Nos.	2
3	Domestic Water Pump	Nos.	2 (12.5HP)
4	Fire Pump	Nos.	2 (12.5HP)
5	Fire Pump	Nos.	1 (25HP)
6	Softner / RO or any other pump	Nos.	2HP

(AUTHORIZED SIGNATORY)
ARG INFRASTRUCTURE
Co. Off.: SAMIAH HOUSE (BASEMENT), A-35, Sector- 63 Noida,
TELE FAX: 0120-6783699; PH- 0120-6783600-10

ARCHITECT

FARHAN AHMAD KHAN
CA/2014-63798

SUBMISSION DRAWING

SITE LEVEL SERVICE DEVELOPMENT PLAN

SCALE 1:500

NORTH

SHEET 15