



हरियाणा शहरी विकास प्राधिकरण

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CE-I No. 78953
Dated: 21/08/2024
Annexure-A

SUB:- Approval of service plan estimate of Affordable Plotted Colony (DDJAY-2016) over an area measuring 18.475 acres (license no. 05 of 2024 dated 18.01.2024) in the revenue estate of Village Khaika, Sector-4, Sohna, Gurugram being developed by M/s Faith Buildtech Private Limited (LC-5019-JE).

Technical note and comments:-

1. All detailed working drawings would have to be prepared by the colonizer for Integrating the internal services proposals with the master proposals of town.
2. The correctness of the levels will be the sole, responsibility of the colonizer for the integration of internal proposals, with the master proposals, of town and will be got confirmed before execution.
3. The material to be used shall the same specifications as are being adopted by HSVP and further shall also confirm to such directions, as issued by Chief Engineer, HSVP from time to time.
4. The work shall be carried out according to Haryana PWD specification or such specifications as are being followed by HSVP. Further it shall also confirm to such other directions, as are issued by Chief Engineer, HSVP from time to time.
5. The colonizer will be fully responsible to meet the demand of water supply and allied services till such time these are made available by State Government/ HSVP. All link connections with the State Government/ HSVP system and services will be done by the colonizer. If necessary extra tube-wells shall also be installed to meet extra demand of water beyond the provision according to EDC deposited.
6. Structural design & drawings of all the structures, such as pump chamber, boosting chamber, RCC OHSR, underground tanks, quarters, manholes chamber, sections of RCC pipes sewer and SW pipes, sewer, ventilating shafts for sewerage and Masonry Ventilation Chamber for Chamber for storm water drainage, temporary disposal/ arrangement etc. will be as per relevant I.S codes and PWD specifications, colonizer himself will be responsible for structural stability of all structures.
7. Potability of water will be checked and confirmed and the tube-wells will be put into operation after getting chemical analysis of water tested.
8. Only C.I/D.I pipes will be used in water supply and flushing system, UPVC/HDPE pipe for irrigation purposes.

EXTERNAL DEVELOPMENT WORKS

DESIGN AND COST ESTIMATE

FOR

**PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED
COLONY (DDJAY) PLAN OF AREA MEASURING 18.475
ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT
PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH
BUILDTECH PVT. LTD.**

Submitted by

M/s FAITH BUILDTECH PVT. LTD.

ESTIMATE FOR PROVIDING EXTERNAL DEVELOPMENT WORKS FOR PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

REPORT

Sohna town of Haryana State is situated on Alwar - Gurugram Highway at a distance of 50 kms for Delhi. Being in the national capital Region, the town has fast developing tendency and potential. Further, it has also started sharing the growing Industrial load of Delhi. In order to relieve the growing pressure of population in National Capital of Delhi, Haryana Shahari Vikas Pradhikaran has already developed residential sector which are fully inhabited to an extent. This report and estimate is for approximately 18.475 Acres of Residential Plotted Colony located at Sector-4, Sohna Proposed to be developed and located within sector-4 of development plan Sohna 2031 Gurugram, Haryana by **M/S Faith Buildtech Pvt Ltd.**

WATER SUPPLY

HSVP water supply is expected to be provided on main sector roads in future. At present Tube wells are proposed to cater the potable water demand. It has been proposed to construct underground tanks of capacity as per attached details and at location for domestic purpose and for fire protection. Flushing and Horticulture water tank will be constructed as part of STP. The underground domestic tanks will be fed from HSVP supply, from there water shall pump out to each plot. Flushing water and Irrigation water demand will be met from treated effluent from Sewerage Treatment Plant. The water supply system has been designed as per the Hazen William formula.

DESIGN

The scheme has been designed for population considering 13.5 person for each plot. The rate of water supply per head/day has been taken as 155 liters per head per day as per HSVP norms.

PUMPING EQUIPMENTS

It has been proposed to install pumping set as described with standby of equal capacity shall be provided. Standby electric power requirement is added to the main DG Sets or independently in case of electricity failure.

SEWERAGE SCHEME

Sewer line from proposed development will be connecting to a centralized Sewage treatment plant located within the site with a bye-pass line to HSVP sewer to dispose off the surplus water from STP. The sewerage system has been marked on the respective plans.

Sewer lines have been designed for three times average D.W.F in relation to water supply demand. It has been assumed that about 80% of the domestic & flushing water supply shall find its way into the proposed sewer. Sewer lines shall be laid to a gradient maintaining minimum 2.46 ft./sec self-cleaning velocity. Sewer line up to 400mm dia has been designed to run half full and above 400mm dia has been designed to run three fourth full at peak flow. Necessary provision for laying S.W./RCC pipe sewer line, construction of required number of manholes etc., has been made in the estimate.

Necessary design statement for entire sewerage system has been prepared and attached with estimate. Manning's formula has been used for the design of sewerage system.



STORM WATER DRAINAGE

We proposed to lay underground R.C.C. pipe drains with required number of catch basins, manholes and rainwater recharge pits with over flow to the proposed HSVP storm drain on Sohna Road. The intensity of rain fall has been taken as 1/4" per hour. R.C.C storm water line will be designed as per Manning's formula.

SPECIFICATIONS

The work will be carried out in accordance with the standard specifications of P.H as laid down by the Haryana Govt./HSVP

ROADS

Estimate of Road is prepared as per revised specifications adopted by HSVP.

STREET LIGHTING

Provision for street lighting also has been made

PLANTATION

Estimates of plantation, landscaping, signage, etc., have been included

RATES

The estimate has been prepared based on the present market rates

COST

The total cost of development works in the scheme including various P.H. and B&R services works out to be **Rs. 1866.88 Lakh** which includes 3% Contingencies and 49% Departmental Charges, price escalation, unforeseen, Admin. Charges.

The cost per gross acre for this, works out to **Rs. 101.04 Lakh / acre** which covers the provision of services like Water Supply, Sewerage, Storm Water Drainage, Roads, Street Lighting and Plantation including maintenance thereof as well as future expansion where-so-ever indicated.

For: M/S FAITH BUILDTECH PVT. LTD.

For Faith Buildtech Pvt. Ltd.

Sandip
Director/ Auth. Sign.

Authorized Signatory



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : MAIN DESIGN CALCULATIONS

Sl. No.	Description	Population			Water Requirement per Person per Day		Total Water Requirement per Person per Day		Total Water requirement t (LPD)
		No. of Plots	Occupancy per Plot	Total Population	Potable Water	Flushing Water	Potable Water	Flushing Water	
A	DOMESTIC WATER REQUIREMENT								
i)	Residential								
(a)	Main Plots	330	13.5	4455	65% of demand @ 155 lpcd	35% of demand @ 155 lpcd	448,841	241,684	690,525
	Total (Cu.M/Day)						449	242	691
ii)	Community								
(a)	Daily water demand @ 25 KL per acre = 1.847 Acre x 25000 liter =			46175	55% of demand	45% of demand	25,396	20,779	46,175
	Total (Cu.M/Day)						25	21	46
	Total Water Requirement In Cu. M (i + ii)						474	263	737
iii)	Commercial								
(a)	Fixed population (Staff)			350	@ 25 lpcd	@ 20 lpcd	8,750	7,000	15,750
(b)	Floating population			2334	@ 5 lpcd	@ 10 lpcd	11,670	23,340	35,010
	Total (Cu.M/Day)						21	31	52
B)	HORTICULTURE DEMAND								
a)	Horticulture demand from STP for total Park area of 5607.6782 Sq.m (6 Ltrs/Sq.m)			5.607.68		6.17		34,599	LPD
						Total	34,599	LPD	
						Say	35	KLD	
C)	SEWAGE TREATMENT PLANT FOR RESIDENTIAL AND COMMUNITY								
a)	Total waste water generated (80% of daily water consumption)						590	KLD	
b)	Add 5 % for Future Load as per HSVP						29	KLD	
c)	STP capacity required						619	KLD	
d)	STP capacity provided						620	KLD	
D)	Water Balance Calculation for Residential and Community								
a)	Total waste water generated						590	KLD	
b)	Recycled water available (90% waste water generated)						531	KLD	
c)	Recycled water usage (Horticulture + Flushing)						298	KLD	
d)	Total fresh water demand						474	KLD	
e)	Total excess water to GMDA Main						233	KLD	
E)	SEWAGE TREATMENT PLANT FOR COMMERCIAL								
a)	Total waste water generated (80% of daily water consumption)						42	KLD	



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SUBJECT : MAIN DESIGN CALCULATIONS

b)	Add 20 % for Future Load as per HSVP	8	KLD	
c)	STP capacity required	50	KLD	
d)	STP capacity provided	60	KLD	

F) Water Balance Calculation for Commercial

a)	Total waste water generated	42	KLD	
b)	Recycled water available (90% waste water generated)	37	KLD	
c)	Recycled water usage	31	KLD	
d)	Total fresh water demand	21	KLD	
e)	Total excess water to GMDA Main	6	KLD	

G) UNDER GROUND WATER TANK REQUIREMENT

		PLOTTED	COMMERCIAL	
(a)	Static Fire Water Storage Tank	100	As/Fire Auth.	KL
b)	Domestic Water @ 60% of Daily Demand	284	13	KL
c)	Flushing Water @ 60% of Daily Demand	179	19	KL

i)	Proposed Underground Tanks for Fire Purpose	100	-	KL
ii)	Proposed Underground Tanks for Domestic Purpose	300	15	KL
iii)	Proposed Underground Tanks for Flushing & Irrigation Purpose	180	20	KL

For plotted it is proposed to construct Underground fire tank of 100 KL, Domestic water tank of 300 KL and Flushing & Irrigation water tank of 180 KL capacity as part of STP.

For commercial it is proposed to construct Underground Domestic water tank of 15 KL and Flushing water tank of 20 KL capacity as part of STP..

H) TUBE WELL

(i) TUBE WELL FOR RESIDENTIAL AND COMMUNITY

(a)	Assuming working hours of tube wells	10	Hrs./day	
(b)	Assuming discharge / hour of each tube well	15	Cu.M/Hr	
(c)	Total Domestic Water Demand	474	Cu.M/day	
(d)	No. of tube well required	3.16	Nos.	
(e)	Add 10% as stand by	0.32	Nos.	
	Total	3.48	Nos.	
	Required 50%	1.74	Nos.	
	Say	2	Nos.	

(ii) TUBE WELL FOR COMMERCIAL

(a)	Assuming working hours of tube wells	6	Hrs./day	
(b)	Assuming discharge / hour of each tube well	15	Cu.M/Hr	
(c)	Total Domestic Water Demand	21	Cu.M/day	
(d)	No. of tube well required	0.23	Nos.	
(e)	Add 10% as stand by	0.02	Nos.	
	Total	0.26	Nos.	
	Say	1	No.	

I) PUMPING MACHINERY FOR TUBE WELL

(i)	Gross Working Head	45	M	
(ii)	Avg. fall in S.L.	3	M	



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SUBJECT : MAIN DESIGN CALCULATIONS

(iii)	Depression Head	9	M	
(iv)	Frictional Head Loss in Mains & Specials	7	M	
	Total Head	64	M	
(v)	BHP of Pump	5.93	HP	
	Say	7.50	HP (Each)	
J) BOOSTING MACHINERY (DOMESTIC WATER SUPPLY PUMPS)				
(a)	Discharge per Hour @ 8 Hours/Day = $474/8 =$	59.25	Cu.M/Hr	
	Say	988	LPM	
(b)	Number of Working Pumps	2	Nos.	
(c)	Proposed Pump Discharge (Each)	494	LPM	
	Say	500	LPM (Each)	
(d)	Gross Working Head			
(i)	Suction Lift-Positive Suction	0	M	
(ii)	Elevation Head	7	M	
(iii)	Residual Head required at farthest ferrule	30	M	
(iv)	Frictional Head Loss in Mains & Specials	6	M	
	Total	43	M	
	Say	45	M	
(e)	HP of Each Pump Required = $500 \times 45 / 60 \times 75 \times 0.6$	8.33	HP	
	Say	10.00	HP	
K) HSVP WATER SUPPLY LINE				
(i)	FOR RESIDENTIAL AND COMMUNITY			
(a)	Total Domestic Water Demand	474	Cu.M/Day	
(b)	Flow	494	LPM	
(c)	Proposed Diameter of pipe line	100	MM	
(d)	Total Length of Line	55	M	
(e)	Frictional Head Loss	0.0216	M	
(f)	Velocity	1.0	M/Sec	
(g)	Total Head Loss	1.2	M	
(ii)	FOR RESIDENTIAL AND COMMUNITY			
(a)	Total Domestic Water Demand	21	Cu.M/Day	
(b)	Flow	32	LPM	
(c)	Proposed Diameter of pipe line	100	MM	
(d)	Total Length of Line	10	M	
(e)	Frictional Head Loss	0.0001	M	
(f)	Velocity	0.0	M/Sec	
(g)	Total Head Loss	0.0	M	
L) BOOSTING MACHINERY (FLUSHING / IRRIGATION WATER SUPPLY PUMPS)				
(a)	Discharge per Hour @ 8 Hours/Day = $(263 \text{ kl} + 35 \text{ kl}) / 8 =$	37.25	Cu.M/Hr	
	Say	620.83	LPM	
(b)	Number of Working Pumps	1	No.	



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SUBJECT : MAIN DESIGN CALCULATIONS

(c)	Proposed Pump Discharge (Each)		620.83	LPM	
		Say	620	LPM	
(d)	Gross Working Head				
(i)	Suction Lift-Positive Suction		0	M	
(ii)	Elevation Head		7		
(iii)	Residual Head required at farthest ferrule		30	M	
(iv)	Frictional Head Loss in Mains & Specials		6	M	
		Total	43	M	
		Say	45	M	
(e)	HP of Each Pump Required = $620 \times 45 / 60 \times 75 \times 0.60$		10.33	HP	
		Say	10.00	HP	
M)	GENERATING SETS				
	Equipment Description	Working	Stand by	Power Consumption	Total Power Consumption Unit
a)	HP of Domestic Pumps	2.0	1.00	10.00	20.00 HP
b)	HP of Flushing Pumps	1.0	1.00	10.00	10.00 HP
	Total Power Consumption				30.00 HP
	DG KVA Required (HP x 0.746)				22.38 K.W.
	Say in KVA				33.57 KVA
	Add for Lighting				2.00 KVA
	DG Capacity Required				35.57 KVA
	Say				35.00 KVA
N)	SEWAGE TREATMENT PLANT				
a)	STP capacity required for Residential plotted development and community			620	KLD
b)	STP capacity required for Commercial			60	KLD



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SUBJECT: ESTIMATE FOR PROVIDING EXTERNAL DEVELOPMENT WORKS

FINAL ABSTRACT OF COST

Description	Items	Amount (In Lakh)
SUB WORK NO. I	WATER SUPPLY SCHEME	323.60
SUB WORK NO. II	SEWERAGE SCHEME	236.25
SUB WORK NO. III	STORM WATER DRAINAGE SCHEME	240.11
SUB WORK NO. IV	ROADS & FOOT PATHS	508.88
SUB WORK NO. V	STREET LIGHTING	70.88
SUB WORK NO. VI	HORTICULTURE	14.89
SUB WORK NO. VII	MTC CHARGES & RESURFACING OF ROADS <i>for 10 years.</i>	472.28
TOTAL IN LAKH		1,866.88

Cost per Acre = 1866.88 / 18.475 =

Rs. 101.04 Lakh per Gross Acre

[Signature]
Executive Engineer
HSVP Division No. VI
Gurugram

For **M/S FAITH BUILDTECH PVT. LTD.**
For Faith Buildtech Pvt. Ltd.

AUTHORISED SIGNATORY

[Signature]
Director
Sign.

[Signature]
Superintending Engineer
HSVP, Circle-II, Gurugram



Checked subject to Comments
In forwarding letter No. 73954
D-21108/2014...and notes
Attached with the estimate

[Signature]
Executive Engineer (M)
for Chief Engineer-I
Panchkula

[Signature]
Director
Town & Country Planning
Haryana, Chandigarh

SUB WORK NO. I		WATER SUPPLY SCHEME	
Sl. No.	Description	Items	Amount (In Lakh)
1	Sub Head No. 01	Head Works	72.90
2	Sub Head No. 02	Pumping Machinery	72.08
3	Sub Head No. 03	Domestic Water supply Distribution	33.61
4	Sub Head No. 04	Flushing & Irrigation System	32.27
Total in Lakh			210.85
P.E. and Contingency Charges @ 3%			6.33
Total			217.18
Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%			106.42
Total			323.60
(C/O to Final abstract of cost)			



SUB WORK NO. I**WATER SUPPLY SCHEME****Sub Head No. 01****Head Works**

Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing , laying , jointing and testing pipe lines including cost of excavation etc. complete in all respects.			
a)	100 mm dia. D.I. pipe 55m @ Rs. 1460/- (For Plotted from HSVP main)	55	1,460	0.80
b)	100 mm dia. D.I. pipe 335m @ Rs. 1460/- (For Tubewell)	335	1,460	4.89
c)	100 mm dia. D.I. pipe 10m @ Rs. 1460/- (For Commercial from HSVP main)	10	1,460	0.15
2	Boring and installing 300 mm i/d tubewell with reverse rotary rig complete with pipe and strainer to depth of about 80 m in all respect 3 Nos. @ Rs. 15,00,000/- each (2 nos. for Plotted and 1 no. for Commercial)	3	1,500,000	45.00
3	Provision for borewell chamber of size 1.5 x 1.5 x 1.5 m For Housing borewell 3 Nos. @ Rs.100000/- each	3	100,000	3.00
4	Construction of boundary wall around Tube Well	Lump Sum		2.00
5	Providing and fixing sluice valve/butter fly valve and air release valve including cost of surface boxes and masonry chambers etc. complete in all respects			
a)	100 mm i/d 4 Nos. @ Rs. 12000/-	4	12,000	0.48
6	Providing and fixing indicating plates for sluice valve, butterfly valve and air valves etc.			
a)	4 Nos. @ Rs. 2000/- each	4	2,000	0.08
7	Provision for carriage for materials and other unforeseen items.	Lump Sum		1.00
8	Provision for cutting of roads and making good to its original conditions.	Lump Sum		1.50
9	Provision for making connection with HSVP on master road.	Lump Sum		2.00
10	Supply and installation of electrically driven Submersible Pumping sets in TWs complete with lowering pipes, submersible cables, control panels and other accessories on tube wells discharge 15kl/hr. @ 64 m head with 7.5 H.P. motor.	3	150,000	4.50
11	Provision for Staff Qtr. For mtc. Staff	Lump Sum		7.50
Total				72.90
(C/O to abstract of cost of Sub work No. I)				



SUB WORK NO. I		WATER SUPPLY SCHEME		
Sub Head No. 03		Domestic Water supply Distribution		
Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing, Laying, jointing and testing D.I pipe line including fittings, valves, cost of excavation etc. complete in all respect.			
a)	100mm dia D.I Pipe	1537	1,460	22.44
b)	150mm dia D.I Pipe	307	2,040	6.26
2	Providing and fixing sluice valve including cost of surface boxes and masonry chambers etc. complete in all respects.			
a)	100mm, 5 Nos. Each (@ Rs.12000/-	5	12,000	0.60
b)	150mm, 3 Nos. Each (@ Rs.15000/-	3	15,000	0.45
3	Providing and fixing External Fire Hydrants including chamber complete in all respects.			
a)	2 Nos. Each (@ Rs.15,000/-	2	15,000	0.30
4	Providing and fixing air release valve and scour valve			
a)	3 Nos. Each (@ Rs.10000/-	3	10,000	0.30
5	Indication plate for valves, hydrant AV etc.			
a)	13 Nos: (@ Rs.2000/- each	13	2,000	0.26
6	Provision for carriage of materials and other unforeseen items	Lump Sum		1.50
7	Provision for cutting of roads and making good to its original conditions.	Lump Sum		1.50
Total in Lakh				33.61
(C/O to abstract of cost of Sub work No. I)				



SUB WORK NO. I		WATER SUPPLY SCHEME		
Sub Head No. 04		Flushing & Irrigation System		
Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing, Laying, jointing and testing HDPE / PVC pipe line including fittings, valves, cost of excavation etc. complete in all respect.			
a)	100mm dia HDPE / PVC Pipe	1863	1,460	27.20
b)	150mm dia HDPE / PVC Pipe	15	2,040	0.31
2	Providing and fixing sluice/butter fly valve including cost of surface boxes and masonry chambers etc. complete in all respects.			
a)	150mm - 1 No. Each @ Rs.15000/-	1	15,000	0.15
b)	100mm - 7 Nos. Each @ Rs.12000/-	7	12,000	0.84
3	Providing and fixing air release valve and scour valve			
a)	3 Nos. Each @ Rs.10000/-	3	10,000	0.30
4	Indication plate for valves, hydrant AV etc.			
a)	11 Nos. Each @ Rs.2000/-	11	2,000	0.22
5	Provision for carriage of materials and other unforeseen items	Lump Sum		1.00
6	Provision for uPVC pipe line suitable for 6kg/sqcm. pressure including cost of fittings, valves and connections etc. complete. 25 mm dia pipe	Lump Sum		0.50
7	Provision for cutting of roads and making good to its original conditions.	Lump Sum		1.00
8	Providing and fixing 25mm dia Garden Hydrant valve complete in all respect.	Lump Sum		0.75
Total in Lakh				32.27
(C/O to abstract of cost of Sub work No. I)				



SUB WORK NO. II		SEWERAGE SCHEME		
Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing, laying, jointing and testing Sewer pipe lines including fittings, valves, Manholes & cost of excavation etc. complete in all respects. (Upto 2 Mtr. Depth)			
a)	200 mm i/d - 1154 M @ Rs. 1700/M	1154	1,700	19.62
b)	250 mm i/d - 5 M @ Rs. 2000/M	5	2,000	0.10
c)	100 mm dia D.I. 15 M @ Rs. 1460/M (Sewer Bye Pass Riser Line) for Commercial	15	1,460	0.22
d)	100 mm dia D.I. 56 M @ Rs. 1460/M (Sewer Bye Pass Riser Line) for Plotted	56	1,460	0.82
2	Providing, laying, jointing and testing Sewer pipe lines including fittings, Manholes & cost of excavation etc. complete in all respects. (Above 2 Mtr. Depth)			
a)	200 mm i/d 346 M @ Rs. 1700/M	346	1,700	5.88
b)	250 mm i/d 285 M @ Rs. 2000/M	285	2,000	5.70
c)	300 mm i/d 12 M @ Rs. 2500/M	12	2,500	0.30
3	Provision for carriage of material and other unforeseen charges.	Lump Sum		2.00
4	Provision for making connection with HSVP sewer on master road.	2	200,000	4.00
5	Provision for providing and fixing vent shaft at suitable places as per the P.H. requirement.	Lump Sum		5.00
6	Providing & installation 680 KLD compact sewerage plant complete in all respects. (Including Tertiary Treatment) @ Rs. 16,000/- per KLD (at two locations) (620 KLD for plotted and 60 KLD for commercial.)	680	16,000	108.80
7	Provision for road cutting and making its original condition	Lump Sum		1.50
Total in Lakh				153.94
P.E. and Contingency Charges @ 3%				4.62
Total				158.55
Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%				77.69
Total in Lakh				236.25
(C/O to Final abstract of cost)				



SUB WORK NO. III

STORM WATER DRAINAGE SCHEME

Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing, laying, RCC pipe class NP-3 including jointing, cutting, special, excavation, manholes, venting chambers etc. complete in all respects (Upto 2 Mtr. Depth)			
a)	400 mm dia. 1407 M @ Rs. 2500/M	1407	2,500	35.16
2	Providing, laying, RCC pipe class NP-3 including jointing, cutting, special, excavation, manholes, venting chambers etc. complete in all respects (Above 2 Mtr. Depth)			
a)	400 mm dia. 170 M @ Rs. 2500/M	170	2,500	4.24
b)	500 mm dia. 502 M @ Rs. 2700/M	502	2,700	13.55
3	Provision for lighting and watching	Lump Sum		2.50
4	Provision for road gullies & 250mm dia connecting pipes.	Lump Sum		7.50
5	Provision for rainwater harvesting arrangements at selected places (16 Nos. for Plotted + 2 nos. for Community + 1 No. for Commercial) = 19 Nos. @ Rs. 3,50,000 Each	19	350,000	66.50
6	Provision for Shoring & Timbering	Lump Sum		3.50
7	Provision for lighting, watering and timbering drains & other unforeseen charges	Lump Sum		1.50
8	Provision for making connection with HSVP Mains on master road	Lump Sum		2.00
9	Provision for temporary disposal arrangement till the HSVP services being provided.	Lump Sum		20.00
Total in Lakh				156.45
P.E. and Contingency Charges @ 3%				4.69
Total				161.15
Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%				78.96
Total in Lakh				240.11
(C/O to Final abstract of cost)				



SUB WORK NO. IV**ROADS & FOOT PATHS**

Sl. No.	Width of Road in metres	Length in Metres	Road Portion	Area in Sq.m.
1	9.0m Wide Road	1,703	5.50	9,369
2	12.0m Wide Road	161	5.50	885
	Total	1,864		10,254
	Add 5% for Curves	93.22		513
	Total	1958		10,767
	Say	1960 m		10770 sqm.

Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing for leveling and earth filling as per site condition 18.475 acres @ Rs. 1,75,000 per acres	18.475	175,000	32.33
2	Construction of road by :- (i) 200 mm thk. GSB (ii) 250 mm thk. stone aggregate (iii) 50 mm thk. DBM (iv) 30 mm thk. BC			
	10770 sqm. @ Rs. 1500/- per sqm.	10770	1,500	161.55
3	Providing of paver blocks on both sides of road (5880 sqm. @ Rs 1000)	5,880	1,000	58.80
4	Providing of kerbs stone & Channels of CC 1:2.5:5 (kerb stone on both side of road 9.0 m & 12.0 m wide roads) (1960 X 2 = 3920m @600.0/Metre	3,920	600	23.52
5	Provision for guide map and other unforeseen item.	Lump Sum		2.00
6	Provision for plot indicators.	Lump Sum		2.00
7	Provision for demarcating burgies	Lump Sum		2.00
8	Provision for traffic arrangement	Lump Sum		2.00
9	Provision for carriage of material & unforeseen items	Lump Sum		10.00
10	Provision for pavement in commercial area i.e. 50% of the area 1.847 x 4047 = 3738 sqm. @ Rs. 1000/- per sqm.	3738	1,000	37.38
Total in Lakh				331.58
P.E. and Contingency Charges @ 3%				9.95
Total				341.53
Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%				167.35
Total in Lakh				508.88
(C/O to Final abstract of cost)				



SUB WORK NO. V**STREET LIGHTING**

Sl. No.	Description	Quantity	Rate	Amount (In Lakh)
1	Providing street lighting on roads as per standard specifications of HVPN.			
	18.475 acres @ 2,50,000/- per acres	18.475	250,000	46.19
	Total in Lakh			46.19
	P.E. and Contingency Charges @ 3%			1.39
	Total			47.57
	Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%			23.31
	Total in Lakh			70.88
	(C/O to Final abstract of cost)			



SUB WORK NO. VI			HORTICULTURE
Sl. No.	Description		Amount (In Lakh)
1	Development of Green areas		
a)	Trenching the ordinary soil up to dept of 60cm including removal and stacking of serviceable material and disposing of by spreading and leveling within a lead to 50m and making up the trenches area of proper leads by filling with earth mixed with manure before and after flooding trench with water including cost of imported earth and manure		
b)	Rough dressing of roof area		
c)	Grassing with "Doob Grass" including watering and maintenance of lawns for 30 days till the grass a thick lawn; free weeds and fit for moving in rows 7.5m apart in either direction including provision for hedges and barbed wire fencing around park.		
	Approx. 1.385 acres (@ 1,50,000 per acre		2.08
2	Planting Trees		
a)	Provisions trees, along 9.0m & 12.0m wide roads at 12mt interval		
	Total Road length = 1960 Metres		
	(1960 x 2)/12 = 326.66 nos, Say = 330 Nos (@ Rs. 2310/- per Tree		7.62
	Total in Lakh		9.70
	P.E. and Contingency Charges @ 3%		0.29
	Total		9.99
	Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%		4.90
	Total in Lakh		14.89
	(C/O to Final abstract of cost)		



SUB WORK NO. VII**MTC CHARGES & RESURFACING OF ROADS**

Sl. No.	Description			Amount (In Lakh)
1	Providing of M/C charges for Water supply, Sewerage, Strom water drainage, Roads, Street lighting, Plantation etc. complete in all aspect, including Operational and Establishment charges as per HUDA norms for 10 years completion			
	Area 18.475 acre @ 8.00 lacs per acre			147.80
2	Providing of resurfacing of roads after 5 years 100mm thick layer 100mm thick BUSG complete to 25mm thick premix carpet with seal cost			
	Total Road Area 10770 sqm @ 660 per sqm			71.08
3	Providing of resurfacing of roads after 10 years with 25mm thick premix carpet with seal coat with mech.paver			
	Total Road Area 10770 sqm @ 825 per sqm			88.85
	Total in Lakh			307.73
	P.E. and Contingency Charges @ 3%			9.23
	Total			316.97
	Departmental, Price Escalation, Unforeseen & Adm. Charges @ 49%			155.31
	Total in Lakh			472.28
	(C/O to Final abstract of cost)			



SUBJECT : DESIGN OF SEWERAGE SYSTEM

Sl. No.	Sewer Line Node No.	No. of Plots	Total Population @13.5 Persons/Plot	Water Demand @155 lpcd	Non Residential Load	Total Daily Water Demand	Sewer Discharge (80% of Total Demand)	Sewer Discharge			Average Sewer Discharge (3 Times Avg.)	Peak Sewer Discharge (5 Times Avg.)	Diameter of Pipe	Velocity	Design Discharge (Q)	Length of Pipe	Slope	Fall in Line	Ground Level		Invert Level		Depth		Remarks
								Self	Previous	Total									Start	End	Start	End	Start	End	
From	To	Nos	Nos	lpcd	lpcd	lpcd	lpcd	lpcd	lpcd	lpcd	lpcd	lpcd	mm	m/s	lps	lps	lps	lps	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	
1	S1	S3	39	527	81607.5		65286	65286	0	65286	0.76	2.27	200	0.76	11.89	200	190	1.053	203.300	203.356	202.100	201.047	1.20	2.31	1.75
2	S2	S3	3	41	6277.5		5022	5022	0	5022	0.06	0.17	200	0.76	11.89	13	190	0.088	203.424	203.356	202.221	202.156	1.20	1.20	1.20
3	S3	S7	7	95	14617.5		11718	11718	70308	82026	0.95	2.85	200	0.76	11.89	48	190	0.253	203.356	203.288	201.047	200.795	2.31	2.49	2.40
4	S4	S6	6	81	12555		10044	10044	0	10044	0.12	0.35	200	0.76	11.89	32	190	0.168	203.288	203.220	202.088	201.920	1.20	1.30	1.25
5	S5	S6	6	81	12555		10044	10044	0	10044	0.12	0.35	200	0.76	11.89	43	190	0.226	203.150	203.220	201.950	201.724	1.20	1.50	1.35
6	S6	S7	24	324	50220		40176	40176	20088	60264	0.70	2.09	200	0.76	11.89	133	190	0.700	203.220	203.288	201.724	201.024	1.50	2.26	1.88
7	S7	S9	15	203	31387.5		25110	142290	167400	194	1.94	5.81	200	0.76	11.89	115	190	0.605	203.288	203.424	200.795	200.189	2.49	3.23	2.86
8	S8	S9	32	432	66960		53568	53568	0	53568	0.62	1.86	200	0.76	11.89	125	190	0.658	203.560	203.424	202.360	201.702	1.20	1.72	1.46
9	S9	S11	8	108	16740		13392	13392	220968	234360	2.71	8.14	200	0.76	11.89	48	190	0.253	203.424	203.492	200.189	199.937	3.23	3.56	3.39
10	S10	S11	32	432	66960		53568	53568	0	53568	0.62	1.86	200	0.76	11.89	125	190	0.658	203.628	203.492	202.428	201.770	1.20	1.72	1.46
11	S11	S15	40	540	83700	COMMUNITY 46175	103900	103900	287928	391828	4.54	13.61	250	0.77	18.99	167	245	0.682	203.492	203.696	199.887	199.205	3.61	4.49	4.05
12	S12	S14	18	243	37665		30132	30132	0	30132	0.35	1.05	200	0.76	11.89	78	190	0.411	203.832	203.696	202.632	202.221	1.20	1.47	1.34
13	S13	S14	12	162	23110		20088	20088	0	20088	0.23	0.70	200	0.76	11.89	68	190	0.358	203.560	203.696	202.360	202.002	1.20	1.69	1.45
14	S14	S15	23	311	48127.5		38502	38502	50220	88722	1.03	3.08	200	0.76	11.89	114	190	0.600	203.696	203.696	202.002	201.402	1.69	2.29	1.99
15	S15	S23	28	378	58590		46872	46872	480550	527422	6.10	18.31	250	0.77	18.99	118	245	0.482	203.696	203.764	199.205	198.724	4.49	5.04	4.77
16	S16	S20	10	135	20925		16740	16740	0	16740	0.19	0.58	200	0.76	11.89	111	190	0.384	203.500	203.600	202.300	201.716	1.20	1.88	1.54
17	S17	S19	4	54	8370		6696	6696	0	6696	0.08	0.23	200	0.76	11.89	24	190	0.126	203.900	203.866	202.700	202.574	1.20	1.29	1.25
18	S18	S19	6	81	12555		10044	10044	0	10044	0.12	0.35	200	0.76	11.89	26	190	0.137	203.866	203.866	202.666	202.529	1.20	1.34	1.27
19	S19	S20	3	41	6277.5		5022	5022	16740	21762	0.25	0.76	200	0.76	11.89	23	190	0.121	203.866	203.600	202.529	202.408	1.34	1.19	1.26
20	S20	S22	3	41	6277.5		5022	5022	38502	43524	0.50	1.51	200	0.76	11.89	97	190	0.511	203.600	203.832	201.716	201.205	1.88	2.63	2.26
21	S21	S22	5	68	10462.5		8370	8370	0	8370	0.10	0.29	200	0.76	11.89	39	190	0.205	203.865	203.832	202.665	202.460	1.20	1.37	1.29
22	S22	S23	5	68	10462.5		8370	8370	51894	60264	0.70	2.09	200	0.76	11.89	38	190	0.200	203.832	203.764	201.205	201.005	2.63	2.76	2.69
23	S23	STP	1	14	2092.5		1674	1674	587686	589360	6.82	20.46	300	0.76	26.81	12	325	0.037	203.764	203.764	198.674	198.637	5.09	5.13	5.11
TOTAL		330	4455	690525	46175	736700	589360																		

SUBJECT : DESIGN OF SEWERAGE SYSTEM

Sl. No.	Sewer Line No.	From	To	No. of Plots	Total Population @ 13.5 persons/ Main Plot	Water Demand @ 155 lpcd	Non Residential Load	Total Daily Water Demand	Sewage Discharge (80% of Total Demand)	Sewage Discharge			Average Sewage Discharge	Peak Sewage Discharge (3 Times Avg.)	Diameter of Pipe	Velocity	Design Discharge (Q)	Length of Pipe	Slope	Fall in Line	Ground Level		Invert Level		Depth		Remarks
										Self	Previous	Total									Start	End	Start	End	Start	End	
24		Commercial STP By Pass connection line to HSVP MH																									
25		STP overflow connection line from Site Boundary to HSVP Sewer line (By Gravity)																									
26		Main STP By Pass connection line upto Site Boundary																									
27		STP overflow connection line from Site Boundary to HSVP Sewer line (By Gravity)																									



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : SEWERAGE STATEMENT UPTO STP (Depth Upto 2.0 Metres)

Sl. No.	Sewer Line Node No.		Average Depth of Pipe Mtr	Diameter of Pipe mm	Total Length of Pipe Mtr	Quantity of Pipe	
	From	To				200 Dia Mtr	250 Dia Mtr
1	S1	S3	1.75	200	200	200	-
2	S2	S3	1.20	200	13	13	-
3	S4	S6	1.25	200	32	32	-
4	S5	S6	1.35	200	43	43	-
5	S6	S7	1.88	200	133	133	-
6	S8	S9	1.46	200	125	125	-
7	S10	S11	1.46	200	125	125	-
8	S12	S14	1.34	200	78	78	-
9	S13	S14	1.45	200	68	68	-
10	S14	S15	1.99	200	114	114	-
11	S16	S20	1.54	200	111	111	-
12	S17	S19	1.25	200	24	24	-
13	S18	S19	1.27	200	26	26	-
14	S19	S20	1.26	200	23	23	-
15	S21	S22	1.29	200	39	39	-
TOTAL						1154	0

Total for 200 mm Dia Pipe	1154	Metres
Total for 250 mm Dia Pipe	0	Metres



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : SEWERAGE STATEMENT STP OVERFLOW LINE (Depth Upto 2.0 Metres)

Sl. No.	Sewer Line Node No.		Average Depth of Pipe <i>Mtr</i>	Diameter of Pipe <i>mm</i>	Total Length of Pipe <i>Mtr</i>	Quantity of Pipe	
	<i>From</i>	<i>To</i>				200 Dia <i>Mtr</i>	250 Dia <i>Mtr</i>
1	Commercial STP By Pass connection line to HSVP MH			100	15	-	-
2	STP overflow connection line from Site Boundary to HSVP Sewer line (By Gravity)		1.238	200	5	5	-
3	Main STP By Pass connection line upto Site Boundary			100	56	-	-
4	STP overflow connection line from Site Boundary to HSVP Sewer line (By Gravity)		0.930	250	5	-	5

Total for 100 mm Dia D.I. pumping main (STP Overflow Line from Commercial)	15	Metres
Total for 100 mm Dia D.I. pumping main (STP Overflow Line from Plotted)	56	Metres
Total for 200 mm Dia S.W. Pipe (STP Overflow Line from Commercial)	5	Metres
Total for 250 mm Dia S.W. Pipe (STP Overflow Line from Plotted)	5	Metres



**PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY)
PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF
DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT.
LTD.**

SUBJECT : SEWERAGE STATEMENT UPTO STP (Depth Above 2.0 Metres)

Sl. No.	Sewer Line Node No.		Average Depth of <i>Mtr</i>	Diameter of Pipe <i>mm</i>	Length of Pipe <i>Mtr</i>	Quantity of Pipe		
	<i>From</i>	<i>To</i>				200 Dia <i>Mtr</i>	250 Dia <i>Mtr</i>	300 Dia <i>Mtr</i>
1	S3	S7	2.40	200	48	48	-	-
2	S7	S9	2.86	200	115	115	-	-
3	S9	S11	3.39	200	48	48	-	-
4	S11	S15	4.05	250	167	-	167	-
5	S15	S23	4.77	250	118	-	118	-
6	S20	S22	2.26	200	97	97	-	-
7	S22	S23	2.69	200	38	38	-	-
8	S23	STP	5.11	300	12	-	-	12
TOTAL						346	285	12

Total for 200 mm Dia Pipe	346	Metres
Total for 250 mm Dia Pipe	285	Metres
Total for 300 mm Dia Pipe	12	Metres



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18-475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTech PVT. LTD.

SUBJECT : DESIGN OF STORM WATER DRAINAGE SYSTEM

Sl. No.	Drainage Line Node No.		Length of Line	Area to be Drained	Area in Hectares			Discharge (Rainfall Intensity = 6.25mm)	Maximum Design Discharge (q)	Proposed Pipe Dia	Slope	Velocity	Discharge Capacity of Pipe (Q)	Fall in Line	Ground Level		Invert Level		Depth		Remarks
	From	To			Self	Branch	Total								Start	End	Start	End	Start	End	
			Mtr	Sq.M.				Cu.M/Hour	LPS	mm	1 in	m/sec	LPS	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	Mtr	
1	D1	R.PIT-1	40	1,872	0.19	0.00	0.19	11.70	3.25	400	570	0.60	75.56	0.070	203.300	203.290	201.850	201.780	1.45	1.51	1.48
2	R.PIT-1	D5	34	809	0.08	0.19	0.27	16.76	4.65	400	570	0.60	75.56	0.060	203.290	203.288	201.830	201.770	1.46	1.52	1.49
3	D2	D4	24	638	0.06	0.00	0.06	3.99	1.11	400*	570	0.60	75.56	0.042	203.424	203.356	201.974	201.932	1.45	1.42	1.44
4	D3	D4	39	958	0.10	0.00	0.10	5.99	1.66	400	570	0.60	75.56	0.068	203.288	203.356	201.838	201.770	1.45	1.59	1.52
5	D4	D5	133	5,885	0.59	0.16	0.75	46.76	12.99	400	570	0.60	75.56	0.233	203.356	203.288	201.770	201.536	1.59	1.75	1.67
6	D5	D7	48	1,415	0.14	1.02	1.16	72.36	20.10	400	570	0.60	75.56	0.084	203.288	203.220	201.536	201.452	1.75	1.77	1.76
7	D6	R.PIT-2	25	1,353	0.14	0.00	0.14	8.46	2.35	400	570	0.60	75.56	0.044	203.240	203.230	201.790	201.746	1.45	1.48	1.47
8	R.PIT-2	D7	26	1,239	0.12	0.14	0.26	16.20	4.50	400	570	0.60	75.56	0.046	203.230	203.220	201.746	201.701	1.48	1.52	1.50
9	D7	R.PIT-3	4	50	0.01	1.42	1.42	88.87	24.69	400	570	0.60	75.56	0.007	203.220	203.220	201.452	201.445	1.77	1.77	1.77
10	R.PIT-3	R.PIT-4	30	1,500	0.15	1.42	1.57	98.24	27.29	400	570	0.60	75.56	0.053	203.220	203.150	201.545	201.492	1.67	1.66	1.67
11	R.PIT-4	R.PIT-5	18.5	600	0.06	1.57	1.63	101.99	28.33	400	570	0.60	75.56	0.032	203.150	203.150	201.592	201.560	1.56	1.59	1.57
12	R.PIT-5	R.PIT-6	16	470	0.05	1.63	1.68	104.93	29.15	400	570	0.60	75.56	0.028	203.150	203.150	201.610	201.582	1.54	1.57	1.55
13	R.PIT-6	R.PIT-7	26.5	300	0.03	1.68	1.71	106.81	29.67	400	570	0.60	75.56	0.046	203.150	203.150	201.632	201.585	1.52	1.56	1.54
14	R.PIT-7	D9	178.5	6,350	0.64	1.71	2.34	146.49	40.69	400	570	0.60	75.56	0.313	203.150	203.424	201.635	201.322	1.51	2.10	1.81
15	D8	D9	124	5,975	0.60	0.00	0.60	37.34	10.37	400	570	0.60	75.56	0.218	203.560	203.424	202.110	201.892	1.45	1.53	1.49
16	D9	D11	48	1,130	0.11	2.94	3.05	190.90	53.03	400	570	0.60	75.56	0.084	203.424	203.492	201.322	201.238	2.10	2.25	2.18
17	D10	D11	124	7,708	0.77	0.00	0.77	48.18	13.38	400	570	0.60	75.56	0.218	203.628	203.492	202.178	201.960	1.45	1.53	1.49
18	D11	R.PIT-11	51	988	0.10	3.83	3.92	245.25	68.13	500	775	0.60	117.49	0.066	203.492	203.500	201.188	201.122	2.30	2.38	2.34



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : DESIGN OF STORM WATER DRAINAGE SYSTEM

Sl. No.	Drainage Line Node No.		Length of Line	Area to be Drained	Area in Hectares				Discharge (Rainfall Intensity = 6.25mm)	Maximum Design Discharge (q)	Proposed Pipe Dia	Slope	Velocity	Discharge Capacity of Pipe (Q)	Fall in Line	Ground Level		Invert Level		Depth		Average Depth	Remarks
	From	To			Sq.M.	Self	Branch	Total								Cu.M/Hour	Start	End	Start	End	Start		
19	R.PIT-11	R.PIT-12	27.5	5.387	0.54	3.92	4.46	278.92	77.48	500	775	0.60	117.49	0.035	203.500	203.628	201.222	201.187	2.28	2.44	Mfr	2.36'	
20	R.PIT-12	D13	6	677	0.07	4.46	4.53	283.15	78.65	500	775	0.60	117.49	0.008	203.628	203.500	201.287	201.279	2.34	2.22			
21	D12	D13	40	1.148	0.11	0.00	0.11	7.18	1.99	400	570	0.60	75.56	0.070	203.500	203.500	202.050	201.980	1.45	1.52			
22	D13	D17	128	4.963	0.50	4.65	5.14	321.34	89.26	500	775	0.60	117.49	0.165	203.500	203.696	201.229	201.064	2.27	2.63			
23	D14	R.PIT-13	44	1.662	0.17	0.00	0.17	10.39	2.89	400	570	0.60	75.56	0.077	203.832	203.764	202.382	202.305	1.45	1.46			
24	R.PIT-13	D16	58	630	0.06	0.17	0.23	14.33	3.98	400	570	0.60	75.56	0.102	203.764	203.696	202.305	202.203	1.46	1.49			
25	D15	D16	32	1.791	0.18	0.00	0.18	11.19	3.11	400	570	0.60	75.56	0.056	203.628	203.696	202.178	202.122	1.45	1.57			
26	D16	D17	126	3.844	0.38	0.41	0.79	49.54	13.76	400	570	0.60	75.56	0.221	203.696	203.696	202.122	201.901	1.57	1.80			
27	D17	D19	118	3.750	0.38	5.93	6.31	394.33	109.53	500	775	0.60	117.49	0.152	203.696	203.764	201.064	200.912	2.63	2.85			
28	D18	D19	24	944	0.09	0.00	0.09	5.90	1.64	400	570	0.60	75.56	0.042	203.830	203.764	202.380	202.338	1.45	1.43			
29	D19	R.PIT-14	12	325	0.03	6.40	6.44	402.26	111.74	500	775	0.60	117.49	0.015	203.764	203.760	200.912	200.896	2.85	2.86			
30	R.PIT-14	R.PIT-15	28	490	0.05	6.44	6.49	405.32	112.59	500	775	0.60	117.49	0.036	203.760	203.760	200.996	200.960	2.76	2.80			
31	R.PIT-15	R.PIT-16	22	500	0.05	6.49	6.54	408.44	113.46	500	775	0.60	117.49	0.028	203.760	203.760	201.010	200.982	2.75	2.78			
32	R.PIT-16	R.PIT-17	19.5	369	0.04	6.54	6.57	410.75	114.10	500	775	0.60	117.49	0.025	203.760	203.760	201.032	201.006	2.73	2.75			
33	R.PIT-17	R.PIT-19	38	1,065	0.11	6.57	6.68	417.41	115.95	500	775	0.60	117.49	0.049	203.760	203.760	201.056	201.007	2.70	2.75			
34	R.PIT-19	D21	5	10	0.00	6.68	6.68	417.47	115.96	500	775	0.60	117.49	0.006	203.760	203.832	201.057	201.051	2.70	2.78			
34	D21	D26	39	1,025	0.10	6.68	6.78	423.88	117.74	500	700	0.63	123.63	0.056	203.832	203.600	201.051	200.995	2.78	2.60			
35	D22	D23	114	1,365	0.14	0.00	0.14	8.53	2.37	400	570	0.60	75.56	0.200	203.500	203.600	202.050	201.850	1.45	1.75			
35	D23	R.PIT-18	58	1,465	0.15	0.14	0.28	17.69	4.91	400	570	0.60	75.56	0.102	203.600	203.900	201.850	201.748	1.75	2.15			

PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : DESIGN OF STORM WATER DRAINAGE SYSTEM

Sl. No.	Drainage Line Node No.		Length of Line	Area to be Drained	Area in Hectares			Discharge (Rainfall Intensity = 6.25mm)	Maximum Design Discharge (q)	Proposed Pipe Dia	Slope	Velocity	Discharge Capacity of Pipe (Q)	Fall in Line	Ground Level		Invert Level		Depth		Average Depth	Remarks
	From	To			Self	Branch	Total								Start	End	Start	End	Start	End		
36	R.PIT-18	D25	29	10.	0.00	0.28	0.28	17.75	4.93	400	570	0.60	75.56	0.051	203.900	203.866	201.748	201.697	2.15	2.17	2.16	
37	D24	D25	20	1.015	0.10	0.00	0.10	6.34	1.76	400	570	0.60	75.56	0.035	203.866	203.866	202.416	202.381	1.45	1.49	1.47	
38	D25	D26	92.5	50	0.01	0.39	0.39	24.41	6.78	400	570	0.60	75.56	0.162	203.866	203.600	201.697	201.535	2.17	2.06	2.12	
39	D26	OUTFALL	8	50	0.01	7.17	7.18	448.59	124.61	500	650	0.65	128.29	0.012	203.600	203.600	200.995	200.983	2.60	2.62	2.61	



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : STORM WATER DRAINAGE STATEMENT (Depth Upto 2.0 Metres)

Sl. No.	Drainage Line Node No.		Average Depth of Pipe	Diameter of Pipe	Length of Pipe	Quantity of Pipe		
						400mm Dia	450mm Dia	500mm Dia
	From	To	Mtr	mm	Mtr	Mtr	Mtr	Mtr
1	D1	R.PIT-1	1.48	400	40	40	-	-
2	R.PIT-1	D5	1.49	400	34	34	-	-
3	D2	D4	1.44	400	24	24	-	-
4	D3	D4	1.52	400	39	39	-	-
5	D4	D5	1.67	400	133	133	-	-
6	D5	D7	1.76	400	48	48	-	-
7	D6	R.PIT-2	1.47	400	25	25	-	-
8	R.PIT-2	D7	1.50	400	26	26	-	-
9	D7	R.PIT-3	1.77	400	4	4	-	-
10	R.PIT-3	R.PIT-4	1.67	400	30	30	-	-
11	R.PIT-4	R.PIT-5	1.57	400	19	19	-	-
12	R.PIT-5	R.PIT-6	1.55	400	16	16	-	-
13	R.PIT-6	R.PIT-7	1.54	400	27	27	-	-
14	R.PIT-7	D9	1.81	400	179	179	-	-
15	D8	D9	1.49	400	124	124	-	-
16	D10	D11	1.49	400	124	124	-	-
17	D12	D13	1.49	400	40	40	-	-



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : STORM WATER DRAINAGE STATEMENT (Depth Upto 2.0 Metres)

Sl. No.	Drainage Line Node No.		Average Depth of Pipe	Diameter of Pipe	Length of Pipe	Quantity of Pipe		
	From	To				400mm Dia	450mm Dia	500mm Dia
			Mtr	mm	Mtr	Mtr	Mtr	Mtr
18	D14	R.PIT-13	1.45	400	44	44	-	-
19	R.PIT-13	D16	1.48	400	58	58	-	-
20	D15	D16	1.51	400	32	32	-	-
21	D16	D17	1.68	400	126	126	-	-
22	D18	D19	1.44	400	24	24	-	-
23	D22	D23	1.60	400	114	114	-	-
24	D23	R.PIT-18	1.95	400	58	58	-	-
25	D24	D25	1.47	400	20	20	-	-
TOTAL						1407	0	0
Total for 400 mm Dia Pipe						1407	Metres	
Total for 450 mm Dia Pipe						0	Metres	
Total for 500 mm Dia Pipe						0	Metres	



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : STORM WATER DRAINAGE STATEMENT (Depth Above 2.0 Metres)

Sl. No.	Drainage Line Node No.		Average Depth of Pipe Mtr	Diameter of Pipe mm	Length of Pipe Mtr	Quantity of Pipe		
	From	To				400mm Dia Mtr	450mm Dia Mtr	500mm Dia Mtr
1	D9	D11	2.178	400	48	48	-	-
2	D11	R.PIT-11	2.341	500	51	-	-	51
3	R.PIT-11	R.PIT-12	2.360	500	28	-	-	28
4	R.PIT-12	D13	2.281	500	6	-	-	6
5	D13	D17	2.452	500	128	-	-	128
6	D17	D19	2.742	500	118	-	-	118
7	D19	R.PIT-14	2.858	500	12	-	-	12
8	R.PIT-14	R.PIT-15	2.782	500	28	-	-	28
9	R.PIT-15	R.PIT-16	2.764	500	22	-	-	22
10	R.PIT-16	R.PIT-17	2.741	500	20	-	-	20
11	R.PIT-17	R.PIT-19	2.728	500	38	-	-	38
12	R.PIT-19	D21	2.742	500	5	-	-	5
13	D21	D26	2.693	500	39	-	-	39
14	R.PIT-18	D25	2.160	400	29	29	-	-
15	D25	D26	2.117	400	93	93	-	-
16	D26	OUTFALL	2.611	500	8	-	-	8
TOTAL						170		502
Total for 400 mm Dia Pipe						170	Metres	
Total for 450 mm Dia Pipe							Metres	
Total for 500 mm Dia Pipe						502	Metres	



SUBJECT : DOMESTIC WATER SUPPLY DESIGN

Sl. No.	Line No.	Plots on Line	Population @13.5 Persons/ Hectare	Domestic Water Requirement @150-100 mm	Domestic Water Requirement for Non Residential Buildings	Total Domestic Water Requirement (Self Load on Lines)	Previous Load on Lines	Total Load on Lines	Peak Factor @ 3 times of daily water demand	Flow Rate lph	Flow Rate lpm	Length of Pipe m	Proposed line dia. mm	Value of 'C'	Velocity m/sec	Frictional Head Loss mm	Total Frictional Head Loss mm	Ground Level At Start	Ground Level At End	H.L. at Start	H.L. at End	Residual Head at Start	Residual Head at End
		Nos.	Nos.	lpd	lpd	lpd	lpd	lpd	lpd	lph	lpm	m	mm			m.m	m	m	m	m	m	m	m
1	UCT	W1	0	0.0	0.0	0.0	47423.3	47423.3	142271.75	59279.7	988.0	10	150	100	0.93	0.014	0.11	198.330	203.850	243.330	243.222	45.0	39.4
2	W1	W2	5	6800.6	0.0	6800.6	467426.6	474237.3	142271.75	59279.7	988.0	24	150	100	0.93	0.011	0.26	203.850	203.832	243.222	242.962	39.4	39.1
3	W2	W3	4	5440.5	0.0	5440.5	31282.9	36723.4	110170.125	4590.4	76.5	92	100	100	0.16	0.001	0.06	203.832	203.600	242.962	242.899	39.1	39.3
4	W3	W4	4	5440.5	0.0	5440.5	12241.1	17681.6	53044.875	2210.2	36.8	30	100	100	0.08	0.000	0.01	203.600	203.866	242.899	242.884	39.3	39.0
5	W4	W5	6	8160.8	0.0	8160.8	0.0	8160.8	24482.25	1020.1	17.0	20	100	100	0.04	0.000	0.00	203.866	203.866	242.884	242.884	39.0	39.0
6	W4	W6	3	4080.4	0.0	4080.4	0.0	4080.4	12241.125	510.0	8.5	21	100	100	0.02	0.000	0.00	203.866	203.900	242.884	242.884	39.0	39.0
7	W3	W7	10	13601.3	0.0	13601.3	0.0	13601.3	40803.75	1700.2	28.3	122	100	100	0.06	0.000	0.01	203.600	203.500	242.889	242.886	39.3	39.4
8	W2	W8	33	446	0.0	4484.1	385829.1	430713.3	1292138.75	53839.2	897.3	155	150	100	0.85	0.009	1.40	203.832	203.696	242.962	241.559	39.1	37.9
9	W8	W9	31	459	0.0	46244.3	267498.3	313742.5	941227.5	39217.8	653.6	118	150	100	0.62	0.005	0.59	203.696	203.500	241.559	240.964	37.9	37.5
10	W8	W10	24	324	0.0	32643.0	39443.6	72086.6	216259.875	9010.8	150.2	126	100	100	0.32	0.002	0.30	203.696	203.500	241.559	241.238	37.9	37.8
11	W9	W10	11	149	0.0	14961.4	0.0	14961.4	44884.125	1870.2	31.2	84	100	100	0.07	0.000	0.01	203.500	203.696	240.964	240.953	37.5	37.3
12	W10	W11	18	243	0.0	24482.3	0.0	24482.3	73446.75	3060.3	51.0	89	100	100	0.11	0.000	0.03	203.696	203.832	240.953	240.925	37.3	37.1
13	W9	W12	5	68	25396.0	32196.6	255901.6	267498.3	802494.75	33437.3	557.3	52	100	100	1.18	0.027	1.40	203.500	203.492	240.964	239.560	37.5	36.1
14	W12	W13	31	419	0.0	42163.9	0	42163.9	126491.625	5270.5	87.8	123	100	100	0.19	0.001	0.11	203.492	203.628	239.560	239.452	36.1	35.8
15	W12	W14	8	108	10881.0	0.0	182256.8	193137.8	579413.25	24142.2	402.4	48	100	100	0.85	0.015	0.71	203.492	203.424	239.560	238.851	36.1	35.4
16	W14	W15	32	432	43524.0	0.0	0	43524.0	130572	5440.5	90.7	127	100	100	0.19	0.001	0.12	203.424	203.560	238.851	238.722	35.4	35.2
17	W14	W16	16	216	21762.0	0.0	116970.8	138732.8	416198.25	17341.6	289.0	103	100	100	0.61	0.008	0.82	203.424	203.288	238.851	238.027	35.4	34.7
18	W16	W17	6	81	8160.8	0.0	58485.4	66646.1	199938.375	8330.8	138.8	48	100	100	0.29	0.002	0.10	203.288	203.356	237.928	237.928	34.7	34.6
19	W16	W19	25	338	34003.1	0.0	16321.5	50324.6	150973.875	6290.6	104.8	133	100	100	0.22	0.001	0.16	203.356	203.220	237.928	237.864	34.7	34.6
20	W17	W18	4	54	5440.5	0.0	0	5440.5	16321.5	680.1	11.3	24	100	100	0.02	0.000	0.00	203.220	203.424	237.928	237.927	34.6	34.5
21	W17	W21	32	432	43524.0	0.0	9520.9	53044.9	159134.625	6630.6	110.5	133	100	100	0.23	0.001	0.18	203.356	203.288	237.928	237.748	34.6	34.5
22	W19	W21	6	81	8160.8	0.0	0	8160.8	24482.25	1020.1	17.0	48	100	100	0.04	0.000	0.00	203.220	203.288	237.864	237.862	34.6	34.6
23	W19	W20	6	81	8160.8	0.0	0	8160.8	24482.25	1020.1	17.0	39	100	100	0.04	0.000	0.00	203.220	203.150	237.864	237.862	34.6	34.7
24	W21	W22	7	95	9520.9	0.0	0	9520.9	28562.625	1190.1	19.8	75	100	100	0.04	0.000	0.00	203.288	203.320	237.748	237.744	34.5	34.4



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : DOMESTIC WATER SUPPLY MATERIAL STATEMENT

Sl. No.	Water Supply Node No.		Diameter of Pipe <i>mm</i>	Length of Pipe <i>Mtr</i>	Quantity of Pipe		
	<i>From</i>	<i>To</i>			80mm Dia <i>Mtr</i>	100mm Dia <i>Mtr</i>	150 Dia <i>Mtr</i>
1	UGT	W1	150	10	-	-	10
2	W1	W2	150	24	-	-	24
3	W2	W3	100	92	-	92	-
4	W3	W4	100	30	-	30	-
5	W4	W5	100	20	-	20	-
6	W4	W6	100	21	-	21	-
7	W3	W7	100	122	-	122	-
8	W2	W8	150	155	-	-	155
9	W8	W9	150	118	-	-	118
10	W8	W10	100	126	-	126	-
11	W9	W10	100	84	-	84	-
12	W10	W11	100	89	-	89	-
13	W9	W12	100	52	-	52	-
14	W12	W13	100	123	-	123	-
15	W12	W14	100	48	-	48	-
16	W14	W15	100	127	-	127	-
17	W14	W16	100	103	-	103	-
18	W16	W17	100	48	-	48	-
19	W16	W19	100	133	-	133	-
20	W17	W18	100	24	-	24	-
21	W17	W21	100	133	-	133	-
22	W19	W21	100	48	-	48	-
23	W19	W20	100	39	-	39	-



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : DOMESTIC WATER SUPPLY MATERIAL STATEMENT

Sl. No.	Water Supply Node No.		Diameter of Pipe	Length of Pipe	Quantity of Pipe		
					80mm Dia	100mm Dia	150 Dia
	<i>From</i>	<i>To</i>	<i>mm</i>	<i>Mtr</i>	<i>Mtr</i>	<i>Mtr</i>	<i>Mtr</i>
24	W21	W22	100	75	-	75	-
TOTAL						1537	307



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : DOMESTIC WATER SUPPLY MATERIAL STATEMENT

Sl. No.	Water Supply Node No.		Diameter of Pipe	Length of Pipe	Quantity of Pipe		
	<i>From</i>	<i>To</i>			80mm Dia	100mm Dia	150 Dia
			<i>mm</i>	<i>Mtr</i>	<i>Mtr</i>	<i>Mtr</i>	<i>Mtr</i>
			Total for 100 mm Dia Pipe		1537	Metres	
			Total for 150 mm Dia Pipe		307	Metres	



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOUNIA PLOTTED COLONY (DDUJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SONHA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

TITLE : FLUSHING WATER SUPPLY DESIGN																																																																											
Plots				Non Residential Load				Gross Water Requirement (Self Load on Lines) LPD				Total Load on Lines				Peak Factor				Flow Rate				Length of Line				Dia of Pipe				Value of 'v'				Head Loss in m				Total Head Loss				Velocity				Elevation at Start				Elevation at End				Hydraulic Level at Start				Hydraulic Level at End				Head at Start				Head at End				Remarks			
Line No.		Nos.		Population @ 13.5 persons / Plot		Flushing Water Requirement of Plots - 4% of @145=54.25		Area		Type of Building		Flushing Water Requirement LPD		Total Water Requirement LPD		(c)		(d)=(b)+(c)		Previous Load on Lines		Total Load on Lines		Peak Factor		Flow Rate		Length of Line		Dia of Pipe		Value of 'v'		Head Loss in m		Total Head Loss		Velocity		Elevation at Start		Elevation at End		Hydraulic Level at Start		Hydraulic Level at End		Head at Start		Head at End		Remarks																							
				(a)		(b)		Sq.m.		Green		6.17 ltr/sqm.		10461.24		10461.24		10461.24		297061		3		891184		37132.66		15		150		0.00		0.07		0.58		197.26		203.76		242.27		242.20		45.0		38.4		Pump Room																									
F1		F2		81		4394.25								4394.25		24122.9		28417.2		3		85551.5		3564.65		46		100		0.00		0.02		0.13		203.76		203.83		242.20		242.18		38.4		38.3		At Ground																											
F2		F3		67.5		3661.875								3661.88		0		3661.88		3		10985.6		457.73		7.63		40		100		0.00		0.00		0.02		203.83		203.85		242.18		242.18		38.3		38.3		At Ground																									
F2		F4		40.5		2197.125								2197.13		18263.9		20461		3		61383.1		2557.63		42.63		98		100		0.00		0.02		203.83		203.60		242.18		242.15		38.3		38.6		At Ground																											
F4		F5		40.5		2197.125								2197.13		9475.41		11672.5		3		35017.6		1459.07		24.32		23		100		0.00		0.00		0.05		203.60		203.87		242.15		242.15		38.6		38.3		At Ground																									
F5		F5.1		81		4394.25								4394.25		0		4394.25		3		13182.8		549.28		9.15		26		100		0.00		0.00		0.02		203.87		203.87		242.15		242.15		38.3		38.3		At Ground																									
F5		F6		54		2929.5		348.73		Green		6.17 ltr/sqm.		2151.66				5081.16		3		15243.5		635.15		10.59		28		100		0.00		0.02		203.87		203.90		242.15		242.15		38.3		38.3		At Ground																											
F4		F7		121.5		6591.375								6591.38		0		6591.38		3		19774.1		823.92		13.73		115		100		0.00		0.00		0.03		203.60		203.50		242.15		242.15		38.6		38.7		At Ground																									
F1		F8		378		20506.5								20506.50		237576		258083		3		774249		32260.36		537.67		111		100		0.03		2.80		1.14		203.76		203.70		242.20		239.39		38.4		35.7		At Ground																									
F8		F10		324		17577								17577.00		24840.5		42417.5		3		127252		5302.19		88.37		114		100		0.00		0.10		0.19		203.70		203.70		239.39		239.29		35.7		35.6		At Ground																									
F8		F9		459		24900.75								24900.75		170258		195159		3		585477		24394.86		406.58		114		100		0.02		1.72		0.86		203.70		203.50		239.39		237.67		34.2		34.2		At Ground																									
P9		F10		162		8788.5								8788.50		0		8788.5		3		26365.5		1098.56		18.31		85		100		0.00		0.00		0.04		203.50		203.70		237.67		237.67		34.2		34.0		At Ground																									
F10		F11		243		13182.75		465.03		Green		6.17 ltr/sqm.		2869.24		16051.99		0		16052		3		48156		2066.50		33.44		100		0.00		0.01		0.07		203.70		203.83		237.67		237.66		34.0		33.8		At Ground																									
F9		F12		6		4394.25		1.847		Community		112.50 ltr/Acre		20778.75		25173.00		145085		3		510774		21282.27		354.70		51		100		0.01		0.60		0.75		203.50		203.49		237.67		237.08		34.2		33.6		At Ground																									
F12		F13		432		23436								23436.00		0		23436		3		70308		2929.50		48.83		130		100		0.00		0.04		0.10		203.49		203.63		237.08		237.04		33.6		33.4		At Ground																									
F12		F14		108		5859								5859.00		115790		121649		3		364947		15206.14		253.44		48		100		0.01		0.30		0.54		203.49		203.42		237.08		236.78		33.6		33.4		At Ground																									
F14		F15		32		23436								23436.00		0		23436		3		70308		2929.50		48.83		138		100		0.00		0.04		0.10		203.42		203.56		236.78		236.74		33.4		33.2		At Ground																									
F14		F16		15		10985.625								10985.63		81368.5		92354.1		3		277062		11544.27		192.40		116		100		0.00		0.44		0.41		203.42		203.29		236.78		236.34		33.4		33.1		At Ground																									
F16		F17		7		5126.625								5126.63		34927.9		40054.5		3		120164		5006.81		83.45		48		100		0.00		0.04		0.18		203.29		203.36		236.34		236.30		33.1		32.9		At Ground																									
F16		F19		24		17577		2422.77		Green		6.17 ltr/sqm.		14948.49		32525.49		8788.5		41314		3		123942		5164.25		86.07		133		100		0.00		0.11		0.18		203.29		203.22		236.34		236.23		33.1		33.0		At Ground																							
F19		F20		6		4394.25								4394.25		0		4394.25		3		13182.8		549.28		9.15		45		100		0.00		0.00		0.02		203.22		203.15		236.23		236.23		33.0		33.1		At Ground																									
F19		F21		6		4394.25								4394.25		0		4394.25		3		13182.8		549.28		9.15		48		100		0.00		0.00		0.02		203.22		203.29		236.23		236.23		33.0		32.9		At Ground																									
F17		F18		3		2197.125								2197.13		0		2197.13		3		6591.38		274.64		4.58		18		100		0.00		0.00		0.01		203.36		203.42		236.30		236.23		32.9		32.9		At Ground																									
F17		F21		34		24900.75								24900.75		7830.02		32736.8		3		98192.3		4091.35		68.19		133		100		0.00		0.07		0.14		203.36		203.29		236.30		236.23		32.9		32.9		At Ground																									
F21		F22		5		3661.875		675.55		Green		6.17 ltr/sqm.		4168.14		7830.02		0		7830.02		3		23490.1		978.75		75		100		0.00		0.00		0.03		203.29		203.32		236.23		236.23		32.9		32.9		At Ground																									



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : FLUSHING WATER SUPPLY MATERIAL STATEMENT

Sl. No.	Water Supply Node No.		Diameter of Pipe	Length of Pipe	Quantity of Pipe	
	From	To			100mm Dia	150mm Dia
			mm	Mtr	Mtr	Mtr
1	STP	F1	150	15	-	15
2	F1	F2	100	46	46	-
3	F2	F3	100	40	40	-
4	F2	F4	100	98	98	-
5	F4	F5	100	23	23	-
6	F5	F5.1	100	26	26	-
7	F5	F6	100	28	28	-
8	F4	F7	100	115	115	-
9	F1	F8	100	111	111	-
10	F8	F10	100	114	114	-
11	F8	F9	100	114	114	-
12	F9	F10	100	85	85	-
13	F10	F11	100	80	80	-
14	F9	F12	100	51	51	-
15	F12	F13	100	130	130	-
16	F12	F14	100	48	48	-
17	F14	F15	100	138	138	-
18	F14	F16	100	116	116	-
19	F16	F17	100	48	48	-

PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

SUBJECT : FLUSHING WATER SUPPLY MATERIAL STATEMENT

Sl. No.	Water Supply Node No.		Diameter of Pipe	Length of Pipe	Quantity of Pipe	
	<i>From</i>	<i>To</i>			100mm Dia	150mm Dia
20	F16	F19	100	133	133	-
21	F19	F20	100	45	45	-
22	F19	F21	100	48	48	-
23	F17	F18	100	18	18	-
24	F17	F21	100	133	133	-
25	F21	F22	100	75	75	-
TOTAL					1863	15
			Total for 100mm Dia Pipe		1863	Metres
			Total for 150mm Dia Pipe		15	Metres



PROJECT : PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 18.475 ACRES FALLING WITHIN SECTOR 4 OF DEVELOPMENT PLAN OF SOHNA 2031 BEING DEVELOPED BY FAITH BUILDTECH PVT. LTD.

TITLE : DESIGN OF TUBE WELL LINES

S.NO	LINE NO	AVERAGE DEMAND	PEAK DEMAND @ 1.5 TIMES	FLOW RATE	LENGTH OF PIPE	HEAD LOSS MTR/MTR	TOTAL HEAD LOSS	VELOCITY	DIA OF PIPE
		KLD	KLD	LPM	MTR.	MTR.	MTR.	M/SEC	MM
1	TUBE WELL - 1 TO U.G.T.	20.00	30.00	500.00	25	0.022	0.55	1.06	100
2	TUBE WELL - 2 TO U.G.T.	20.00	30.00	500.00	310	0.022	6.85	1.06	100

TITLE : DESIGN OF HSVP RISING MAIN FOR PLOTTED AND COMMUNITY

S.NO	LINE NO	AVERAGE DEMAND	PEAK DEMAND @ 1.5 TIMES	FLOW RATE	LENGTH OF PIPE	HEAD LOSS MTR/MTR	TOTAL HEAD LOSS	VELOCITY	DIA OF PIPE
		KLD	KLD	LPM	MTR.	MTR.	MTR.	M/SEC	MM
1	MAIN - U.G.T.	474.00	711.00	493.75	55	0.02158	1.19	1.05	100

TITLE : DESIGN OF HSVP RISING MAIN FOR COMMERCIAL

S.NO	LINE NO	AVERAGE DEMAND	PEAK DEMAND @ 1.5 TIMES	FLOW RATE	LENGTH OF PIPE	HEAD LOSS MTR/MTR	TOTAL HEAD LOSS	VELOCITY	DIA OF PIPE
		KLD	KLD	LPM	MTR.	MTR.	MTR.	M/SEC	MM
1	MAIN - U.G.T.	21.00	31.50	21.88	10	0.00007	0.00	0.05	100

