

**M/s GSK INFRATECH LLP, DDJAY PLOTTING IN
SECTOR -3, PATAUDI, GURUGRAM, HARYANA.**

EXTERNAL SERVICE ESTIMATE

ARCHITECT



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Architecture

Interior

Planning

Vastu

ESTIMATE FOR PROVIDING EXTERNAL DEVELOPMENT WORKS FOR PROPOSED DEEN DAYAL JAN AWAS YOJNA PLOTTED COLONY (DDJAY) PLAN OF AREA MEASURING 13.2375 ACRES FALLING WITHIN SECTOR-3, TEHSIL-PATAUDI, DISTT-GURUGRAM. BEING DEVELOPED BY M/S GSK INFRATECH LLP

REPORT

Pataudi is a town, a tehsil and one of the 4 sub-divisions of Gurugram district, in the Indian state of Haryana, within the boundaries of the National Capital Region of India. It is located 28 km (17.4 mi) southwest of Gurugram city.

The small princely state Pataudi State was formed in 1804 by East India Company with 40 villages including Pataudi village (as it was then) as reward to Faiz Talab Khan a Pashtun of the Barech tribe for aiding the Company against the Maratha Empire during the Second Anglo-Maratha War and the English made Faiz Talab Khan Nawab of Pataudi. It was subsumed into Union of India in 1947.

As of 2001 India census, Pataudi had a population of 16,064. Males constitute 53% of the population and females 47%. Pataudi has an average literacy rate of 57%, lower than the national average of 59.5%: male literacy is 65%, and female literacy is 48%. In Pataudi, 17% of the population is under 6 years of age Their main occupation is farming. Rao Kanwar Singh Yadav (father of Krishan Lal Yadav and Ram Avtar Yadav) the famous freedom fighter of Quni Daultabad village is also from Pataudi.

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 purpose 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 pump out to each plot. Flushing water and Irrigation water demand will be met from treated effluent 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 18 persons for each plot. The rate of water head/day has been taken 155.25 liters per head per day as per HSVP norms.

PUMPING EQUIPMENT'S

It has been proposed to install pumping set as described with standby of equal capacity shall be provided 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 in the site with a bye-pass line to HSVP sewer to dispose off the surplus water from STP. The sewerage system 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 assumed that about 80% of the domestic & flushing water supply shall find its way into the proposed sewer lines shall be laid to a gradient maintaining minimum 2.46 ft./see self-cleaning velocity. Sewer line up to 400 Dia has been designed to run half full at peak Necessary provision for laying S.W./RCC/DWC pipe sewer line, construction of required number of manholes etc. 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 RCC NP-3 pipe drains with required number of catch basins, manholes and rainwater recharge pits with over flow to the proposed HSVP storm drain on Sector Road. The intensity of rain fall has been taken as 1/4" per hour. 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 include

RATES

The estimate has been prepared based on the present market rates

COST

The total cost of the scheme, including cost of all services works out be Rs. 1386.60 Lakhs only Including 3% Contingencies and 49% Departmental Charges, price escalation, unforeseen, Admin. Charges.

For: M/S GSK INFRATECH LLP

Authorized Signatory



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-
PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT: FINAL ABSTRACT OF COST

		Amount in Rs. Lacs
SUB WORK NO. I	WATER SUPPLY SCHEME	265.65
SUB WORK NO. II	SEWERAGE SCHEME	193.97
SUB WORK NO.III	STORM WATER DRAINAGE	153.62
SUB WORK NO.IV	ROADS & FOOT PATHS	357.35
SUB WORK NO.V	STREET LIGHTING	50.79
SUB WORK NO. VI	HORTICULTURE (PLANTATION & ROAD SIDE TREES)	10.89
SUB WORK NO. VII	MTC CHARGES RESURFACING OF ROADS	354.33
	TOTAL	1386.60

TOTAL : (Rupees Thirteen Crores Eighty six Lakhs and Sixty Thousands Only)/-

Cost Per Acre = $1386.60 / 13.2375 = 104.75$ Lakh / Acre.

AUTHORISED SIGNATORY

218060 dtd 30/06/2025
Checked subject to Comments
In forwarding letter No. 350547
Dt. 06/11/2025 and notes
Attached with the estimate

Executive Engineer
HSVP Division No. VI
Gurugram

Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP Circle-I, Gurugram

Director
Town & Country Planning
Haryana, Chandigarh



SUB WORK No. 1 (Abstract of Cost)		Water Supply & Fire Fighting	
1	Sub Head No. 01	Head Works	Rs.61,50,625
2	Sub Head No. 02	Pumping Machinery	Rs.67,37,500
3	Sub Head No. 03	Domestic Water Supply Distribution	Rs.23,06,350
4	Sub Head No. 04	Flushing & Irrigation System	Rs.21,15,300
		TOTAL	Rs.1,73,09,775
		Add 3% contingencies & PH Charges	Rs.5,19,293.25
		TOTAL	Rs.1,78,29,068
		Add 49% Departmental charges + Price escalation	Rs.87,36,243.44
		TOTAL	Rs.2,65,65,312
		Say in lacs	265.65

(Cost to Final abstract of cost)



Sub Work No. 1
Sub Head No. 01

Water Supply
Head Works (Rising Main from HSVP & Bore Well) Amount in Rs.

1. Providing laying jointing and testing pipe lines including cost of excavation etc complete in all respects	
a) 100 mm dia D.I. Pipe 140 m @ Rs. 1475/- for plotted from HSVP main	Rs.2,06,500
b) 100 mm dia D.I. Pipe 95 m @ Rs. 1475/- for Tubewell	Rs.1,40,125
2. Boring and installing tube well with reverse Rotary Rig Complete with pipe and strainer to a depth of about 120 meter in all respect 2 Nos. for For overall 13.2375 Acre Site Area Total -2 No. @ Rs. 15,00,000/- each.	Rs.30,00,000
3. Provision for borewell chamber of size 1.5 x 1.5 x 1.5 m For Housing borewell 2 Nos.@ Rs 100000/-each	Rs.2,00,000
4. Construction of boundary wall around Tube Well	Rs.2,00,000
5. Providing and fixing sluice value/butter fly value and air release valve including cost of surface boxes and masonry chambers etc.complete in all respects (a) 100 mm ,150mm & 200mm dia L.S.	Rs.50,000
6. Providing and fixing indicating plates for sluice value. Butterfly valve and air valves etc. (a) 100 mm 2 Nos. @ Rs 2000	Rs.4,000
7. Provision for Carriage of material & other unforeseen items	Rs.1,00,000
8. Provision for cutting of roads and making good to its original conditions.	Rs.1,50,000
9. Provision for making connection with HSVP on master road.	Rs.2,00,000
10. Providing and Installing electricity driven or sumersible pumping sets capable of delivering about 17 KL per hour against a total head of 78 meter. (L.S.)(10.0HP)- 2nos@2.0lakh each	Rs.4,00,000
11. Provide for staff Quarters for maintenance staff (L.S)-2nos (350 sqft @7.5 lakh each	Rs.15,00,000
TOTAL	Rs.61,50,625

(C/O To Abstract of Cost for Sub work No.1)



Sub Work No. 1
Sub Head No. 02

Water Supply
Pumping Machinery

Amount in Rs.

1. Providing & installing booster pumping set of following capacity for Water Supply Booster pumps for Domestic purpose complete with motor and other accessories. For domestic water 500 LPM of 45 M head of 1 set (2 Working 1 standby) of 10 HP Each @ Rs 200,000.	Rs.6,00,000
2. Providing & installing booster pumping set of following capacity for Water Supply Booster pumps complete with motor and other accessories. For flushing water 300 LPM of 45 M head of 1 set (2 Working 1 stand by of 5 HP Each @ Rs 1,00,000/-	Rs.3,00,000
3. Provision for chlorination plant complete 1 No @ Rs 150,000/- Each	Rs.1,50,000
4. Provision for making foundations and erection of pumping machinery - Lump Sum	Rs.2,00,000
5. Provision for pipes.valves and special inside boosting chamber - Lump Sum	Rs.2,00,000
6. Provision for electric service connection including electrical fitting for booster pumps etc. - Lump Sum	Rs.2,50,000
7. Provision for carriage of material and other unforeseen items etc - Lump Sum	Rs.2,00,000
8. Providing and construction of Under Grond Water Storage Tank 575 KL (Including 75 KL for fire) + 200 KL for flushing near STP @ 5500/ KL	Rs.31,62,500
9. Construction of boosting chamber of suitable size - Lump Sum	Rs.5,00,000
10. Provision for gate,boundry wall, foothpath and lawn as water works - Lump Sum	Rs.2,00,000
11. Provision for Generator set of 63 KVA - Lump Sum	Rs.9,75,000
TOTAL	Rs.67,37,500

(C/O To Abstract of Cost for Sub work No.1)



Sub-Work No. 1
Sub Head No. 03

Water Supply
Domestic Water Supply Distribution

Amount in Rs.

1. Providing , Laying , jointing and testing D.I pipe line including Fittings, valves, cost of excavation etc. complete in all respect. D.I Pipe 100 mm , 1050 M @ Rs. 1475/- per meter D.I Pipe 150 mm , 90 M @ Rs. 2040/- per meter	 Rs.15,48,750 Rs.1,83,600
2. Providing and fixing sluice valve including cost of surface boxes and masonry chambers etc. complete in all respects. (a) 100mm ,4 Nos. Each @ Rs 12000/- (b) 150mm ,2 Nos. Each @ Rs 15000/-	 Rs.48,000 Rs.30,000
3. Providing and fixing External Fire Hydrants including chamber complete in all respects. (a) 10 Nos. Each @ Rs 15,000/-	 Rs.1,50,000
4. Providing and fixing air release valve and other valves (a) 2 Nos. Each @ Rs 10,000/-	 Rs.20,000
5. Indication plate for valves,hydrant AV etc. (a) 13 Nos. Each @ Rs 2000/-	 Rs.26,000
6. Provision for carriage of materials and other unforeseen items - Lump Sum	Rs.1,50,000
7. Provision for cutting of roads and making goods to its original conditions - Lump Sum	Rs.1,50,000
TOTAL Rs.23,06,350	



Sub Work No. 1
Sub-Head No. 04

Water Supply
Flushing & Irrigation System

	Amount in Rs.
1. Providing , Laying , jointing and testing D.I pipe line including Fittings, valves, cost of excavation etc. complete in all respect.	
a)D.I Pipe 100 mm , 1100 M @ Rs.1475 /- per meter	Rs.16,22,500
b)D.I Pipe 150 mm , 20 M @ Rs.2040 /- per meter	Rs.40,800
2. Providing and fixing sluice/butter fly valve including cost of surface boxes and masonry chambers etc. complete in all respects.	
(a)100mm dia 6 Nos. Each @ Rs 12,000/-	Rs.72,000
(b)150mm dia 1 Nos. Each @ Rs 15,000/-	Rs.15,000
3. Providing and fixing air release valve and scour valve	
(a) 2 Nos. Each @ Rs 10,000/-	Rs.20,000
4. Indication plate for valves, hydrant AV etc.	
(a) 10 Nos. Each @ Rs 2000/-	Rs.20,000
5. Provision for carriage of materials and other unforeseen items - Lump Sum	Rs.1,00,000
6. Provision for upvc pipe line suitable for 6 kg pressure including cost of fitting, valve etc. complete 25 mm dia. - Lump Sum	Rs.50,000
7. Provision for cutting of roads and making goods to its original conditions. - Lump Sum	Rs.1,00,000
8. Providing & Fixing 25 mm dia Irrigation Hydrant valve complete in all respect	Rs.75,000
Total	Rs.21,15,300

(C/O To Abstract of Cost for Sub work No.1)



1. Providing Laying jointing and testing sewer pipe line including fitting valves. Manholes & cost of excavation etc complete in all respect SW pipe	
a) 200mm i/d 1000 M @ Rs.1700 / M	Rs.17,00,000
b) 250mm i/d 100 M @ Rs.2000 M	Rs.2,00,000
c) 100 mm i/d 230 M @ Rs 1475/M (Sewer Bye Pass Riser Line D.I pipe)	Rs.3,39,250
2. Provision for carriage of materials & other unforeseen Items. - Lump Sum	Rs.2,00,000
3. Provision for making connection with HSVP sewer on master roads.	Rs.2,00,000
4. Provision for providing & fixing vent shaft at suitable places as per P.H. requirement. - Lump Sum	Rs.3,00,000
5. Providing & installation 600 KLD compact sewerage plant complete in all respects.(Including Tertiary Treatment)@ Rs.16000/KLD	Rs.96,00,000
6. Provision for cutting of roads and making good condition	Rs.1,00,000
Total	Rs.1,26,39,250
Add 3% contingencies & PH charges	Rs.3,79,178
Total	Rs.1,30,18,428
Add 49% Price Escalation,Departmental charges	Rs.63,79,029
TOTAL	Rs.1,93,97,457
SAY IN LACS	193.97
(Cost to Final abstract of cost)	



1. Providing and laying R.C.C. pipe drain class NP-3 With cement joint ,Catch Basins & Road Gullies, manholes excavation etc complete in all respect.	
a) 400 mm dia. 1150 M @ Rs. 2500/m (upto 2 mtr. Depth)	Rs.28,75,000
b) 400 mm dia. 50 M @ Rs. 2700/m (above 2 mtr. Depth)	Rs.1,35,000
2. Provision for lighting and watching - Lump Sum	Rs.2,50,000
3. Provision for roads gullies & connecting pipe 300 mm dia - Lump Sum	Rs.5,00,000
4. Providing for rainwater harvesting arrangements at selected places 13 Nos for Plotted @ Rs 350,000/ Each	Rs.45,50,000
5. Provision for Shoring & Timbering. - Lump Sum	Rs.3,50,000
7. Providing fo lighting ,watering and timebring drains & other unforeseen charges - Lump Sum	Rs.1,50,000
8. Provision for making connection with HSVP Mains on master road - Lump Sum	Rs.2,00,000
9. Provision for temporary disposal arrangements till HSVP services are provided.	Rs.10,00,000
Total	Rs.1,00,10,000
Add 3% for contingencies and PH charges	Rs.3,00,300
Total	Rs.1,03,10,300
Add 49% Departmental charges	Rs.50,52,047
TOTAL (Cost to Final abstract of cost)	Rs.1,53,62,347

SAY IN LACS 153.62



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT-GURUGRAM, HARYANA

SUBJECT: POPULATION & WATER DEMAND CALCULATIONS

S. No.	Unit Type	Category as per latest NBC	Total No. of Plots	Total Area (in Sqm)	Persons considered per plot as per HSVP norms	Total Population	LPCD Factor for Potable Water Req.	LPCD Factor for Flushing Water Req.	Potable Water Requirement (LPD)	Flushing Water Requirement (LPD)	Total Water Requirement (LPD)
I. DOMESTIC WATER DEMAND											
1	Plots	Residential	234		18	4212	104.0	51.25	438048.0	215865.0	6,53,913
2	Commercial Block	Business		0.5268 ac		32000 Ltr./ Acre			11294.6	5563.0	16,858
3	Common Facilities			1.324 ac		25000 Ltr./ Acre			22177.0	10923.0	33,100
4	Misc					L.S.=5000 Ltr			3350.0	1650.0	5,000
				Total					471519.6	232351.0	703871
				Grand Total					471,520	232351	7,03,871
	Say in Cum/day								472	232	704
II. HORTICULTURAL WATER DEMAND											
(a)	Total green area 1.0061 Acre @ 25000 litre/ Acre (say)										
(b)	Area under Roads out of 13.2375 Acre = 2.6475Acre @ 5000 litre/ Acre										
	Total, Say (in Cu.m. per day)										
TOTAL WATER REQUIREMENTS FOR ALL PURPOSES											
III. TUBE WELLS											
(a)	Yield									17	Kl/Hr
(b)	Working Hours per Day									16	Hours per Day
	Discharge per Tube well									272	
(c)	Total Fresh water demand									472	m ³ /day
(d)	Number of Tube wells required.									1.73	
(e)	Add 10% as standby									0.17	
				Total						1.91	Nos.
				Say						2.00	Nos.
(Water to the proposed development is to be supplied by HSVP and it is proposed to install the tube-wells for augmentation/standby purposes).											



IV. PUMPING MACHINERY FOR TUBEWELLS			
(a)	Gross Working Head	60	Meters
(b)	Average fall in S.L	2	Meters
(c)	Depression Head	6	Meters
(d)	Friction loss in main	10	Meters
	Total	78	Meters
(e)	Discharge	17000	LPH
(f)	Horse Power	8.19	HP
	HP = $(17000 \times 78 \times 1) / (60 \times 60 \times 75 \times 0.6)$		
		10.00	HP
V. UNDER GROUND TANK			
(a)	Total water demand (Daily for Domestic purposes)	472	m ³ /day
	Capacity of U.G. tank @60 % 472		
(b)	Proposed capacity of underground tanks (Raw + Domestic) for domestic use. $(25+33\%) = 58\%$ (SAY 60%) storage (One day Storage) = $0.6 \times 472 = 283.2$	300.00	m ³
(c)	Proposed capacity of underground static tank for fire = $100 \times \text{sqroot of } 4212 / 1000 = 205.2 \text{ KL} = 1 / 3 \times 205.2 = 68.4 \text{ KL}$ say	75.00	m ³
	TOTAL	375	m ³ /day
	Say	375	m ³ /day
(d)	Flushing Water 230KL @ 60% = 138 KL or say	138.0	m ³ /day
(e)	Horticulture Water = 38 KL	38.0	m ³ /day
	TOTAL	176.0	m ³ /day
	Say	200	m ³ /day
VI. (A) BOOSTING MACHINERY (Water Supply Pumps)			
(a)	Daily Domestic Water Demand	472	m ³ /day
(b)	Discharge per hour @ 8 hr. pumping/ day	58.95	m ³ /hour
	Say	990.0	LPM
(c)	No. of Working pump (2 working + one standby)	2.0	
(d)	Proposed Pump discharge (Working)	495.00	LPM
	Say	500.00	LPM
	Gross Working Head		
(a)	Suction lift - positive suction	6	Meters
(b)	Frictional Loss in Mains & Specials	9	Meters
(c)	Max Clear Head required	30	Meters
	Total	45	Meters
(e)	H.P. of each pump required	8.33	HP
	Pump H.P. = $500 \times 45 / (60 \times 75 \times 0.6)$		
	Say	10.00	HP



VI.(B) BOOSTING MACHINERY (Flushing & Garden Supply Pumps from STP)					
(a)	Daily Flushing & Horticultural Water Demand.		271	m ³ /day	
(b)	Discharge per hour @ 8 hr. pumping/ day		33.85	m ³ /Hour	
		Say	570.00	LPM	
(c)	No. of Working pump(2pump working+1 stand by)		2		
(d)	Proposed Pump discharge (Working)		285.00	LPM	
		Say	300.00	LPM	
	Gross Working Head				
(e)	Suction lift - positive suction		6	Meters	
(f)	Frictional Loss in Mains & Specials		9	Meters	
(g)	Max Clear Head required		30	Meters	
	Total		45	Meters	
(h)	H.P. of each pump required (Pump H.P.)= $\frac{300 \times 45}{(60 \times 75 \times 0.6)}$		5.00	HP	
	Say		5.00	HP	
VII. GENERATING SETS					
1	HP of Tube well pump = 10 X 2 = 20		20.00		
2	HP of Domestic water supply Pump = 10.0 X 2 = 20		20.00		
3	HP of Flushing water supply Pump = 5 X 2 = 10		10.00		
4	Add for lighting		5.00		
	Total		55.00	HP	
	in KVA= $\frac{55 \times 1.1}{\sqrt{3} \times 0.746}$		61.55	KVA	
	SAY		63.00	KVA	
VIII. STP CAPACITY					
1	Total water required Domestic + Flushing		704	KL	
2	Water go to STP @ 80 %		563.12		
3	Add for 5% for margin		28.156		
	TOTAL		591.276		
	SAY		600.00	KL	



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT-GURUGRAM, HARYANA

SUBJECT : SEWERAGE SYSTEM DESIGN SHEET

S.No.	Sewer Line		No. of Plots	Population / PLOT	Total Population	Water Supply LPCD	Total Water Requirement		Sewage Discharge (LPD)			Average Sewage Discharge		Peak Sewage Discharge		Size of Pipe	Velocity		Design Discharge	Length of Line	Slope	Fall in Meters			Ground level		Invert Level		Depth of MH		Average depth of pipe	
							LPD	5	Self	Branch	Total	LPS	LPS	LPS	Cu sec		mm	feet/sec				M/S	Cu sec	As per slope	As Per Gradient	Start	End	Start	End	Start		End
1	2	3	4	5	6	7																										
		from	To																													
1	1	2	12	18	216	155.25	335.4	26.827		26.827	0.311	0.93	0.03	200	2.42	0.74	0.41	60	0.300	0.000	235.00	235.00	233.80	233.50	1.20	1.30					1.35	
2	2	3	41	18	738	155.25	1145.75	91.660	26.827	118.487	1.371	4.11	0.14	200	2.42	0.74	0.41	159	0.795	0.000	235.00	235.00	233.50	232.71	1.30	2.29					1.90	
3	4	3	13	18	234	155.25	363.29	29.063		29.063	0.336	1.01	0.04	200	2.42	0.74	0.41	54	0.270	0.000	235.00	235.00	233.80	233.53	1.20	1.47					1.33	
4	3	5	0	18	0	155.25	0		147.550	147.550	1.708	5.12	0.18	200	2.42	0.74	0.41	46	0.240	0.000	235.00	235.00	232.71	232.48	2.29	2.52					2.41	
5	6	5	6+common facilities	18	108	155.25	607.25	53.380		53.380	0.618	1.85	0.06	200	2.42	0.74	0.41	45	0.225	0.000	235.00	235.00	233.80	233.58	1.20	1.42					1.31	
6	5	8	2	18	36	155.25	558.9	4.471	2.00.929	2.05.400	2.377	7.13	0.25	200	2.42	0.74	0.41	16	0.080	0.000	235.00	235.00	232.48	232.40	2.52	2.60					2.56	
7	7	8	39	18	702	155.25	1089.6	87.188		87.188	1.009	3.03	0.11	200	2.42	0.74	0.41	143	0.715	0.000	235.00	235.00	233.80	233.09	1.20	1.91					1.56	
8	8	10	6	18	108	155.25	167.67	13.414	2.92.589	3.06.002	3.542	10.63	0.37	250	2.81	0.86	0.74	45	0.225	0.000	235.00	235.00	232.40	232.17	2.60	2.83					2.72	
9	9	10	40	18	720	155.25	1117.80	89.424		89.424	1.035	3.11	0.11	200	2.42	0.74	0.41	143	0.715	0.000	235.00	235.00	233.80	233.09	1.20	1.91					1.56	
10	10	16	6	18	108	155.25	167.67	13.414	3.95.426	4.08.840	4.732	14.20	0.50	250	2.81	0.86	0.74	49	0.245	0.000	235.00	235.00	232.17	231.93	2.83	3.07					2.95	
11	11	12	12	18	216	155.25	335.4	26.827		26.827	0.311	0.93	0.03	200	2.42	0.74	0.41	83	0.415	0.000	235.00	235.00	233.80	233.39	1.20	1.61					1.41	
12	13	12	14	18	252	155.25	391.23	31.298		31.298	0.362	1.09	0.04	200	2.42	0.74	0.41	41	0.205	0.000	235.00	235.00	233.80	233.60	1.20	1.41					1.30	
13	12	14	4	18	72	155.25	111.78	8.942	58.126	67.068	0.776	2.33	0.08	200	2.42	0.74	0.41	28	0.140	0.000	235.00	235.00	233.39	233.25	1.61	1.75					1.68	
14	15	14	6	18	108	155.25	167.67	13.414		13.414	0.155	0.47	0.02	200	2.42	0.74	0.41	40	0.200	0.000	235.00	235.00	233.80	233.60	1.20	1.40					1.30	
15	14	16	33	18	594	155.25	922.19	73.775	80.482	154.256	1.785	5.36	0.19	200	2.42	0.74	0.41	131	0.655	0.000	235.00	235.00	233.25	232.59	1.75	2.41					2.08	
16	16	SIP	0	18	0	155.25	0		5.63.096	5.63.096	6.517	19.55	0.68	250	2.81	0.86	0.74	6	0.030	0.000	235.00	235.00	231.93	231.90	3.07	3.10					3.09	



**PROJECT: PLOTTED COLONY UNDER DDJAY LAND
MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-
PATAUDI, DISTT- GURUGRAM, HARYANA**

SUBJECT : SEWERAGE SYSTEM SHEET

S.No.	Sewer Line		Size of Pipe	Length of Line
	From	To	MM	Meters
1	1	2	200	60
2	2	3	200	159
3	3	4	200	54
4	3	5	200	46
5	5	6	200	45
6	5	8	200	16
7	7	8	200	143
8	8	10	250	45
9	9	10	200	143
10	10	16	250	49
11	11	12	200	83
12	13	12	200	41
13	12	14	200	28
14	15	14	200	40
15	14	16	200	131
16	16	STP	250	6
Total 200 Dia Pipe				989
Total 250 Dia Pipe				100
Total				1089
17	Over Flow/bye pass line		100	230



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT-GURUGRAM, HARYANA

SUBJECT : DRAINAGE SYSTEM DESIGN SHEET

S. No.	LINE NO.		Self Area (m ²)	Self Area (Acre)	Branch Area (Acre)	Total Area (Acre)	Total Area (Hectare)	Rain Fall mm/hr	Discharge @17.36 LPS/Hectare	Length in m	Pipe dia in mm	Slope 1 in	Velocity m/sec.	Cap of pipe in lps	Fall in line m	Ground Level		Invert Level		Depth	
	FROM	TO														Start	End	Start	End	Start	Average
1	1	2	3946.00	0.975		0.975	0.395	6.25	6.85	125	400	500	0.64	80.75	0.25	235.00	235.00	233.80	233.55	1.20	1.32
2	3	2	1803.00	0.446		0.446	0.180	6.25	3.13	63	400	500	0.64	80.75	0.13	235.00	235.00	233.55	233.42	1.45	1.51
3	2	4	6896.00	1.704	1.421	3.125	1.265	6.25	21.95	160	400	500	0.64	80.75	0.32	235.00	235.00	233.42	233.10	1.58	1.74
4	6	7	888.00	0.219		0.219	0.089	6.25	1.54	42	400	500	0.64	80.75	0.08	235.00	235.00	233.42	233.34	1.58	1.62
5	8	7	927.00	0.229		0.229	0.093	6.25	1.61	30	400	500	0.64	80.75	0.06	235.00	235.00	233.34	233.28	1.66	1.69
6	7	9	5203.00	1.286	0.449	1.735	0.702	6.25	12.18	114	400	500	0.64	80.75	0.23	235.00	235.00	233.80	233.57	1.20	1.31
7	9	11	2040.00	0.504	1.735	2.239	0.906	6.25	15.72	45	400	500	0.64	80.75	0.09	235.00	235.00	233.80	233.71	1.20	1.24
8	10	11	6746.00	1.667		1.667	0.675	6.25	11.71	144	400	500	0.64	80.75	0.29	235.00	235.00	233.71	233.42	1.29	1.43
9	11	4	1281.00	0.317	3.906	4.223	1.709	6.25	29.66	45	400	500	0.64	80.75	0.09	235.00	235.00	233.80	233.71	1.20	1.24
10	12	13	7421.00	1.834		1.834	0.742	6.25	12.88	156	400	500	0.64	80.75	0.31	235.00	235.00	233.42	233.11	1.58	1.73
11	14	13	2167.00	0.536		0.536	0.217	6.25	3.76	58	400	500	0.64	80.75	0.12	235.00	235.00	233.80	233.68	1.20	1.26
12	13	5	3375.00	0.834	2.370	3.204	1.296	6.25	22.50	43	400	500	0.64	80.75	0.09	235.00	235.00	233.11	233.02	1.89	1.93
13	4	5	467.00	0.115	4.223	4.338	1.755	6.25	30.47	25	400	500	0.64	80.75	0.05	235.00	235.00	233.80	233.75	1.20	1.22
14	5	15	10398.00	2.570	10.667	13.237	5.356	6.25	92.98	121	400	500	0.64	80.75	0.24	235.00	235.00	233.02	232.78	1.98	2.10
15	15-	disposal	0.00	0.000		0.000	0.000	6.25	0.00	15	400	500	0.64	80.75	0.03	235.00	235.00	232.78	232.75	2.10	2.17



**PROJECT: PLOTTED COLONY UNDER DDJAY LAND
MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-
PATAUDI, DISTT- GURUGRAM, HARYANA**

SUBJECT : DRAINAGE SYSTEM SHEET

S. No.	Line No.		Pipe dia.	Length
	From	To	mm	Meters
1	1	2	400	125.00
2	3	2	400	63.00
3	2	4	400	160.00
4	6	7	400	42.00
5	8	7	400	30.00
6	7	9	400	114.00
7	9	11	400	45.00
8	10	11	400	144.00
9	11	4	400	45.00
10	12	13	400	156.00
11	14	13	400	58.00
12	13	5	400	43.00
13	4	5	400	25.00
14	5	15	400	121.00
15	15-	disposal	400	15.00
Total 400 Dia Pipe				1186
SAY				1200



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT : DOMESTIC WATER SUPPLY DESIGN SHEET

S. No.	Line Designation		No. of Plot	Water Requirements (in KLD)	Self Water requireme nt (in KLD)	Branch Water requirement (in KLD)	Total Water Requirements (in KLD)	Discharge per Hour considering 8 Hours Pumping KL/Hr	Size of Pipe Provided mm	Velocity in ft/sec.	Velocity in m/sec.	Head Loss per 1000m	Loss of head as per pipe length	Length of pipe (in meters)	Ground Level		Hydraulic Level		Terminal Head
	FROM	TO													Start	End	Start	End	
1	WT1	1	0	0.00	0.00	471.52	471.52	58.940	150	3.05	0.93	11	0.158	15	235.00	235.00	270.000	269.842	34.842
2	1	2	0	0.00	0.00	172.22	172.22	21.528	100	2.50	0.76	12	0.400	34	235.00	235.00	270.000	269.600	34.600
3	2	3	13	24.34	24.34		24.34	3.042	100	0.35	0.11	0	0.016	50	235.00	235.00	270.000	269.984	34.984
4	2	4	41	76.75	76.75	71.14	147.89	18.486	100	2.15	0.66	9	1.412	159	235.00	235.00	270.000	268.588	33.588
5	4	5	38	71.14	71.14		71.14	8.892	100	1.03	0.32	2	0.465	203	235.00	235.00	270.000	269.535	34.535
6	1	6	0	0.00	0.00	299.30	299.30	37.412	150	1.93	0.59	5	0.045	10	235.00	235.00	270.000	269.955	34.955
7	6	7	6+Commercial+ common facility	44.70	44.70		44.70	5.588	100	0.65	0.20	1	0.049	50	235.00	235.00	270.000	269.951	34.951
8	6	8	2	3.74	3.74	250.85	254.59	31.824	150	1.65	0.50	3	0.088	26	235.00	235.00	270.000	269.912	34.912
9	8A	8	39	73.01	73.01		73.01	9.126	100	1.06	0.32	2	0.366	152	235.00	235.00	270.000	269.634	34.634
10	8	9	5	9.36	9.36	168.48	177.84	22.230	100	2.59	0.79	12	0.562	45	235.00	235.00	270.000	269.438	34.438
11	9A	9	40	74.88	74.88		74.88	9.360	100	1.09	0.33	3	0.371	147	235.00	235.00	270.000	269.629	34.629
12	9	10	7	13.10	13.10	80.50	93.60	11.700	100	1.36	0.41	4	0.171	45	235.00	235.00	270.000	269.829	34.829
13	11	10	32	59.90	59.90	20.59	80.50	10.062	100	1.17	0.36	3	0.340	118	235.00	235.00	270.000	269.660	34.660
14	12	11	5	9.36	9.36	0.00	9.36	1.170	100	0.14	0.04	0	0.002	34	235.00	235.00	270.000	269.998	34.998
15	13	11	6	11.23	11.23	0.00	11.23	1.404	100	0.16	0.05	0	0.003	46	235.00	235.00	270.000	269.997	34.997



**PROJECT: PLOTTED COLONY UNDER DDJAY LAND
MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI,
DISTT- GURUGRAM, HARYANA
SUBJECT : DOMESTIC WATER SUPPLY SHEET**

S. No.	Line Designation		Size of Pipe Provided	Length of pipe in m	
	FROM	TO	mm	100mm	150mm
1	WTP	1	150		15
2	1	2	150		34
3	2	3	100	50	
4	2	4	100	159	
5	4	5	100	203	
6	1	6	150		10
7	6	7	100	50	
8	6	8	150		26
9	8A	8	100	152	
10	8	9	100	45	
11	9A	9	100	147	
12	9	10	100	45	
13	11	10	100	118	
14	12	11	100	34	
15	13	11	100	46	
TOTAL				1049	85
say				1050	90
MUNICIPAL LINE					
1	1a -- UGT		100	140	
	TOTAL say			140	
TUBEWELL LINE					
		from	to	100mm	
1		TW1-1	TW2	45	
2		TW1-2	UGT	50	
		TOTAL IN M		95	



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT : FLUSHING & GARDEN WATER SUPPLY DESIGN SHEET

S. No.	Node No.		No. of Plot	Flushing Water Requirement In KLD	Branch Water	Total KLD	Discharge per Hour considering 8 Hours Pumping	Size of Pipe Provided	Velocity		Head Loss per 1000 m	Loss of head as per pipe length	Length of pipe (in meters)	Ground level		Hydraulic Level		Terminal Head
	From	To							in ft/sec.	in m/s				Start in m	End in m	Start in m	End in m	
1	511P	1		0.00	230.51	230.51	28.813	150	1.49	0.45	3	0.056	20	230.00	235.00	270.00	269.94	34.94
2	1	2	33	30.44	44.28	74.72	9.340	100	1.09	0.33	2	0.295	132	235.00	235.00	270.00	269.70	34.70
3	2	3	6	5.54	38.75	44.28	5.535	100	0.64	0.20	1	0.031	39	235.00	235.00	270.00	269.97	34.97
4	2	4	4	3.69	35.06	38.75	4.843	100	0.56	0.17	1	0.017	29	235.00	235.00	270.00	269.98	34.98
5	4	5	13	11.99		11.99	1.499	100	0.17	0.05	0	0.002	39	235.00	235.00	270.00	270.00	35.00
6	4	6	25	23.06		23.06	2.883	100	0.34	0.10	0	0.033	157	235.00	235.00	270.00	269.97	34.97
7	1	7	5	4.61	151.17	155.78	19.473	100	2.26	0.69	10	0.437	45	235.00	235.00	270.00	269.56	34.56
8	7	8	40	36.90		36.90	4.613	100	0.54	0.16	1	0.082	150	235.00	235.00	270.00	269.92	34.92
9	7	9	6	5.54	108.74	114.27	14.284	100	1.66	0.51	5	0.235	45	235.00	235.00	270.00	269.76	34.76
10	9	10	39	35.98		35.98	4.497	100	0.52	0.16	1	0.078	150	235.00	235.00	270.00	269.92	34.92
11	9	11	3	2.77	69.99	72.76	9.095	100	1.06	0.32	2	0.042	20	235.00	235.00	270.00	269.96	34.96
12	11	12	6+commercial+common facility	22.02		22.02	2.753	100	0.32	0.10	0	0.008	42	235.00	235.00	270.00	269.99	34.99
13	11	13	0	0.00	47.97	47.97	5.996	100	0.70	0.21	1	0.043	47	235.00	235.00	270.00	269.96	34.96
14	13	14	40	36.90		36.90	4.613	100	0.54	0.16	1	0.023	43	235.00	235.00	270.00	269.98	34.98
15	13	15	12	11.07		11.07	1.384	100	0.16	0.05	0	0.007	150	235.00	235.00	270.00	269.99	34.99



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT : ROAD WORKS

S. No.	Description	Unit	Qty	Rate (in Rs.)	Amount (in Rs.)
1	Provision for leveling & earth filling as per site conditions	Acre.	13.23750	1,75,000	23,16,563
2	Provision for 200 mm GSB, 250 mm Stone Aggregate, 50 mm DBM, 30 mm BC.	SQM.	7,350	1,750	1,28,62,500
3	Providing of Paver block on both side of road 1300x2x1.2	SQM.	3,120	1,000	31,20,000
4	Providing of kerbs stone & channels of CC 1: 2.5: 5 (kerb stone on both side of road As per specifications	m	2,600	700	18,20,000
5	Provision for guide map and other unforeseen item - Lump Sum				2,00,000
6	Provision for plot indicators - Lump Sum				2,00,000
7	Provision for demarcating burgies - Lump Sum				2,00,000
8	Provision for traffic aggrangement - Lump Sum				2,00,000
9	Provision for carriage of material & unforeseen items - Lump Sum				5,00,000
10	Provision for Pavement in commercial area and pavements. (50% OF AREA)	Sqm	1,066.00	1,750.00	18,65,500
	Sub Total				2,32,84,563
	Add 3% contingencies & PH charges				6,98,537
	Sub Total				2,39,83,099
	Add 49% Departmental Charges , Price escalation, unforeseen & Admin. Charges				1,17,51,719
	Total				3,57,34,818
	Say Rs in Lakhs (C/O to Final abstract of cost)				357.35



**PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375
ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA**

SUBJECT : ROAD AREA

S. NO	ROAD NO	ROAD LENGTH IN M	ROAD WIDTH (CARPETED) IN M	AREA N SQM
1	1-2	67.00	5.5	368.5
2	2-3	45.00	5.5	247.5
3	3-4	45.00	5.5	247.5
4	4-5	46.00	5.5	253.0
5	4A-5A	46.00	5.5	253.0
6	1-6	159.00	5.5	874.5
7	6-7	50.00	5.5	275.0
8	6-8	45.00	5.5	247.5
9	8-9	23.00	5.5	126.5
10	2-9	159.00	5.5	874.5
11	9-10	45.00	5.5	247.5
12	3-10	159.00	5.5	874.5
13	10-11	45.00	5.5	247.5
14	4-11	159.00	5.5	874.5
15	8-12(15.0m wide)	141.00	7.0	987.0
	TOTAL	1234.00		6998.5
	Add 5% for curves	61.7		349.9
Total		1295.70		7348.43
SAY		1300.00		7350.00
length of kerb stone=1300x2		2600	m	
say		2600		7350.00



**PROJECT: PLOTTED COLONY UNDER DDJAY LAND
MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI,
DISTT- GURUGRAM, HARYANA**

SUBJECT : FLUSHING & GARDEN WATER SUPPLY SHEET

S. No.	Line Designation		Size of Pipe mm Dia	Length of pipe	
				100MM	150MM
1	STP	1	150		20
2	1	2	100	132	
3	2	3	100	39	
4	2	4	100	29	
5	4	5	100	39	
6	4	6	100	157	
7	1	7	100	45	
8	7	8	100	150	
9	7	9	100	45	
10	9	10	100	150	
11	9	11	100	20	
12	11	12	100	42	
13	11	13	100	47	
14	13	14	100	43	
15	13	15	100	150	
TOTAL				1088	20
SAY				1100	20



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3,
TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT: EXTERNAL LIGHTING

S.No.	Discription	UM	Qty.	Rate	Amount
1	Providing and installing street light on roads as for standard specification of DHVPN with LED	Acre	13.23750	250000	3309375
2	Contigency and Frieght Charges @ 3%				99281.25
	TOTAL				3408656.25
3	ADD 49% Deptt charges, price escalation unforseen & dmin charges				1670241.6
4	TOTAL				5078897.8
	Say Rs in Lakhs (C/O to Final abstract of cost)				50.79

lakhs



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT: PLANTATION & ROAD SIDE TRESS

S.No.	Description	Unit	Qty	Rate (in Rs.)	Amount (in Rs.)
1	Development of organised lawn green area.	Acre	1.00610	2,00,000.00	2,01,220.00
a	Trenching of ordinary soil upto depth of 60 cm i/c removal & stacking of serviceable material & disposing by spreading and levelling within a lead of 50 M and making up the trench area for proper levels by filling with earth or earth mixed with manure before and after flooding trench with water i/c cost of imported earth and manure.				
b	Rough dressing of turfed area.				
c	Grassing with "DOOB GRASS" i/c watering and maintenance of lawns for 30 days till the grass forms a thick lawn , free from weeds and fit for mowing in row 7.5 cm part in either direction.				
2	Providing and planting trees along boundary @ 12 m interval = $(1300/12) \times 2 = 216.66$ say = 220	Each	220	2,310.00	5,08,200.00
Cost Detail					
	Excavation	60.00			
	Manure	100.00			
	Tree Plant	150.00			
	Tree Guard	2000.00			
	Total	2310.00			
	Sub Total				7,09,420.00
	Add 3% contingencies & PH charges				21,282.60
	Sub Total				7,30,702.60
	Add 49% Departmental charges				3,58,044.27
	Total				10,88,746.87
	Say Rs in Lakhs (C/O to Final abstract of cost)				10.89



PROJECT: PLOTTED COLONY UNDER DDJAY LAND MEASURING 13.2375 ACRES IN SECTOR-3, TEHSIL-PATAUDI, DISTT- GURUGRAM, HARYANA

SUBJECT : MTC CHARGES & RESURFACING OF ROADS

S.No.	Description	Unit	Qty	Rate (in Rs.)	Amount (in Rs.)
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 13.2375 acres @ 8.00 lacs per acre	acre	13.2375	8,00,000	1,05,90,000
2	Providing of resurfacing of roads after 5 years 100mm thick layer 100mm thick BUSG compete to 25mm thick premix carpet with seal cost	sqm	8,416	660	55,54,560
3	Providing of resurfacing of roads after 10 years with 25mm thick premix carpet with seal coat with mech paver.	sqm	8,416	825	69,43,200
	Sub Total				2,30,87,760.00
	Add 3% contingencies & PH charges				6,92,632.80
	Sub Total				2,37,80,392.80
	Add 49% Departmental charges				1,16,52,392.47
	Total				3,54,32,785.27
	Say Rs in Lakhs (C/O to Final abstract of cost)				354.33

