

WATER IS PRECIOUS

**DDJAY AN AREA MEASURING – 5.04 ACRE  
(LICENCE NO. 122 OF 2025 DATED 17.07.2025)  
IN REVENUE ESTATE OF VILLAGE PATAUDI,  
SECTOR-04, HARYANA**

**M/S CONSULATE REALITY LLP**

PROJECT REPORT / SERVICE ESTIMATE AND CALCULATION OF  
INTERNALDEVELOPMENT WORKS FOR DDJAY 2016) AN AREA MEASURING - 5.04  
ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN PATAUDI, SECTOR-04 (HR)

CONSERVE WATER

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SERVICE PLAN ESTIMATE FOR PROVIDING INTERNAL WATER SUPPLY, SEWERAGE, STORM WATER DRAIN SCHEME, CONSTRUCTION OF ROADS, ELECTRICAL INSTALLATION, HORTICULTURE WORKS, MAINTENANCE OF ROADS AND PUBLIC HEALTH SERVICES IN DDJAY AFFORDABLE PLOTTED COLONY UNDER DDJAY 2016) AN AREA MEASURING - 5.04 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025 IN THE REVENUE ESTATE OF VILLAGE -PATAUDI , TEHSIL- PATAUDI, SECTOR-04 DISTRICT -GURUGRAM, HARYANA BELONGING TO M/S CONSULATE REALTY LLP IN COLLABORATION WITH LAND OWNERS.

### REPORT

The Haryana Government has prepared a master plan for development of DDJAY Affordable Plotted Colony, Tehsil -Pataudi, sector 04 (HR) being developed by **M/S CONSULATE REALTY LLP**. Has decided to develop a part of the area in this master plan and has named this part as DDJAY AFFORDABLE PLOTTED COLONY UNDER DDJAY 2016) AN AREA MEASURING - 5.04 ACRE. This colony is located in the REVENUE ESTATE OF VILLAGE - PATAUDI , TEHSIL- PATAUDI, SECTOR-04 DISTRICT -GURUGRAM, HARYANA BELONGING TO M/S CONSULATE REALTY LLP IN COLLABORATION WITH LAND OWNERS)

The brief details of the colony are as under: -

### WATER SUPPLY

#### SOURCES:-

The source of water supply in this area is tube wells at present as the underground water is potable and fit for human consumption. Moreover, water is available at reasonable depth. The average yield of tube well with 40-45 ft. strainers will be about 25,000 liter per hour. The recharging of underground water table in this belt is stated to be good. However still we shall resort to rain water harvesting system to keep up the recharging system. The number of tube wells required for the above area has been worked out and the tube wells will be bored in tune with growth of demand to avoid absence of the tube wells. The ultimate requirement of tube wells includes provisions of 10% stand by. Water shall be supplied to the Project by Haryana **M/S CONSULATE REALTY LLP**.

#### DESIGN: -

The scheme has been designed for approved population of 1422 persons. The rate of water supply per head per day has been taken as 155.25 liters as per NBC-2016. In addition to above necessary

provision of water for, parks, Horticulture etc. have been taken into account for calculating the maximum quantity of water requirement.

#### DISTRIBUTION SYSTEM:-

The distribution system for this development has been designed to supply @ 155.25 liter per head per day @ 3 times the average rate of flow on Hazen William formula. Necessary provision for laying CI/DI/HDPE pipes conforming to relevant IS standards along with valves and specials has been made in the project. The minimum terminal head at lower point will be more than 29.00 meters so that it can serve the G+2 floors stories construction envisaged in the plan. Minimum pipe dia for distribution is kept as 25 mm dia. For domestic water supply and 20 mm dia for flushing cum irrigation water supply.

#### PUMP CHAMBER AND PUMPING MACHINERY:-

It has been proposed to equip each borewell with an electrically driven submersible pumping set capable of delivering about 350 LPM. The Genset and pump chamber for borewell will be combined with the Genset of pump chamber and boosting station. The provision for providing installation of 1 No. Gen set of 30 KVA capacities for Boosting station and one bore wells to run the machinery in case of failure of power. It has been proposed to construct 1 Nos. pump chamber to be constructed to housing the panel board of pumping machinery and gen set.

#### BOOSTING STATION:

It has been proposed to construct the boosting station within the area of residential colony. The site of the UGT/ boosting station has been earmarked in the approved layout plan. The clear water will be collected from existing rising main to boosting station and also from borewell and will be pumped from boosting station.

#### UNDERGROUND TANK:-

It has been proposed to construct underground water tanks as per attached calculation. The total capacity of underground clear water tanks has been worked out as 200 KL.

**RISING MAIN: -**

The provision for rising main from borewells to UGT has been made in the estimate.

**STAFF QUARTER: -**

It has been proposed to construct 1 No. Staff quarter for maintenance and security and operational staff.

**TERTIARY WATER SUPPLY SCHEME: -**

The provision for laying of tertiary water supply lines have been made in this estimate. The boosting station, collecting tank, pump chamber, machinery and Genset for tertiary water have been taken in this estimate.

**SEWERAGE SCHEME: -**

The internal sewerage of this area will be connected with external sewer of HSVP as and when the STP will be installed by HSVP till then the colonizer shall make its own arrangement for disposal of treated sewerage. The provision of construction of STP has been made in this estimate. The total sewer effluent has been worked out on the basis of 155.25 LPCD water considering 80% sewerage effluent with a peak factor of 3 times Daily Water Flow (DWF) with a minimum velocity of 0.74 mtr. per second. The size and gradient are also considered according to the public health norm. Necessary provision for laying minimum 200mm i/d S.W./DWC/PVC pipe sewer line, Construction of required manhole chambers etc. have been made in this estimate. Necessary design statement for entire sewerage system has been prepared and attached with estimate.

**STORM WATER DRAINAGE**

The storm water of the area has been designed taking the rainfall intensity 1/4" per hour & run of factor as 1 no. The underground SWD pipeline will be connected to rainwater harvesting system for recharge the aquifer and surplus storm water will be allowed to flow to the existing HSVP drain. The RCC NP2/DWC pipe of minimum 400 dia size has been proposed for disposal of storm water in the Residential colony as per norms. The minimum velocity of the pipeline is maintained 0.60 mtr. per second. The provision for construction of manhole chambers, rainwater harvesting system has been made in the estimate.

**ROADS: -**

The Roads in the colony have been planned in such that minimum width of roads providing are 9M wide road, parking and pavement have been provided to above area and estimate is prepared as revised specification.

- (i) 200 mm GSB
- (ii) 250 mm stone aggregate
- (iii) 50 mm thick D.B.M
- (iv) 40 mm thick BC

The above construction shall be done on well compacted sub grade as per specifications. Complete work will be carried out as per MORTH specifications, IRC guide lines or HSVP specifications, which ever applicable.

**STREET LIGHTING: -**

The provision has been made on lump sum basis.

**HORTICULTURE: -**

The usual provision of road side plantation of trees with tree guard has been made for all roads. The parks & open spaces shall also be developed. Estimates and details of plantation, landscaping, signage, etc., has been included.

**MAINTENANCE CHARGES: -**

The maintenance charges of water supply, sewerage, SWD, Road, Electrification & Horticulture works have been proposed up to 10 years in the estimate.

**SPECIFICATIONS: -**

The work shall be carried out strictly in accordance with Haryana PWD Book of specification latest addition & MORT & H specification for road work.

**RATES: -**

The estimate has been prepared on the basis of Haryana Schedule rates 2021 & market rates where the item does not exists in HSR rates.

**COST:**

The total cost of the development in this Project works out to **Rs.625.70 Laes** which include 3 % contingency and P.E charges and 49% departmental charges, administrative charges etc also has been made. The cost per gross acre (Net planned area of 5.04 Acre) works out to **Rs. 124.14 Laes** which covers the provision of services like water supply, sewerage, storm water drainage, roads, street lighting and plantations including maintenance thereof as well as future expenses.

**M/S CONSULATE REALITY LLP**

**Authorized Signatory**



*Vikas*  
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## 5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI, SECTOR-04 (HR)

### DESIGN CALCULATIONS

1	<b>TOTAL PLOTS:</b>	79 NOS:
	TOTAL Population @18 persons/Plot	
	<b>TOTAL PERSONS</b>	1422 Persons
	water requirement @ 155.25 Lts./Person	<b>2,20,765.5 LPD</b>
2	<b>Commercial Area @0.202 Acre (including site on milk &amp; vegetable booth 5x5m)</b>	
	water requirement @ 32000 Ltr/Acre	0.188 Acre <b>6464 LPD</b>
3	<b>Community Centre @ 0.504 Acre</b>	
	water requirement @ 25000 Ltr/Acre	0.504 Acre <b>12610 LPD</b>
	<b>Total populations of the projects</b>	1422 Persons
4	<b>For horticulture purpose</b>	
	Area under green	
	In Acres	0.404 Acres
	water requirement @25 KL/ACRE per day	<b>10117.500 LPD</b>
5	<b>For sweeping of roads</b>	
	Total road area	
	In Acres	.65 Acres
	water requirement for horticulture @5000 Ltr/ACRE per day	<b>3288.66 LPD</b>
	<b>TOTAL WATER REQUIREMENT (1+2+3+4+5)</b>	<b>2,53,245.66 LPD</b>
	<b>SAY</b>	<b>255 KLD</b>
6	<b>FIRE Demand</b>	
	Total Population(P)	1422 Persons
	Firefighting 100VP = $100\sqrt{1.422} \times 1/3$	39.75 KLD
	<b>SAY</b>	<b>40 KLD</b>
	Garden irrigation requirement	10 KLD
	For sweeping of roads Requirement	3 KLD
7	<b>Total Water Requirement for UGT (Excluding Fire demand)</b>	
	Hence Domestic water requirement (67%)	156.27 KLD



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	SAY	160 KLD
Hence Flushing water requirement (33%)		76.97 KLD
	SAY	80 KLD

**Domestic storage requirement daily demand domestic use.**

Capacity of underground tank		160 KL
Taking storage (25+33=58 %)		

<b>We Considering one day Storage.</b>		<b>160 KL</b>
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**Flushing storage requirement daily demand**

Capacity of underground tank		80 KL
Taking storage (25+33=58 %)		

<b>We Considering one day Storage.</b>		<b>80 KL</b>
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**Firefighting 100vP**

100VP = $100 \times 1.548 \times 1/3$		39.75 KL
	SAY	40 KL

It is Proposed to construct an UGT i.e. 160 KLD in 2 compartments for domestic use and 80 KL for Non potable water in Two compartment in STP and 40 KL for Firefighting purposes

<b>Total Capacity of UGT</b>		<b>200 KL</b>
SAY		200 KL



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## 5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI, SECTOR-04 (HR)

Sr. Description  
No.

### 1. BOREWELLS/ TUBEWELL

Assuming working hours of tube well	= 12
Assuming discharge/hour of each tube well	= 25,000 lit/hour
Total Domestic Water demand	= 160 KL
No. of tube wells required for water supply	= $\frac{160}{25 \times 12} = 0.533$
Add 10% stand by	= 0.58
Total no of tube wells required	= 1 nos.

So it is proposed to provide 1 Nos of tube wells at present. Moreover the requirement of flushing water supply is to met from treated water from S.T.P. and ultimately water is to be supplied by HSVP

### 2. PUMPING MACHINERY FOR BOREWELL

Gross working load	= 35.00 m
Average fall in is S.L.	= 3.00 m
Depression head	= 9.00 m
Friction Loss	= 3.00m
Total	= 50.00 m
B.H.P. = $\frac{170 \times 1000 \times 50}{60 \times 60 \times 75 \times 0.6}$	With 60% efficiency
Say	= 4.37 H.P.
	= 5 H.P

### 3. RISING MAIN FROM BOREWELL TO UGT

Rising main network for 1 no. borewells is having dia 100 mm. Provision for same has been considered in estimate. Material statement is also attached.

4. Boosting Machinery (Drinking water)

Daily requirement for domestic use (Drinking) = 160 KLD

Assuming 8 hours running 1 pump (with one stand by) discharge/hour. =  $\frac{160}{8}$  = 20 kl/hour = 333.33 lpm

Say = 350 lpm

Head of Pump

- i) Suction Lift 4m
  - ii) Friction Loss in main & specials 4.0m
  - iii) Elevation Head 15m
- |                       |      |            |
|-----------------------|------|------------|
| Clear & Residual Head | 10 m |            |
| Say                   | 33m  | <u>33M</u> |

B.H.P. of Motor =  $\frac{350 \times 33}{60 \times 75 \times 0.6}$  = 4.28  
 Say 5 H.P.

5. BOOSTING MACHINERY (Flushing water supply)

Daily requirement for domestic use (flushing)  
 Add for horticulture and roads 93 KL  
**TOTAL**

Assuming 8 hours running 1 pumps (with one stand by)  
 Discharge/hour = 11.625 KL/hour  
 Discharge/minute = 193.75 liter/m  
 say = 195 liter/m

**HEAD OF PUMP**

- i) Suction lift = 4 M
  - ii) Friction Loss in main & specials = 4 M
  - iii) Clear = 15 M
  - iv) Residual head = 10
- TOTAL = 33 M**

SAY  
B.H.P. of Motor

$$= 33 \text{ M}$$

$$= \frac{195 \times 33}{60 \times 75 \times 0.6}$$

say

$$= 2.38$$

$$= \underline{3.0 \text{ HP}}$$

6. **GENSET FOR BOOSTING STATION**

Pumping sets 1 Nos. 4.5 H.P. (Domestic)

= 5 H.P.

Pumping sets 1 Nos. 2.0 H.P. (Flushing)

= 3.0 H.P.

Lightening etc  
Tubewell

= 5. H.P.

= 5 H.P.

= 18 H.P.

= 20 HP

Says as

**Capacity of gen set required**

20 x 0.746 x 1.5  
Add 10 % extra

= 22.38KVA

= 2.238 KVA

= 24.61 KVA

Say 30 KVA

SAY

7. **PUMP ROOM**

It is proposed to construct combined pump room for housing the panel of machinery of boosting station and borewells.

8. **STAFF QUARTER**

Construction of staff quarter for operation of Boosting station including public health services.

9. **SEWAGE TREATMENT PLANT**

STP required capacity @ 80% of total demand  
excluding the horticultural and for sweeping of road  
Total Requirement /day

=253KL

STP requirement	@80% of 253 =	202.4	KLD
	Add 10 % Marginal Factor	20.24	KLD
PROPOSED STP CAPACITY	=	222.64	KLD
Or Say	=	225	KLD

5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04 (HR)

**FINAL ABSTRACT OF COST**

		Amount (Rs. In Lacs)	
Sub Work No. I	Water Supply	Rs.	167.50
Sub Work No. II	Sewerage	Rs.	106.00
Sub Work No. III	Storm Water Drainage	Rs.	78.00
Sub Work No. IV	Road and Footpath	Rs.	117.00
Sub Work No. V	Street Lighting	Rs.	20.00
Sub Work No. VI	Horticulture Work	Rs.	3.20
Sub Work No. VII	Maintenance Charges for 10 years i/c resurfacing of roads after 1 <sup>st</sup> 5 years and 2 <sup>nd</sup> 5 years	Rs.	134.00
<b>Total</b>		<b>Rs.</b>	<b>625.70</b>

Cost per Acres (Net planned area of 5.04 Acre) = Rs. 625.70/ 5.04 = 124.14 Lack per Acre



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FINAL ABSTRACT OF COST (WATER SUPPLY)

Amount (Rs in  
Lacs)

Sub Head No. 1 Head Works

75.00

Sub Head No. 2 Pumping Machinery

35.00

Sub Head No. 3 Distribution System(Drinking)

35.00

Sub Head No. 4 Distribution System(Flushing)

22.50

Total

167.50



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5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04(HR)

Sub Work-I Sub Head No. 1	Water Supply Head Works Amount (Rs.) (in Lacs)
1 Boring and installing 510 i/d tube wells with reserve/ direct rotary rig complete with pipe strainer to a depth of about 150m complete.  1 Nos. @ 15.00 Lacs each	15.00
2 Constructing pump chambers as per standard design of PWD PH/HSVP of size 4.90x4.25 m  1 Nos. @ 4.00 Lacs each	4.00
3 Construction of boundary wall around the Tube well site  Water Works 1 No. @ Rs 3.00 lac  Tube wells 1 Nos. @ Rs 1.50	3.00  1.50
4 Provision for Electrical connection for tube well  1 No @ Rs. 1.00 Lac each	1.00
5 Provision of footpath hedges and lawns at tube well 1 Nos.	
6 Construction of boosting chambers of suitable size along with underground tank of capacity 200KL pumping machinery and generating set etc. complete in all respects. Details of boosting station	
i) Construction of boosting chamber	5.00
ii) U.G. tank 200KL capacity RS 5500/KL 5500x200	11.00
7 Provision for staff quarters for Maintenance	
i) 1 No 350 sq.ft @ Rs 6.00 Lac	6.00
8 Provision for carriage of material and other unforeseen items L.S	2.00
	48.5
P.E. & contingency charges @ 3%	1.455
	49.95
Department escalation unforeseen and administrator charges @ 49%	24.47
	74.42
Total	75
Say	15

Sub Work I  
Sub Head No. 2

Water Supply  
Pumping  
Machinery  
Amount (Rs.)  
(in Lacs)

1	Providing and installing electricity driven electro or submersible pumping sets capable of delivering about 25.00KL water per hour against a total head of 60 M complete with motor and other accessories (5 B.H.P.)		2.50
	1 Nos. @ Rs 2.50 lac each		2.00
2	Provision for diesel engine gen set stand by arrangement for tube wells (L.S.)		
3	Provision for cheap pressure type chlorination plant complete		1.00
	1 Nos. @ Rs 1,00,000/-		
4	Provision for making foundations and erection of pumping machinery	L.S	2.00
5	Provision for pipes, valves, and specials inside the pump chamber	L.S	2.00
6	Provision for electric services connection including electric transformer and fittings for tube wells chambers complete including transformers	L.S	2.50
7	Providing and installing centrifugal boosting pumping sets, capable of delivering water at 33 M head complete in all respects domestic		4.50
	2 Sets @ Rs 2.25 lac each		
8	Provision of Diesel Gen set for Boosting Pumps for drinking water supply 30.0 KVA for flushing	L.S	4.00
9	Provision for carriage for materials and other unforeseen items	L.S	2.00
			22.50
		Total	0.675
	P.E. & contingency charges @ 3%		23.175
			11.355
	Department escalation unforeseen and administrator charges @ 49%		34.53
		Total	35.00
		say	

C/O to final abstract of cost



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**Sub Work I**

**Sub Head No. 3**

**Water Supply  
Distribution  
System(Drinking)  
Amount (Rs.)  
(in Laacs)**

1	Providing, laying, jointing and testing C.I./D.I. K7/ HDPE Pipes including cost of excavation complete as per specifications. 100 mm dia i/d 640 mtrs @ Rs.1460 /mtr	9.34
2	Providing and fixing sluice valve including cost brick masonry chambers complete in all respect. 100 mm dia i/d 6Nos. @ Rs. 12000/- each	0.72
3	Providing and fixing air valves and scour valves or scour taps including cost of brick masonry chamber 3Nos. @ Rs. 15,000/- each	0.45
4	Providing and fixing fire hydrants complete with masonry chambers 9 Nos. @ Rs. 15,000/- each	1.35
5	Providing and fixing indicator plates for sluice valve, air valve etc. 16Nos. @ Rs. 2000/- each	0.32
6	Provision for rising main D.N. 100mm from main HSVP water line to U.G.S.T. 530mtrs @ Rs1460/- mtr	7.73
7	Provision for D.N. 100mm D.I. rising main from tube well to U.G.S.T. 50 mtrs @ Rs. 1460/- mtr	0.73
8	Provision for carriage of material & other un foreseen items L.S	2.00
		<u>22.64</u>
	Add P.E. & Contingency charges @ 3%	<u>0.67</u>
		23.31
	Department escalation unforeseen and administrator charges @ 49%	11.42
		34.73
	<b>Total</b>	<b>35.00</b>
	<b>Say:</b>	



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Sub Work I

Sub Head No. 4

Water Supply  
Distribution  
System(Flushing)  
Amount (Rs.)  
(in Lacs)

1	Providing, laying, jointing and testing HDPE Pipes including cost of excavation complete as per specifications. 100 mm dia i/d 665 mtrs @ Rs 1460 /mtr	
2	Providing and fixing sluice valve including cost brick masonry chambers complete in all respect. 100 mm dia i/d 6Nos. @ Rs. 25000/- each	9.70
3	Providing and fixing air valves and scour valves or scour taps including cost of brick masonry chamber 3Nos. @ Rs. 25,000/- each	1.50
4	Providing and fixing 25mm and irrigation hydrants 6 Nos. @ Rs. 5000/- each	0.75
5	Providing and fixing indicator plates for sluice valve, air valve etc. 16Nos. @ Rs. 2000/- each	0.3
6	Provision for carriage of material and other unforeseen items	0.32
		2.00
		<hr/> 14.57
	Add P.E. & Contingency charges @ 3%	0.43
		<hr/> 15.00
	Department escalation unforeseen and administrator charges @ 49%	7.35
		<hr/> 22.35
	Total	22.35
	Say:	22.50

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5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04 (HR)

## SUB WORK II

		SEWERAGE SCHEME
		Amount (Rs.) (in Laacs)
1	Providing, lowering, jointing, cutting, salt glazed stone ware /SW/PVC/DWC pipes and specials into trenches including cost of excavation, bed concrete, cost of manholes complete in all respect.	
	i) 200 mm i/d	
	Av. Depth up to 3M – 534 M @ Rs. 1700- per M	9.07
	ii) 250 mm i/d	
	Av. Depth up to 3M – 234M @ Rs. 2000- per M	4.68
	iii) 300 mm i/d	
	Av. Depth up to 3M – 0M @ Rs. 2500- per M	0.00
2	Provision for providing oblique junctions (L.S.)	2.00
3	Provision for providing and fixing vent shafts at suitable places as per PH requirement ( L.S.)	2.00
4	Provision of Electro Mechanical Cost of STP (225 KL) @ Rs. 20000/- KLD	45.00
5	Provision of temporary timbering etc.	1.00
6	Provision for cutting of roads and carriage of materials etc. and other unforeseen charges (L.S.)	3.00
7	Provision for connection with HSVP main (L.S.)	2.00
	Total	68.75
	P.E. & Contingency charges @ 3%	2.06
		70.81
	Department escalation unforeseen and administrator charges @ 49%	34.69
	Total	105.50
	Say:	106.00

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5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04 (HR)

## SUB WORK III

		STORM WATER DRAINAGE Amount (Rs.) (in Laes)
1	Providing, laying RCC pipes drain class NP – 2/DWC with cement joint, manholes, excavation etc. complete in all respect 400 mm i/d Av. Depth up to 2 m –645 M @ Rs. 2500/-per M	16.12
	600 mm i/d Av. Depth up to 0 m –314 M @ Rs. 4500/-per M	0.00
2	Provision for road gullies with 250 mm dia pipe connection L.S.	2.50
3	Provision for Construction pit at selected place.	15.0
4	Provision for temporary disposal arrangement till HSVP services are provide L.S.	5.00
5	Provision for lighting, watching and temporary diversion of traffic L.S.	3.00
6	Provision for cutting of roads and carriage of materials etc. and other unforeseen items L.S.	5.00
7	Provision for connection with HSVP on master line L.S.	2.00
8	Provision for timbering and shoring. L.S.	2.00
	Total	50.62
	P.E. & contingency charges @ 3%	1.518
	Total	52.13
	Department escalation unforeseen and administrator charges @ 49%	25.54
	Total	77.67
	say	78

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5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR -04(HR)

## SUB WORK - IV

Item No.	Description of Item	Unit	Qty.	Rate (Rs)	Road Work	
					Amount (Rs in lacs)	
<b>1</b>	<b>Earth Works</b>					
1.1	Provision for leveling + earth filling as per site condition approximate	Acre	5.04	2,50,000		12.60
<b>2</b>	<b>Providing and laying Bituminous road</b>					
	ii) Providing and laying (200mm GSB, 250mm WMM, 50mm DBM, 40mm BC)	Sq.m	2661.75	1500		39.92
<b>3</b>	<b>Miscellaneous Items</b>					
3.1	Construction of cement concrete Kerb and Channels as per specifications	Meter	744.88	600		4.46
3.2	Construction of footpaths as per specification on 15m wide road 1x1.50x963.9	Sq.m	1117.32	1000		11.17
3.3	Providing and fixing guide maps at selected locations (L.S.)					2.00
3.4	Provision for plot indicators (L.S.)					1.00
3.5	Provision for demarcating burgies (L.S.)					1.00
3.6	Provision for traffic arrangement					2.00
3.7	Provision for carriage of material (L.S.)					2.00
3.8	Construction of pavement in shopping area	Sq.m	NA			2.00
	Add 3% contingency & P.E. charges					76.15
	Department escalation					2.28
	unforeseen					78.43
	administrator charges @ 49%					38.43
	<b>Total and</b>					<b>116.86</b>
	<b>Total Say</b>					<b>117.00</b>

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5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04 (HR)

**SUB WORK - V**

**Street Lighting**

Amount  
(Rs. in lacs)

Providing street lighting on internal Roads as per standard specification of HVPNL & CFL complete in all respect of area 5.04 acre @ Rs. 2,50,000/- per acre

= 12.60

5.15X 2,50,000/-

= 0.37

Add 3% contingencies & P.E. charges

= 12.97

TOTAL

Add Department escalation unforeseen and

= 6.35

administrator charges @ 49%

= 19.32

Total  
Say

= 20

C/O to final abstract of cost



ANIL K. ANLAWAT  
C.A. No. 15/59929

5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04 (HR)

SUB WORK - VI

HORTICULTURE

AMOUNT  
(RS. IN  
LACS)

<p><b>1 Development of Lawn area</b></p> <p>a) Trenching the ordinary soil up to depth of 60 cm. Including removal and packing of serviceable material and disposing at a lead of 50 m/ and making up the trenched area to proper level by filling with earth mixed with manure including cost of imported earth and manure.</p> <p>b) Rough dressing of trenched area.</p> <p>c) Grassing with "doob grass" including watering and maintenance of lawns free from weeds and fit for moving rows 7.50 cm in either direction including for hedges and grill and barbed wire fencing around park and green belts (as per HSVP Norms) Area 0.404 Acres @ Rs. 1,50,000/- per acre</p>	<p>0.606</p>
<p><b>2 Planting of trees with tree guards on Roads at 40' intervals</b></p> <p>Total length of roads= 375 mtr</p> <p>No. of trees @ 12 m c/c = <math>375 \times 2 / 12 = 6205</math> Nos. Say = 63 NOS</p> <p><b>Cost of the tree</b></p> <p>Excavation Rs. 60/- Manure Rs. 100/- Tree plants Rs. 150/- Tree guards Rs. 2000/- Total = 2300/- 63 Nos: @ Rs. 2300</p> <p><b>TOTAL</b></p> <p>Add 3 % contingencies and P.E charges</p> <p>Add 49% departmental charges, price escalation , unforeseen and Adm charges</p> <p><b>TOTAL</b></p> <p>SAY</p>	<p>1.44</p> <p>2.04</p> <p>0.061</p> <p>2.10</p> <p>1.02</p> <p>3.12</p> <p>3.20</p>

C/O to final abstract of cost



VIKASHLAWAT  
CA/2013/59929

5.04 ACRES DDJAY AFFORDABLE PLOTTED COLONY IN PATAUDI,  
SECTOR-04 (HR)

**SUB WORK – VII**

**MAINTENANCE CHARGES  
AND RESURFACING OF  
ROADS**

Amount (Rs. in lacs)

**2<sup>nd</sup> phase after 5 yrs of 1<sup>st</sup> phase**

1. Provision for maintenance charges for water supply, sewerage, storm water drainage, roads, streetlights, horticulture etc. complete including operation and establishment charges as per HSVP normal after completion and resurfacing of roads after 10 years.

5.04 acres @ Rs. 8.00 lacs per acre

= 40.32

2. Provision for resurfacing of roads after 1<sup>st</sup> 5 years of maintenance i.e. 100mm thick B.M. and 25mm premix carpet with mechanical paver

2661.750 sqm @ Rs 800/- Per Sqm

= 21.29

3. Resurfacing of road after 10 years of maintenance by providing 25 mm thick premix carpet with seal coat with mechanical paver

2661.75 sqm @ Rs 1000/- Per Sqm

= 26.61

= 88.22

= 2.64

= 90.86

= 44.52

**TOTAL**

Add 3% PE and contingency charges

= 135.38

= 134.00

Add 49% Departmental charges, price escalation unforeseen and administrator charges.

Total

Say



Ar. V. K. LAHWAT  
CA No. 15759929

ESTIMATE FOR PROPOSED D.D.J.A.Y.AFFORDABLE PLOTTED COLONY MEASURING - 5.04 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE ESTATE OF VILLAGE PATAUDI, SECTOR-04, HARYANA

DESIGN CALCULATION FOR DOMESTIC WATER SYSTEM

S. NO.	Reference line		NO OF UNIT			Popul. (Total No of Persons)	Total Requirement (In LPD)	Total Water Requirement (In LPM)	DIA. (In MM)	Velocity (m/sec)	Length of Line (In Mtr)	(S) Slope of pipe (In m/m)	Head Loss for line Length (In Mtr)	Fitting Loss @ 10% of pipe length (In Mtr)	Total Head Loss (In Mtr)	CUMMULATIVE	Ground Level (In Mtr)	Air Release Valve Nos.
	FROM	TO	SELF	PREVIOUS	TOTAL													
1	UGT	C1	0	79	79	1422	12265	26	100	1.2	2	0.028	0.06	0.006	0.06	0.061	0.000	0
2	C1	C2	16	131	147	2646	22822	48	100	1.2	142	0.028	3.94	0.394	4.34	4.338	0.000	0
3	C2	C3	2	79	81	1458	12575	26	100	1.2	9	0.028	0.25	0.025	0.27	0.275	0.000	0
4	C2	C6	0	50	50	900	7763	16	100	1.2	35	0.028	0.96	0.096	1.05	1.054	0.000	0
5	C6	C4	0	47	47	846	7297	15	100	1.2	9	0.028	0.25	0.025	0.27	0.275	0.000	0
6	C6	C5	3	0	3	54	466	1	100	1.2	17	0.028	0.47	0.047	0.52	0.516	0.000	1
7	C4	C7	5	42	47	846	7297	15	100	1.2	48	0.028	1.33	0.133	1.47	1.466	0.000	1
8	C7	C8	2	0	2	36	311	1	100	1.2	11	0.028	0.29	0.029	0.32	0.324	0.000	1
9	C7	C9	2	38	40	720	6210	13	100	1.2	13	0.028	0.36	0.036	0.39	0.391	0.000	1
10	C9	C10	0	38	38	684	5900	12	100	1.2	22	0.028	0.60	0.060	0.66	0.663	0.000	1
11	C10	C11	0	38	38	684	5900	12	100	1.2	37	0.028	1.02	0.102	1.12	1.118	0.000	1
12	C11	C12	34	4	38	684	5900	12	100	1.2	161	0.028	4.47	0.447	4.92	4.918	0.000	1
13	C12	C13	2	0	2	36	311	1	100	1.2	9	0.028	0.25	0.025	0.28	0.278	0.000	1
14	C12	C14	2	0	2	36	311	1	100	1.2	4	0.028	0.11	0.011	0.12	0.119	0.000	1
15	C15	C01	0	11	11	198	1708	4	100	1.2	41	0.028	1.14	0.114	1.25	1.253	0.000	1
16	C16	C15	11	0	11	198	1708	4	100	1.2	80	0.028	2.22	0.222	2.44	2.444	0.000	1
											Total length=	638.1						
											SAYS =	640.0						

Ar. V. P. Desai  
C.A. No. 13/59929



**ESTIMATE FOR FOR PROPOSED  
D.D.J.A.Y.AFFORDABLE PLOTTED COLONY  
MEASURING – 5.04 ACRE (LICENCE NO. 122 OF  
2025 DATED 17.07.2025) IN REVENUE ESTATE OF  
VILLAGE PATAUDI, SECTOR-04, HARYANA**

**MATERIAL OF DOMESTIC PIPE**

SL NO	LINE NO	LENGTH OF PIPE	SIZE OF RISER PIPE IN MM Dia
1	UGT C1	2	100
2	C1 C2	142	100
3	C2 C3	9	100
4	C2 C6	35	100
5	C6 C4	9	100
6	C6 C5	17	100
7	C4 C7	48	100
8	C7 C8	11	100
9	C7 C9	13	100
10	C9 C10	22	100
11	C10 C11	37	100
12	C11 C12	161	100
13	C12 C13	9	100
14	C12 C14	4	100
15	C15 C01	41	100
16	C16 C15	80	100
	<b>TOTAL</b>	<b>638</b>	
	<b>SAY</b>	<b>640</b>	



Ar. VIKAS AHLAWAT  
CA/13/59929

ESTIMATE FOR FOR PROPOSED D.D.J.A.Y.AFFORDABLE PLOTTED COLONY MEASURING – 5.04 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE ESTATE OF VILLAGE PATAUDI, SECTOR-04, HARYANA

MATERIAL OF DOMESTIC

SL NO	LINE NO	LENGTH OF PIPE	SIZE OF RISER PIPE IN MM Dia
1	MAIN LINE FROM HSVP/ GMDA	530	100
2	BORE WELL TO UGT	50	100



AI. VIKAS CHAWLA  
CN/2025/59929



ESTIMATE FOR FOR PROPOSED D.D.J.A.Y.AFFORDABLE  
 PLOTTED COLONY MEASURING – 5.04 ACRE (LICENCE  
 NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE  
 ESTATE OF VILLAGE PATAUDI, SECTOR-04, HARYANA

MATERIAL OF FLUSHING PIPE

SL NO	LINE NO		LENGTH OF PIPE	SIZE OF RISER PIPE IN MM Dia
1	STP	F1	9	100
2	F1	F2	162.2	100
3	F2	F3	7.8	100
4	F2	F4	36.2	100
5	F4	F5	8.3	100
6	F6	F4	21	100
7	F5	F7	50.9	100
7	F7	F8	7.5	100
8	F7	F9	242	100
8	F9	F10	10.7	100
9	F9	F11	8.9	100
10	F1	F12	100	100
	<b>TOTAL</b>		<b>665</b>	
	<b>Say</b>		<b>665</b>	

Ar. V. RAHAWAT  
 CA/3/59929



ESTIMATE FOR PROPOSED D.D.J.A.Y.AFFORDABLE PLOTTED COLONY MEASURING - 5.04 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE ESTATE OF VILLAGE PATAUDI, SECTOR-04, HARYANA

DESIGN OF SEWERAGE SYSTEM

S.No	Sewerage Line No.	Length (m)	Design of Sewerage System			Population	Sewerage flow @ 80% IPCD	Peak Flow (lps)	Peak Flow (lps)	Infiltration @ 25% Av. Discharge	Total discharge (lps)	Pipe Size (mm)	Slope (mm)	"C" Value	Velocity (m/s)	Capacity of pipe (lps)	Check	Fall (m)	Ground Level (m)	Invert Level (m)	q/D	v/v	Actual velocity (va)	d/D	Depth (m)	Avg. Depth of Manhole	
			Self	Prev.	Total																						Other
1	S-1	75.0	11	0	11	198	1366	3415.5	0.040	0.010	0.049	200	225	0.011	0.82	12.926	OK	0.338	0.000	-1.400	0.000	0.280	0.230	0.050	1.400	1.738	1.569
2	S-2	18.9	0	11	11	198	1366	3415.5	0.040	0.010	0.049	200	225	0.011	0.82	12.926	OK	0.338	0.000	-1.738	0.000	0.280	0.230	0.050	1.738	1.872	1.780
3	S-3	51.5	14	0	14	252	1739	4347	0.050	0.013	0.063	200	225	0.011	0.82	12.926	OK	0.229	0.000	-1.400	0.000	0.280	0.230	0.050	1.400	1.629	1.514
4	S-4	219.0	28	14	42	756	5216	13041	0.151	0.038	0.189	200	225	0.011	0.82	12.926	OK	0.247	0.000	-1.629	0.000	0.280	0.247	0.070	1.629	2.602	2.116
5	S-5	68.0	8	42	50	900	6210	15525	0.180	0.045	0.225	250	275	0.011	0.86	21.199	OK	0.247	0.000	-2.602	0.000	0.280	0.242	0.050	2.602	2.849	2.726
6	S-6	12.0	5	0	5	108	745	1863	0.022	0.005	0.027	200	225	0.011	0.82	12.926	OK	0.053	0.000	-1.400	0.000	0.280	0.230	0.050	1.400	1.427	1.427
7	S-7	156.0	12	56	68	1224	8446	21114	0.244	0.061	0.305	250	275	0.011	0.86	21.199	OK	0.567	0.000	-2.849	0.000	0.300	0.259	0.070	2.849	3.417	3.133
8	S-8	10.0	0	79	79	1422	9812	24529.5	0.284	0.071	0.355	250	275	0.011	0.86	21.199	OK	0.036	0.000	-3.417	0.000	0.300	0.259	0.070	3.417	3.453	3.435

AR. VIKAS AHLAWAT  
CA No. 3/159929



ESTIMATE FOR FOR PROPOSED D.D.J.A.Y.AFFORDABLE  
 PLOTTED COLONY MEASURING – 5.04 ACRE (LICENCE  
 NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE  
 ESTATE OF VILLAGE PATAUDI, SECTOR-04, HARYANA

MATERIAL STATEMENT FOR SEWER WATER LINE

SL	Lines		200 MM DIA LENGTH	250 MM DIA LENGTH
NO.			METER	METER
1	S-1	S-2	76.0	
2	S-2	S-3	18.9	
3	S-3	S-4		156.0
4	S-5	S-4	12.0	
5	S-8	S-7	51.5	
6	S-7	S-6	219.0	
7	S-6	S-4		68.0
8	S-4	S-3	156.5	
9	S-3	TO STP		10.0
		<b>TOTAL</b>	<b>533.89</b>	<b>234.00</b>
			<b>534.00</b>	<b>234.00</b>

AL. VILKAR  
 CA/13/59929



ESTIMATE FOR PROPOSED D.D.J.A.Y. AFFORDABLE PLOTTED COLONY MEASURING - 5.04 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE ESTATE OF VILLAGE PATAUDI, SECTOR-04, HARYANA

DESIGN CALCULATION FOR STORM WATER

S. NO.	NAME OF THE LINE	AREA TO BE SERVED IN ACRES			DISCHARGE @ 1/4" RAIN FALL (litr/Sec)	FINAL DISCHARGE (litr/Sec)	SIZE OF PIPE (MM)	C VALUE	VELOCITY (m/sec)	DISCHARGE CAPACITY OF PIPE (litr/Sec)	LENGTH OF PIPE (m)	SLOPE	FALL IN METERS slope	GROUND LEVEL		INVERT LEVEL		DEPTH OF PIPE AT		AVERAGE DEPTH OF PIPE (m)
		PREVIOUS	TOTAL	U/End										L/End	U/End	L/End	U/End	L/End		
1	D1	0.55	0.00	0.55	0.0038	3.84	400	0.013	0.71	88.83	64.5	550	0.117	0.000	0.000	-1.250	-1.367	1.25	1.37	1.31
2	RWH-1	0.04	0.00	0.04	0.0003	0.26	400	0.013	0.71	88.83	4.5	550	0.01	0.000	0.000	-1.375	-1.375	1.37	1.38	1.52
3	D2	0.90	0.04	0.94	0.0066	6.60	400	0.013	0.71	88.83	153.5	550	0.28	0.000	0.000	-1.655	-1.655	1.65	1.65	1.66
4	RWH-2	0.04	0.94	0.98	0.0069	6.86	400	0.013	0.71	88.83	9.0	550	0.02	0.000	0.000	-1.671	-1.783	1.25	1.28	1.27
5	D3	0.15	0.00	0.15	0.0011	1.05	400	0.013	0.71	88.83	95.0	550	0.17	0.000	0.000	-1.671	-1.844	1.67	1.84	1.76
6	D4	0.36	0.15	0.51	0.0036	3.61	400	0.013	0.71	88.83	14.5	550	0.03	0.000	0.000	-1.250	-1.276	1.25	1.28	1.26
7	D5	0.16	0.00	0.16	0.0011	1.14	400	0.013	0.71	88.83	99.0	550	0.18	0.000	0.000	-1.844	-2.024	1.84	2.02	1.93
8	D6	0.61	0.68	1.28	0.0090	9.03	400	0.013	0.71	88.83	2.5	550	0.00	0.000	0.000	-2.024	-2.028	2.02	2.03	2.03
9	RWH-3	0.05	0.00	0.05	0.0003	0.34	400	0.013	0.71	88.83	2.5	550	0.00	0.000	0.000	-2.028	-2.203	2.03	2.20	2.20
10	D7	1.02	0.05	1.07	0.0075	7.51	400	0.013	0.71	88.83	96.0	550	0.17	0.000	0.000	-2.203	-2.205	2.20	2.20	2.26
11	RWH-4	0.30	0.00	0.30	0.0021	2.13	400	0.013	0.71	88.83	1.0	550	0.00	0.000	0.000	-2.205	-2.325	2.20	2.32	2.33
12	D8	0.51	0.30	0.82	0.0057	5.73	400	0.013	0.71	88.83	66.0	550	0.12	0.000	0.000	-2.325	-2.329	2.32	2.33	2.33
13	D9	0.13	1.12	1.25	0.0087	8.75	400	0.013	0.71	88.83	2.6	550	0.00	0.000	0.000	-2.329	-2.361	2.33	2.36	2.35
14	RWH-5	0.24	0.00	0.24	0.0017	1.70	400	0.013	0.71	88.83	17.6	550	0.03	0.000	0.000	-2.361	-2.361	2.33	2.36	2.35

Dr. V. S. SHILAWAT  
C/P 2013/159929



ESTIMATE FOR FOR PROPOSED D.D.J.A.Y.AFFORDABLE PLOTTED COLONY MEASURING – 5.04 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE ESTATE OF VILLAGE PATAUDI,SECTOR-04,HARYANA

MATERIAL STATEMENT OF STROM

SL NO.	SW LINE		DIA OF PIPE IN MM	LENGTH OF LINE METER
	From	To		
1	D1	RWH-1	400	64.5
2	RWH-1	D2	400	4.5
3	D2	RWH-2	400	153.5
4	D3	D3	400	9.0
5	D3	D-4	400	18.2
6	D3	D5	400	95.0
6	D6	D5	400	14.5
7	D5	RWH3	400	99.0
8	RWH3	D7	400	2.5
9	D7	RWH4	400	96.0
10	RWH4	D8	400	1.0
11	D8	D9	400	66.0
12	D9	RWH5	400	2.6
13	RWH5	TO MUNICIPLE LINE	400	17.6
<b>TOTAL</b>				<b>643.9</b>

Say 440 Mtr.

Ar. VIKASH KHLAWAT  
CA/2013/59929



ESTIMATE FOR FOR PROPOSED D.D.J.A.Y.AFFORDABLE PLOTTED COLONY MEASURING – 5.04  
 ACRE (LICENCE NO. 122 OF 2025 DATED 17.07.2025) IN REVENUE ESTATE OF VILLAGE  
 PATAUDI,SECTOR-04,HARYANA

MATERIAL STATEMENT OF ROAD  
 6 METER WIDE ROAD

S.NO	NODE		WIDE(m)	LENGTH(m)	9 M	WIDTH Metalled	AREA in SQM
1	R1	R3	9 M	39.4	39.4	6	236.4
2	R3	R2	9 M	15.5	15.5	6	93
3	R3	R4	9 M	31.0	31	6	186
4	R4	R5	9 M	31.1	31.1	6	186.6
5	R5	R7	9 M	137.6	137.6	6	825.6
6	R7	R6	9 M	11.80	11.8	6	70.8
7	R7	R8	9 M	31.3	31.3	6	187.8
8	R8	R9	9 M	43.60	43.6	6	261.6
9	R9	R10	9 M	13.4	13.4	6	80.4
10	R10	R11	9 M	31.4	31.4	6	188.4
11	R11	R12	9 M	36.4	36.4	6	218.4
12	R12	R13	9M	156.2	156.2	7	1093.4
13	R13	R14	9M	13.1	13.06	8	104.48
14	R13	R15	9M	12.2	12.2	9	109.8
15	R15	R16	9M	28.1	28.1	10	281
Total 6 M Wide Road Length				354.70	Total Road Area =		2535.000
				17.74			126.75
Add 5%				372.44			2661.750
TOTAL							

Ar. VIKAS AHLAWAT  
 CA/12/2015/59929

