PROPOSED PLOTTED COMMERCIAL COLONY ON LAND MEASURING 3.8375 ACRES FALLING IN SITUATED IN THE REVENUE ESTATE OF VILLAGE DHORKA, SECTOR-95 DIST-GURUGRAM, HARYANA.

DEVELOPED BY M/S GLS INFRA PROJECTS PVT LTD.

ESTIMATE FOR PROVIDING WATER SUPPLY.SEWERAGE. STORM WATER DRAINAGE, ROADS,STREET LIGHTING AND HORTICULTURE IN SCO PLOTTING BY METL FOR COMMERCIAL SITE 3.8375 ACRE SITUATED IN THE REVENUE ESTATE OF VILLAGE DHORKA, SECTOR-95 DIST-GURUGRAM, HARYANA.

Gurugram is a town and municipal corporation in the Gurugram district of the state of Haryana, India. It is a part of the National Capital Region (NCR) of Delhi. Its proximity to the burgeoning city of Gurgaon has in recent years caused its character and demographics to change dramatically. It has many factories, offices, hotels, IT parks and educational institutes. There are several sightseeing spots around the area, some overlapping with Gurgaon. Sohna is 41 kilometres from Indira Gandhi International Airport and is located on National Highway 48, making it well connected with Delhi, Gurgaon, Rewari, Dharuhera, Jaipur, Ahmedabad and Mumbai.

PROJECT REPORT/ESTIMATE FOR PROVIDING WATER SUPPLY, SEWERAGE, STROM WATER DRAINAGE, ROADS, STREET LIGHTING AND HORTICULURE IN SCO PLOTTING BY METL FOR COMMERCIAL SITE 3.8375 ACRE SITUATED IN THE REVENUE ESTATE OF VILLAGE DHORKA, SECTOR-95 DIST-GURUGRAM, HARYANA.

The Haryana Government has prepared a master plan for development of Residential/Industrial/ Commercial urban estate Gurugram. Project is developed by GLS Infra Projcts Pvt Ltd. They have decided to develop the area in this master plan as a plotted commercial colony and has named this part as Proposed SCO Colony for an area measuring 3.8375 Acres in the Revenue Estate of Village Dhorka, Sector-95, Dist-Gurugram, Haryana.

Water Supply

1 Source

The source of water supply in this area is from **HSVP** how ever tubewells shall be proposed for Emergency if permission will get from CGWA. At present water supply is from HSVP municipal supply and tanker supply is sweet and fit for human consumption. However in borewell water is available at reasonable depth. The average yield of tubewell with 40-45 ft strainers will be about 15,000 litre 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 tubewells required for the above area has been worked out and the tubewells will be bored after the permission from CGWA in tune with growth of demand. The ultimate requirement of tubewells includes provisions of 10% stand by. Ultimately, water shall be supplied to the Project by **HARYANA SHAHARI VIKAS PRADHIKARAN, GURUGRAM, HARYANA**

2 Design

The scheme has been designed for approved population of **1977 persons in 3.8375 acres**. The rate of water supply per head per day has been taken as 45 litres as per NBC 2016 / HSVP norms. in addition to above necessary provision of water for community area, coomercial area, parks etc. have been taken into account for calculating the maximum quantity of water requirement.

3 Storage & Pumping

It has been proposed to install pumping set as described with standby of equal capacity. The provision for standby generating set has been provided in case of any electricity failure. Generator will be provided separately or added to the capacity of main generator.

4 Under Ground Storage

Underground storage tank provision has been made for **200KL** capacity. in 4 compartments, which caters for the raw, domestic as well as for firefighting requirement. The water from fire compartment shall overflow to the raw water compartment so that the water in the fire compartment always remain fresh.

5 Boosting Station

A boosting station having monoblock centrifugal pump set is planned near under ground reservior to pump water from domestic/ treated under ground water tank to over head water tank provided at individual plot terrace.

6 Distribution System

The distribution system for this development has been designed to supply @ 45 litre per head her day @ 2.5 times the average rate of flow on 'Hazen william' formula with C-140. Necessary provision for laying D.I. pipe K-7 conforming to relevent IS standards along with valves and specials has been made in the project. The minimum terminal head at any point will be more than 30.00 meters so thet it can serve the stilt and four floors stories construction envisaged in the plan. Minimum pipe dia for distribution is kept as 100 mm dia for domestic water supply.

7 Rising Mains

Rising mains from HSVP water main or sector road to water works have also been designed and provision for 100 mm dia D.I. pipe line (dia as/ design) has been made in this estimate.

8 Sewerage

This scheme is designed for sewer connecting to the proposed sewage treatment plant. The sewage system has been marked on the respsctive plans.

The sewer lines have been designed for 3 times average DWF in relation to the water supply demand assuming that 80% of water supply shall find its way into the propoesd sewer. DWC HDPE SN8 pipe sewers have been proposed and designed to run half full. The sewers have been designed on 0.75 M per second minimum velocity i.e. self cleansing velocity Necessary provision for laying DWC HDPE SN8 pipes and manholes etc. has been made in this estimate.

Size/ Shape of Manholes

As per IS 4111:1986 "Circular type of manholes are much stronger than rectangular and arch type manholes thus these type of manholes are preferred over rectangular as well as arch type manholes. However both rectangular and circular type of manholes are propsed to be provided. The brick masonary rectangular manhole is proposed to be provided for depth upto 0.9m.

The brick masonry/ concrete circular manholes are proposed to be provided for all depth exceeding 0.9 m upwards. Circular manholes are strsaight down in lower portion and slanting on top portion so as to narrow down the top opening equal to internal dia of manhole cover.

Depending on the depth of manhole, brick circular manhole of dia 910, 1220, 1520, 1820 mm dia are proposed to be provided.

9 Storm Water Drainage

The storm water is designed to carry 6.25 mm rainfall per hour or 0.123 cusecs per acre as discharge. Also suitable provisions are contemplated in our scheme to ensure better recarging of underground water table in the area. Underground R.C.C. pipe drain with minimum 400 mm dia are proposed to be provided in this area with circular manhole.

Necessary design statement for entire storm water system has been prepared and attached with estiamte.

10 Rain Water Harvesting

The main emphasis on recharging the underground aquifers and safe disposal of storm water with flooding the site has been laid in designing/ planning of storm water drainage system. Conventional type rain water harvesting are proposed to be provided.

11 Roads

The roads are proposed to be provided in the plotted development in such a way that main 12 m wide & 24 m sector road is opening to the Plot. Detailed calculation of the various item of works have been made on the basis of the detail design of the roads as approved by Chief Engineer HSVP, Gurugram.

12 Street Lighting

Street lighting system has been designed to provide illumination of 15 to 20 lux on roads. Street lights are provided on 6 m high steel tubular poles are located. Luminaries with 65 watts LED lights are proposed to be provided for achieving the desired illumination.

13 Horticulture

Provision of road side plantation of trees with tree guards has been made for all roads.The parks shall be developed by providing lawns & ornamental trees with tree guards.

14 Specifications :

The work will be carried out in accordance with the standard sprcification of P.H. Department as laid down by HSVP & Haryana Government.

15 Rates

Estimate for providing services in this pocket has been prepared on the recent HSVP rates.

16 Cost

The total cost of development in this project including various P.H. and B & R services works out to **Rs. 604.80 Lacs** which includes 3% contingency and PE charges and 49% departmental charges also.

The cost per gross acre for this phase works out to App. **Rs. 157.60 Lacs/acre** which covers the provision of services like water supply, sewerage, storm water drainage, roads, street lighting and plantations including plantations maintenance thereof as well as future expansion whatsoever indicated.

	DESIGN CALCULATION	**For 3.8375 Acres**	Unit
	Daily water requirement	Acres	
	Total No. of Commercial Plots	53	Nos
1	Ground Floor area in sqm	5435.403	sqm

	Person per sqm			3	Sqm/Person	
	Total No. Person Ground Floor			1812	Persons	
	Permanent Population@10%			181	Persons	
	Floating Popultion @ 90%			1631	Persons	
	Total daily Water requirement for Permanent (45 LPCD)		@	45	LPCD	
				Domestic @25 LPCD	Flushing @ 20 LPCD	
				4525	3620	LPD
	Total daily Water requirement for Floating (15 LPCD)		@	15	LPCD	
				Domestic @5 LPCD	Flushing @ 10 LPCD	
				8155.00	16310.00	LPD
2	1st to 3rd Floor area in sqm			17859.182	sqm	
	Person per sqm			10	Sqm/Person	
	Total No. Person upper floor			1786	Persons	
	Visitors 10%			179	Persons	
	Maintenace Staff			10	Persons	
	Total daily Water requirement for Staff (45 LPCD)		@	45	LPCD	
				Domestic @25 LPCD	Flushing @ 20 LPCD	
				44900	35920	LPD
	Total daily Water requirement for Visitors (15 LPCD)		@	15	LPCD	
				Domestic @5 LPCD	Flushing @ 10 LPCD	
				895	1790	LPD
3	Filter Backwash			1500		LPD
4	Horticulture assume area 15% of the Plot @ 6 LPD/SQM				13977	LPD
5	For Road Wash (LS)				5000	LPD
I	Total daily requirement					
a)	For (1+2+3)			59975	57640	LPD
b)	Under Road+ Horticulture (4+5)			0	18977	LPD
	Total Daily Requirement			59975	76617	LPD

		Or Say	60	77	KLD

II Tubewell

Assuming working hours of tubewells		**5**	hours
Assuming discharge/hour of each tubewell		**15**	KL/hours
Total domestic water requirment		**60**	**KLD**
No. of tubewells required		0.80	Nos.
Add 10% standby		0.08	
	Total	0.88	Nos.
	Proposed	**1.0**	Nos.

So It is proposed 1 nos of tubewell if permission will get from from CGWA. The provision of 1 no of tubewell has been made in the estimate because the water demand for flushing, horticulture and the road washing purpose is to be met from re circulated after treatment at STP and ultimate water supply is to be provided by HSVP.

III Pumping machinery for tubewell

a)	Gross working load		=	45.00	m
b)	Average Fall in S.L		=	3.05	m
c)	Depression head		=	6.10	m
d)	Friction loss		=	2.50	m
			=	56.65	m
		Say	=	60.00	m
	BHP = (15x1000x60)/(60x60x75x0.6)		=	5.56	HP
	With 60% efficiency	**Proposed**		**7.50**	HP

It is proposed to install **1 no. Submersible pumping set** with a discharge of **15000 ltr./hour (250 lpm) driven with 7.5 HP** electric motor.

IV Underground Tank

Daily requirement for domestic use and other except fire		=	**59.98**	KLD
Capacity of under ground tank 24 hr storage except fire fighting @ 100% storage requirement		=	**59.98**	KLD
	Say	=	**60.00**	KLD
Total Permanent Population in plots		=	**1977**	Person
Fire Tank Capacity as 100 x [sqrt(1977) /1000]		=	140.61	KLD
	Say	**=**	**140.00**	KLD
	Total		**200.00**	**KLD**

It is proposed to provide 1 no. under ground tank of capacity **200 KL** which also includes **140 KL** capacity for **fire fighting**.
Tank will have four compartments, Two for fire, one for raw and one for domestic use. The water first enters the fire compartment, then over flows to the domestic water

It is proposed to provide under ground tank of following capacity

a)	Capacity of Fire tank-1		**70.00**	KLD
b)	Capacity of Fire tank-2		**70.00**	KLD
c)	Capacity of Raw tank		**30.00**	KLD
d)	Capacity of Domestic tank		**30.00**	KLD

V BOOSTING MACHINERY (Drinking water)
UG. Tank

a) Filter Feed Pump

	Daily requirement for domestic use	=	59.98	KLD
	Assuming 8 hours running 1 pumps (with one standby)			
	Discharge/hour	=	7.50	KL/HR
			124.95	LPM
		Or Say	130.00	LPM
	Head of pump			
i)	Suction lifts	=	0.0	m
ii)	Friction loss in M<main & specials	=	0.0	m
iii)	Clear head	=	25.0	m
		=	25.0	m
	Say	=	25.0	m
	BHP of motor (130*25)/(60*75*0.6)	=	1.20	HP
		Or Say	2.5	HP

b) Domestic Water Transfer Pump

	Daily requirement for domestic use	=	59.98	KLD
	Assuming 6 hours running 1 pumps (with one standby)			
	Discharge/hour	=	10.00	KL/HR
			166.60	LPM
		Or Say	170.00	LPM
	Head of pump			
i)	Suction lifts	=	5.0	m
ii)	Friction loss in M<main & specials	=	5.0	m
iii)	Clear head	=	15.0	m
iv)	Residual head	=	15.0	m

				=	40.0	m	
	Say			=	40.0	m	
	BHP of motor (170*40)/(60*75*0.6)			=	2.5	HP	
				Or Say	2.5	HP	
VI	**Gen Set**	Nos.	HP				
a)	Raw Water Transfer Pump	1	2.5	=		2.5	HP
b)	Domestic Water Transfer Pump	1	2.5	=		2.5	HP
c)	Flushing Water Transfer Pump	1	5.0	=		5	HP
d)	Tubewell	1	7.5	=		7.5	HP
e)	Lighting		3.0	=		3	HP
						20.5	HP
		or 20.5 x 0.746 x 1.50				22.9	KVA
		Say				**30**	KVA
4	**Sewage Treatment Plant capacity**						
	Gross domestic + Flushing water requirement/day				117.6	KLD	
	Sewage flow will be 80% of Domestic & 100% of Flushing				105.6	KLD	
	STP Capacity required at 20% extra margin as per MOEF requirement				**126.74**	**KLD**	
	STP Capacity (Or Say)				**130.00**	**KLD**	
VII	**STP Treated Tank**						
	Daily requirement for flushing, horticulture, road washing			=	**76.62**	KLD	
	Capacity of under ground tank 14 hr storage @60% storage			=	**45.97**	KLD	
		Say		=	**45.00**	KLD	

VIII	**BOOSTING MACHINERY (Flushing water)**			
	STP			
	Daily requirement for Flushing & Horticulture use	=	71.62	KLD
	Assuming 6 hours running 1 pumps (with one standby)			
	Discharge/hour	=	11.94	KL/HR
			198.94	LPM
		Or Say	200.00	LPM
	Head of pump			
i)	Suction lifts	=	5.0	m
ii)	Friction loss in M<main & specials	=	5.0	m
iii)	Clear head	=	15.0	m
iv)	Residual head	=	15.0	m
		=	40.0	m
	Say	=	40.0	m
	BHP of motor (180*45)/(60*75*0.6)	=	3.0	HP
		Or Say	5.0	HP

FINAL ABSTRACT OF COST

	Amount (Lacs.) For 3.8375 Ac
Sub Work 1- Water Supply	**103.00**
Sub Work 2- Sewerage	**72.91**
Sub Work 3- S.W. Drainage	**45.67**
Sub Work 4- Roads	**181.18**
Sub Work 5- Street Lighting	**14.72**
Sub Work 6- Horticulture	**2.32**
Sub Work 7- Maintenance of services for 10 years including resurfacing of roads after 1st 5 years & II. Phase i.e. 10 years maintenance (as per HSVP norms)	**184.99**
TOTAL	**604.80**
COST / ACRE	**157.60**

WATER SUPPLY HEAD		Amount (Lacs.) For 3.8375 Ac
Sub Head 1- Head Works		**32.00**
Sub Head 2- Pumping Machinery		**18.20**
Sub Head 3- Distribution System		**16.57**
Sub Head 4- Irrigation scheme		**0.47**
Total		**67.24**
Add 3% Contingencies & PE Charge		**2.02**
		69.26
Add 49% Departmental Charges		**33.94**
	TOTAL	**103.19**
(CO to final abstract of cost)	**SAY**	**103.00**

Sub Head I

Water Supply
Head Works
Rs.(lakhs)

S. No.	Description	Unit	Qty	Rate	Amount
1	Boring and installing 510 mm i/d tubewells with reverse/direct rotary rig complete with pipe strainer to a depth of about 80m. complete.	Nos.	1	1000000.00	10.00
2	Constructing pump chambers as per standard design of PWD PH/HSVP of size 1.50x1.50 m.	Nos.	1	100000.00	1.00
3	Construction of boosting chambers of suitable size along with under ground tank pumping machinery and generating set etc. complete in all respects.				
	Details of boosting station				
i)	construction of boosting chamber			LS	5.00
ii)	construction of UG Tank	KL.	200	6000.00	12.00
4	Provision for carriage of material and other unforeseen items .	LS		LS	1.00
5	Provision for facilities staff for Maintenance.	LS		LS	3.00
	(C.O. to abstract of cost of Sub-work No.I)			**TOTAL**	**32.00**
				SAY	**32.00**

	Sub Work I				Water Supply
	Sub Head No. II				Pumping Machinery
					Amount (Rs.)
					(in Lakhs)
S. No.	**Description**	**Unit**	**Qty**	**Rate**	
1	Providing and installing electricity driven electro or submersible pumping set capable of delivering about 20 KL water per hour against a total head of 60 M complete with motor and other accessories.	Nos.	1	200000.00	2.00
2	Provision for cheap pressure type chlorination plant complete.			LS	1.00
3	Provision for making foundations & erection of pumping			LS	1.00
4	Provision for pipes, valves & specials inside the pump chamber.			LS	1.00
5	Provision for electric services connection including			LS	2.00
6	Providing and installing electricity driven pumping set, capable of delivering 130 LPM of water at 25M head complete in all respects. (For Filter Feed Pump) (2.5 HP)				
	(1 working + 1 standby)	Nos.	2	120000.00	2.40
7	Providing and installing electricity driven pumping set, capable of delivering 170 LPM of water at 40M head complete in all respects. (2.5HP) (Domestic Water Transfer Pump)				
	(1 working + 1 standby)	Nos.	2	120000.00	2.40
8	Providing and installing electricity driven pumping set, capable of delivering 200 LPM of water at 40M head complete in all respects. (5 HP) (Flushing Water Transfer Pump)				
	(1 working + 1 standby)	Nos.	2	120000.00	2.40
9	Provision of diesel generator set of each for standby arrangements for booster pump complete with gear				

	30 KVA.	LS	3.00
10	Provision for carriage of materials and other unforeseen	LS	1.00
	(C.O. to abstract of cost of Sub-work No.I)	**TOTAL**	**18.20**
		SAY	**18.20**
	Sub Work I		**Water Supply**
	Sub Head No. III		**Distribution System/Rising Main**

S. No.	Description	Unit	Qty	Rate	IN LACS
1	Providing, laying, jointing & testing D.I. K-7 pipes including cost of excavation complete as per ISI marked. (For Domestic water supply line)				
i)	100 mm dia	M	415	1475.00	6.12
2	Providing, laying, jointing & testing D.I. K-7 pipes including cost of excavation complete as per ISI marked. (For borewell line)				
i)	100 mm dia	M	10	1475.00	0.15
3	Providing, laying, jointing & testing UPVC pipes 10 Kg/Sqcm Class- IV (IS- 4985) including cost of excavation complete as per ISI marked. (For Flushing water supply line)				
i)	80 mm dia	M	437	800.00	3.50
4	Providing and fixing sluice valves including cost brick masonary chambers complete in all respects.				
i)	100 mm i/d	Nos.	3	25000.00	0.75
5	Providing, fixing and testing butterfly valves including cost of valve chambers complete in all respects.				
i)	80 mm i/d	Nos.	3	15000.00	0.45
6	Providing and fixing 100 mm dia NRV including cost of valve chambers complete in all respects.				
i)	100 mmm dia	Nos.	1	25000.00	0.25
ii)	80 mmm dia	Nos.	1	20000.00	0.20
7	Providing and fixing air valves and scour valves including cost of valve chambers complete in all respects.	Nos.	4	10000.00	0.40
8	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	12	1000.00	0.12

9	Provision for carriage of material			LS	1.00
10	Provision for cutting the roads and making to its original condition			LS	1.00
11	Providing and fixing fire hydrants complete with masonary chambers.	Nos.	5	15000.00	0.75
12	Making water supply connection			LS	1.00
13	Provision for rising main from HSVP water supply line to UG Tank				
i)	100 mm dia (DI Pipe K-7)	M	60	1475.00	0.89
	(C.O. to abstract of cost of Sub-work No.I)			**TOTAL**	**16.57**
				SAY	**16.57**

	Sub Work I				**Water Supply**
	Sub Head No. IV				**Irrigation**
S. No.	**Description**	**Unit**	Qty	**Rate**	**IN LACS**
1	Providing, laying, jointing & testing UPVC pipes 10 Kg/Sqcm Class- IV (IS -4985) including cost of excavation complete as per ISI marked				
i)	25 mm dia	M	40	400.00	0.160
2	Providing & fixing 20 mm PVC Irrigation hydrant valve with PVC lid complete in all respect including cost of PVC keys	Nos.	6	3500.00	0.21
3	Provision for carriage of material	LS		10000.00	0.10
	(C.O. to abstract of cost of Sub-work No.I)			**TOTAL**	**0.47**
				SAY	**0.47**

	Sub Work II				**Sewerage Scheme**
S. No.	**Description**	**Unit**	Qty	**Rate**	in Lacs
1	Providing, lowering, jointing, cutting DWC HDPE SN8 pipes and specials into trenches including cost of excavation, bed concrete lot of manholes complete.				
i)	200 mm i/d				
a)	Average depth upto 1.5 m	M	81	2270.00	1.84
b)	Average depth 1.5 m to 4.5 m	M	362	2370.00	8.58
2	Provision for lighting, watching and temporary diversion traffic			LS	1.00
3	Provision for timbering & shoring			LS	1.00
4	Provision for cutting of roads and carriage of materials etc. and other unforsean charges			LS	1.00
5	Provision for connection with HSVP			LS	1.00
6	Providing and installation of STP 130 KL including civil tanks and all electro mechanical works. It also includes flushing tank.	KL	130	25000.00	32.5
7	Provision for DI K-7 pipe from S.T.P. to HSVP main line				
i)	100 mm dia pipe	M	40	1475.00	0.59
					47.51
	Add 3% contingencies & PE charges				1.43
					48.93
	Add 49% Deptt. Charges				23.98
				TOTAL	**72.91**
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - II)			**SAY**	**72.91**

Sub Work III — **Storm water drainage**

S. No.	Description	Unit	Qty	Rate	In Lacs
1	Providing, lowering, jointing, cutting RCC NP2 pipes and specials into trenches including cost of excavation cost of manholes, ventilating chambers etc. complete in all respects.				
i)	400 mm i/d				
a)	Average depth upto 1.5 m	M	388	2950.00	11.45
b)	Average depth 1.5 m to 4.5 m	M	38	3050.00	1.16
2	Provision for road gully and drain.			LS	5.00
3	Provision for lighting, watching and temporary diversion of traffic.			LS	1.00
4	Provision for cutting of roads and carriage of materials etc. and other unforseen items.			LS	1.00
5	Construction of rain water harvesting pit as per details and specification given below and as per attached drawing including, cost of excavation of all ind soil foundation trenches of drain including dressing of sides of ramming and getting out excavtion of soil.	Nos	2	450000.00	9.00
6	Provision for connection with HSVP. 400 mm i/d (Average depth 1.5 m to 4.5 m)	M	5	3050	0.15
7	Provision for connection with HSVP line			LS	1.00
					29.76
	Add 3% contingencies				0.89
					30.65
	Add 49% Deptt. Charges				15.02
				TOTAL	**45.67**
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - III)			**SAY**	**45.67**

	Sub Work IV				Road Work
S. No.	**Description**	**Unit**	**Qty**	**Rate**	In Lacs
1	Provision for levelling and earth filling as per site conditions.	Acre	3.8375	175000.00	6.72
2	Construction of road by- i) 150 mm thick W.B.M. stone aggregate layer ii) 100 mm thick PCC iii) 50 thick sand bed iv) 80 mm thick conc. pavers				
	Total	Sq. M	6797	1500.00	101.96
3	Miscellaneous items				
(a)	Providing for Kerbs & Channels for 3.8375 ACRES 898 RM	RMT	898	600.00	5.39
4	Provision for traffic lighting and guide map	LS		100000.00	1.00
5	Provision for carriage of material	LS		100000.00	1.00
6	Provision for plot indicator	LS		100000.00	1.00
7	Provision for demaracation & burgies	LS		100000.00	1.00
					118.06
	Add 3% contingencies				3.54
					121.60
	Add 49% Deptt. Charges				**59.58**
				TOTAL	**181.18**
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - IV)			SAY	**181.18**

	Sub Work V				Street Lighting
S. No.	**Description**	**Unit**	**Qty**	**Rate**	In Lacs
1	Providing street lighting on internal roads as per standerd specification of HVPNL and CFL complete in all respect				
	Provision made on L.S. cost @ Rs.2,50,000.00 per acre	L.S.	3.8375	250000.00	9.59
					9.59
	Add 3% contingencies				0.29
					9.88
	Add 49% Deptt. Charges				4.84
				TOTAL	**14.72**
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - V)			**SAY**	**14.72**

Sub Work VI Horticulture

S. No.	Description	Unit	Qty	Rate	Amount In Lacs
1	Development of lawn area				
a)	Trenching the ordinary soil upto depth of 60 cm. including removal and apcking of servicable material and disposing at the lead of 50m and making upto the tranched area to prope level by filling with earth mixed with manure before and after flooding trenches with water including cost of imported earth and manure.				
b)	Rough dressing of trenched area.				
c)	Grassing with including watering and maintenance of lawns free from weds and fit for moving in rows including for hedges, shrubs and green belt (as per HSVP Norms)	Per acre	0.5756	150000.00	0.86
2	Planting of trees with tree guards on roads at 12 m intervals with 12m wide road one side & 24 m wide both side				
	Total length of roads = 430 mtr				
	No of trees @ 12m c/c = 430/12 = 35.833 nos				
	say = 36 nos				
	Cost of the tree @ 1800/- each	Nos.	36	1800.00	0.65
	TOTAL				**1.51**
	Add 3% contingencies				0.05
					1.56
	Add 49% Deptt. Charges				0.76
				TOTAL	**2.32**
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - VI)			**SAY**	**2.32**

	Sub Work VII				Maintenance
S. No.	**Description**	**Unit**	**Qty**	**Rate**	In Lacs
1	Provision for maintenance charges for water supply, sewerage, storm water drainage, roads, street light, horticulture etc. complete including operation and establishment charges as per HSVP norms after completion.	Acre	3.8375	750000.00	28.78
2	Provision for resurfacing and strengthening of roads after 1st five years of 1st phase with 80 mm thick concrete pavers @ 600 / sqm	Sq. M	6797	600.00	40.78
3	Provision for resurfacing and strengthening of road after 10 years of 2nd phase with 80 mm thick concrete pavers @ 750 / sqm	Sq. M	6797	750.00	50.98
					120.54
	Add 3% contingencies				3.62
					124.16
	Add 49% Deptt. Charges				60.84
				TOTAL	**184.99**
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - VII)			SAY	**184.99**