COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES FALLING UNDER VILLAGE BEGUMPUR KHATOLA, SECTOR-73, DISTRICT GURUGRAM

ESTIMATE

FOR

PROVIDING WATER SUPPLY, SEWERAGE, STORM WATER DRAINAGE, ROADS, HORTICULTURE, STREET LIGHTING & FIRE SERVICE

IN

COMMERCIAL COLONY BEING DEVELOPED

BY

GODDARD BUILDER & CONSTRUCTION PVT. LTD.

NOV 2022

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ESTIMATE FOR PROVIDING EXTERNAL DEVELOPMENT WORK IN COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

1. INTRODUCTION

Gurgaon Town is an important town of Haryana State situated on Delhi – Jaipur Highway at a distance of approximately 30 Kms. from Delhi. Being in the National Capital Region, the town has fast developing tendency and potential. Further it has also started sharing the growing industrial load of Delhi and Faridabad. In order to relieve the growing pressure of population in Delhi, it has been decided by the Haryana Govt. to establish various sectors in Gurgaon. Keeping in view, the above facts, a commercial plotted colony has been planned on total plot area measuring 7.40625Acres (LIC No. 184 of 2022 dated 15-11-22), in Sector-73, Gurugram.

2. WATER SUPPLY

At present the source of water supply in this area is HUDA supply direct connection to each plot. The water supply system has been designed as per the Hazen William formula.
It has been proposed to construct 1 no underground tank of capacity 120 KL, for domestic purposes and 100 KL as static storage for fire-fighting purposes. The underground tanks will be filled up from the HUDA supply.

3. DESIGN

The scheme has been designed for approximately 3816 persons considering 31 persons for each 14.1M x 6M plot, 38 persons for each 17.55M x 6M plot, 65 persons for each 24.45M x 7.5M plot, 67 persons for each 21.5M x 8.75M plot and 73 persons for each 23.5M x 8.75M plot. The rate of water supply has been taken as 45.0 litres per capita per day (lpcd). Besides the above necessary provisions of water for area under open spaces and green belts @25 KL per acre has also been included. Additional requirements of water for road washing have also been taken into account.

3.1 UNDER GROUND STORAGE, PUMP CHAMBERS & PUMPING MACHINERY

It has been proposed to install a pumping station next to underground tank. At pumping station, there would be two pumping systems each comprising two pumps, one working and one standby. The provision for Diesel Generating set as a stand-by source of power in case of any electricity failure has also been made. Provision is also made for chlorination of water before distribution.

3.2 DISTRIBUTIONS SYSTEM

The Distribution System for this development area has been designed @ 30 persons for each 14M x 6M plot, 38 persons for each 17.55M x 6M plot, 61 persons for each 23.150M x 7.5M plot, 67 persons for each 21.5M x 8.75M plot and 73 persons for each 23.5M x 8.75M plot with water supply @ 45.0 litre/head/day @ 3.0 times, the average rate of flow on `Hazen William' formula with C-100 necessary provision for laying C.I. pipes conforming to relevant ISI standards along with valves and specials has been made in this estimate.

3.3 RISING MAIN

Rising mains from HUDA water main on sector road to water works have also been designed and provision for 100mm i/d C.I. Pipe line has been made in the estimate.

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4. SEWERAGE SCHEME

The sewerage network of the plotted development shall be connected to the proposed Sewage Treatment plant (STP). The treated effluent will be used for landscape irrigation. Surplus effluent will be discharged into the sewerage system being planned by HUDA on the Sector Road.

The sewerage system has been designed for 3 times of average DWF. It has been assumed that 75% of domestic water supply shall find its way into the proposed sewer. All the sewer upto 400 mm dia. have been designed to run half-full. Necessary design statement for the entire sewerage system has been prepared and attached. Sewer lines have been designed for a minimum self cleansing velocity of 0.75 M/sec. S.W. pipes will be used for sewer lines. All the manholes and related appurtenances shall be constructed as per standard design.

5. STORM WATER DRAINAGE

The design rainfall intensity has been considered as 1/4" per hour for the proposed development. The average co-efficient of run-off has been considered as 0.5 for the proposed development. Pipe drains formed of minimum 400 mm dia R.C.C. NP3 pipe has been proposed for the storm water drainage. Road Gully Chambers will collect the storm water from the surface and discharge into the manholes through 400 ~~300~~ mm dia. R.C.C. NP3 pipes. The internal storm water drains shall be connected to the proposed storm water drainage system of the surrounding plotted development, which ultimately gets connected to peripheral departmental storm water drainage system on sector road. The velocity of water in the pipe has been considered as a minimum of 0.60 M/sec. all the pipes are considered as running full. Necessary design statement for the entire storm water drainage system has been prepared and attached.

6. SPECIFICATIONS

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

7. RATE

The estimate has been based on the present market rates with escalation.

8. COST

855.72 ~~701.47~~

The total cost of the scheme, including cost of all services works out of **Rs. ~~730.93~~ lacs** including 3% contingencies and 49% Departmental Charges. @ Rs 121.44 lacs Per Acre

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REPORT ON DESIGN CALCULATION FOR COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

A. Details of Plots Units and Water Requirement

I. WATER REQUIREMENT FOR WORKING STAFF AND SHOPPERS OF COMMERCIAL COLONY

Total No. of Plots

S.No.	Plot size (Approx.)	Area (Sq.M.)	No. of Plots	Population/ Plot (Persons)		Total Population (Persons)		Plot No.
				Fixed Population/ Plot	Floating Population/ Plot	Fixed Population	Floating Population	
1	14.1 M X 6 M	84.6	20	30	41	600	820	A1-A20
2	17.55 M X 6 M	105.3	38	38	51	1444	1938	B1-B38
3	23.150 M X 7.5 M	173.625	13	61	85	793	1105	C1-C12A
4	21.5 M X 8.75 M	188.125	7	67	91	469	637	D1-D7
5	23.5 M X 8.75 M	205.625	6	73	100	438	600	E1-E6
Total Population			84			3744	5100	

Total working staff (fixed population) = **3744 persons**

Total water requirement @ 45.0 lpcd = 3816 x 45.0
= 1,68,480 litres/day
= **169 KL/Day,**

Total Shoppers (floating population) = **5100 persons**

Total water requirement @ 15.0 lpcd = 5100 x 15.0
= 76,500 litres/day
= **77 KL/Day,**

TOTAL DOMESTIC WATER REQUIREMENT = 169 + 77
= 246 KL/Day, Say 250 KL/Day

II. HORTICULTURE REQUIREMENT

Total area of site = 7.40625 Acres
Total soft area (approx.) = 0.26 Acres
Total water requirement for horticulture Work @ 25 KL/Acre / Day = 0.26 x 25
= **6.5 KL/Day, Say 7 KL/Day**

III. ROAD WASHING

Total Road area (approx.) = 1.43 Acres
Water requirement for road washing @ 5 KL/Acre = 1.43 x 5
= **7.15 KL/Day, Say 8 KL/Day**

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IV. FIRE FIGHTING REQUIREMENT

Water requirement for fire fighting = 100 x Sq. root (P)
Where, 'P' is population in 1000
Hence, fire fighting requirement = 100 x Sq. root (8.844)/3

= 99.13 KL/Day
Say **100 KL/Day**

Hence, total daily requirement = I + II + III
= 250 + 7 + 8

= **265 KL/Day**

B. PUMPING MACHINERY FOR BOOSTING WATER

It is proposed a ring main on the periphery of the plotted development. The details of pumping machinery for plotted development is given as below:

I) FOR FRESH WATER SUPPLY:

Pumping Machinery for Plotted Development

Daily demand for Commercial Colony = 250,000 litres

Fresh water demand for Commercial Colony = (3744x25) + (5100x5)
= 119,100 litres,
Say 120 KLD

Add for Water bodies = 11 KLD
Add for filter backwash = 9 KLD
Total Daily fresh water requirement = 140 KLD

i) Pumping rate assuming 8 hours of pumping per day

$$= \frac{140,000}{8 \times 60 \times 60}$$

= **4.86 litres per second.**

ii) Pumping head

a) Suction head	=	0.0 M (positive suction)
b) Static head	=	26.0 M
c) Residual head	=	5.0 M
d) Frictional head loss	=	14.0 M
Total	=	**45.0 M**

Hence, provide 2 pumps (1W + 1S) with a discharge of 4.86 litres per second at 45.0 M head.

BHP of Motor = $\frac{45 \times 4.86}{0.6 \times 0.9 \times 76.04}$

= **5.33**
Say = **7.5 B.H.P**

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II) FOR RECYCLED WATER SUPPLY FOR FLUSHING:

Pumping Machinery for Plotted Development

Daily demand for Commercial Colony = 250,000 litres

Recycled water demand for Commercial Colony = (3744x20) + (5100x10)
= 125,880 litres,
Say 126 KLD

Add for road washing and gardening = 15 KLD
Toral Daily recycled water requirement = 141 KLD, Say 145 KLD

iii) Pumping rate assuming 8 hours of pumping per day

$$= \frac{145,000}{8 \times 60 \times 60}$$

= **5.03 litres per second.**

iv) Pumping head

a) Suction head	=	0.0 M (positive suction)
b) Static head	=	26.0 M
c) Residual head	=	5.0 M
d) Frictional head loss	=	14.0 M
Total	=	**45.0 M**

Hence, provide 2 pumps (1W + 1S) with a discharge of 5.03 litres per second at 45.0 M head.

BHP of Motor = $\frac{45 \times 5.03}{0.6 \times 0.9 \times 76.04}$

= **5.51**

Say = **7.5 B.H.P**

C. UNDERGROUND TANK

Total daily domestic water requirement = 250 KL

Water Requirement for Fire Fighting = 100 KL*

= 350 KL

Say = ~~290 KL~~ 350

*100 x Sq. root (Population in thousand) = 100 x Square. root (8.988)/ 3
= 99.93 KL,
Say 100 KL

Fresh water demand for Commercial Colony = (3744x25) + (5100x5)
= 119,100 litres,
Say 120 KLD

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Add for Water bodies	=	11 KLD
Add for filter backwash	=	9 KLD
Total Daily fresh water requirement	=	140 KLD

Capacity of underground tanks for fresh water	=	140 KLD

Recycled water demand for Commercial Colony including flushing and irrigation	=	(3816x20) + (5172x10) + 15000
	=	140880 litres, Say 145 KL

Capacity of underground tanks for recycled water is ½ day capacity	=	~~145/2~~
	=	~~72.5 KL~~ 145 KL
		~~Say 75 KL~~

It is proposed to construct UGT of 140 KL (Domestic) and ~~100~~ 145 KL (Fire) for the commercial colony of 7.40625 Acre.

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

FINAL ABSTRACT OF COST

SUB WORK NO. I	WATER SUPPLY	Rs. ~~92.91 LACS~~	107.55 lacs
SUB WORK NO. II	SEWERAGE	Rs. ~~81.09 LACS~~	129.66 "
SUB WORK NO. III	STORM WATER DRAIN	Rs. ~~90.55 LACS~~	124.55 lacs
SUB WORK NO. IV	ROAD & FOOTPATHS	Rs. ~~211.09 LACS~~	237.48 "
SUB WORK NO. V	STREET LIGHTING	Rs. ~~28.79 LACS~~	28.79 "
SUB WORK NO. VI	HORTICULTURE	Rs. ~~20.37 LACS~~	21.58 "
SUB WORK NO. VII	MAINTENANCE CHARGES for 10 years including resurfacing of roads after 1st 5 years & 2nd 5 years m/c. (as per HUDA norms)	Rs. ~~206.13 LACS~~	206.13 "
		Rs. ~~730.93 LACS~~	855.72 lacs

855.72

Cost per acre = ~~730.93~~/ 7.40625

= Rs. ~~97.40 lacs~~ per gross acre

~~123.44~~ 115.54 lacs per acre.

Checked for service estimate only

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Executive Engineer-EDC (Infra-I) GMDA
for roads/lighting/Hort.

Executive Engineer-I
W/S Division, GMDA
Gurugram

Checked subject to comments in forwarding letter No. II 5284 Dt. 09/12/2022 ..and notes attached with the estimate

Executive Engineer-
Sew. Division No. II
GMDA, Gurugram

Executive Engineer-III
Drainage Division, GMDA,
Gurugram

Chief Engineer,
(Infra-II), GMDA
Gurugram

COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

ABSTRACT OF COST OF SUB-WORK NO. I (WATER SUPPLY)

SUB HEAD NO. I	HEAD WORKS & PUMPING MACHINERY	Rs.	~~31.30 Lacs~~	34.90 Lacs
SUB HEAD NO. II	DISTRIBUTION SYSTEM FOR FRESH WATER SUPPLY	Rs.	~~15.80 Lacs~~	16.18 "
SUB HEAD NO. III	DISTRIBUTION SYSTEM FOR FLUSHING/ IRRIGATION WATER SUPPLY	Rs.	~~10.91 Lacs~~	10.91 "
SUB HEAD NO. IV	RISING MAIN	Rs.	~~4.53 Lacs~~	8.09 "
		Rs.	~~60.54 Lacs~~	70.08 "
ADD : 3% Contingencies & P.E. Charges		Rs.	~~1.82 Lacs~~	2.10 "
		Rs.	~~62.36 Lacs~~	72.18 "
ADD : 49% Departmental Charges, price escalation, unforeseen, administration charges		Rs.	~~30.55 Lacs~~	35.36 "
		Rs.	**~~92.91 Lacs~~**	107.55 Lacs

(TOTAL C.O TO SUMMARY)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. I

WATER SUPPLY

SUB HEAD NO. I

HEAD WORKS & PUMPING MACHINERY

S.No.	Description	Qty.	Unit	Rate	Amount
1.	Boosting Machinery				
	i) 2 Nos. 4.86 LPS at 45 mtrs head– 7.5 BHP (For Fresh Water supply)	2	No.	150,000	3,00,000/-
	ii) 2 Nos. 5.03 LPS at 45 mtrs head– 7.5 BHP (For Recycled Water supply)	2	No.	150,000	3,00,000/-
2.	Construction of 1 No. Boosting arrangement and underground tank of total 240KL (Dom.+ Fire) capacity	240	KL	~~4,500~~ 6000	~~10,80,000/-~~ 14,40,000
3.	Construction of Boosting Chamber of Suitable size	L.S.			5,00,000/-
4.	Provision for 30 KVA DG Set @ Rs. 10,000 per KVA as standby	L.S.			3,00,000/-
5.	Providing for chlorination plant complete in all respect	1	No	L.S.	1,00,000/-
6.	Provision for making foundations and erection of pumping machinery.	L.S		L.S.	1,00,000/-
7.	Provision for pipes valves and specials inside the pump chamber and boosting chambers	L.S.		L.S.	1,00,000/-
8.	Provision for electric services connection including electric fittings for boosting chamber etc	L.S.			1,00,000/-
9.	Provision for carriage of materials and other unforseen items.	L.S.			50,000/-
10.	Provision for facilities for maintenance staff	L.S.			2,00,000/-

Rs. ~~31,30,000/-~~ 34,90,000

Say Rs. ~~31.30~~ 34.90 **Lacs**

(C.O. TO ABSTRACT OF COST SUB WORK NO. I)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. I — **WATER SUPPLY**

SUB WORK NO. II — **DISTRIBUTION SYSTEM FOR FRESH WATER SYPPLY**

S.No.	Description	Qty.	Unit	Rate	Amount
1.	Providing, laying, jointing and testing ~~C.I.~~/ D.I. lines including cost of excavation, specials etc. complete in all respect				
	C.I. PIPE				
	100 mm i/d	770	M	1475 ~~1,250~~	1135750.00 ~~9,62,500/-~~
2.	Providing and fixing sluice valve including cost of surface boxes & masonary chambers etc. complete				
	100 mm i/d	5	No.	25000 ~~12,000~~	125000 ~~60,000/-~~
3.	Providing and fixing scour valves and including cost of bricks masonary chamber	5	No.	10,000	50,000/-
4.	Providing and fixing indicating plates for sluice valves and air valves	5	No.	1,000	5,000/-
5.	Provision for carriage of material	LS			50,000/-
6.	Provision for cutting of roads & making good to its original conditions & other unforeseen items	L.S.			1,00,000/-
7.	Provision for fire hydrant including cost of brick masonary chamber complete in all respect.	6	No.	15,000	90,000/-
8.	Providing & laying M.S. pipe 100 mm dia. Including cost of fitting (line for fire hydrants).	50	M.	1,250	62,500/-

Rs. ~~13,80,000/-~~ 1618250/-

Say Rs. ~~13.80 Lacs~~ 16.18

(C.O. TO ABSTRACT OF COST SUB WORK NO. I)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. I — **WATER SUPPLY**

SUB WORK NO. III — **DISTRIBUTION SYSTEM FOR FLUSHING/ IRRIGATION WATER SYPPLY**

S.No.	Description	Qty.	Unit	Rate	Amount
1	Providing, laying, jointing and testing pipelines conforming uPVC pipe 10kg/cm2 Class-IV (IS:4985) including cost of excavation, specials etc. complete in all respect				
	90 mm OD	760	M	900	6,84,000/-
2.	Providing and fixing sluice valve including cost of surface boxes & masonry chambers etc. complete				
	80 mm i/d	6	No.	10,000	60,000/-
3.	Providing and fixing QRCV (Quick Release Coupling Valves) with chambers	23	No.	3,500	80,500/-
4.	Providing and fixing scour valves and including cost of bricks masonary chamber	6	No.	10,000	60,000/-
5.	Providing and fixing indicating plates for sluice valves and air valves	6	No.	1000	6,000/-
6.	Provision for carriage of material & unforeseen items	LS			1,00,000/-
7.	Provision for cutting of roads & making good to its original conditions	L.S.			1,00,000/-
				Rs.	**10,90,500/-**

Say Rs. 10.91 Lacs

(C.O. TO ABSTRACT OF COST SUB WORK NO. I)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. I — **WATER SUPPLY**

SUB HEAD NO. IV — **RISING MAIN FROM HUDA**

S.No.	Description	Qty.	Unit	Rate	Amount
1.	Providing, laying, jointing and testing ~~C.I.~~ DI Pipes including cost of excavation complete				
	100 mm i/d	192	M	~~1250~~ 1475	~~2,40,000/-~~ 283200
2.	Providing and fixing sluice valves including cost of surface boxes and masonary chambers, indication plates etc. complete				
	100 mm i/d	1	No.	~~12000~~ 25000	~~12,000/-~~ 25000
3.	Providing and fixing indicating plates with sluice valves	1	No.	1000	1,000/-
4.	Provision for carriage of materials.	L.S.			50,000/-
5.	Provision for cutting of roads and making good of its original conditions	L.S.			50,000/-
6.	Provision for connection from HUDA Main ~~fee~~ & Connection fee	L.S.			~~1~~4,00,000/-
				Rs.	~~4,53,000/-~~ 809200

Say Rs. ~~4.53~~ Lacs
~~8.09~~
8.09

(C.O. TO ABSTRACT OF COST SUB WORK NO. I)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. II **SEWERAGE (INTERNAL SEWER)**

S.No.	Description	Qty.	Unit	Rate	Amount
1.	Providing, lowering, jointing & cutting salt glazed stone ware pipe and spls. Into trenches including cost of excavation, bed concrete, cost of manholes, etc. complete in all respect.				
	i) 200 mm dia i/d S.W. pipes Av. Depth upto 2 M	700	M	~~1250~~ 2270	~~8,75,000/-~~ 1589000.00
	ii) 200 mm dia i/d S.W. pipes Av. Depth 2 M to 4 M	40	M	~~1500~~ 2370	~~60,000/-~~ 94800.00
2.	Providing, laying, jointing and testing sewer bye-pass pipelines conforming D.I. pipe including fittings, Manholes, cost of excavation, etc. complete in all respect (overflow pipe)				
	100 mm I.D. Av. Depth upto 1.5 M	55	M	~~1250~~ 2270	~~68,750/-~~ 124850.00
3.	Provision for providing oblique junction etc.	L.S.			40,000/-
4.	Provision for temporary timbering etc.	L.S.			50,000/-
5.	Provision for lighting watching etc.	L.S.			50,000/-
6.	Provision for cutting the road and carriage of materials etc. and other unforeseen charges, vent pipe etc.	L.S.			1,00,000/-
7.	Provision for making connection with existing lines	L.S.			~~2,00,000/-~~ 400000.00
8.	Provision for 240 KLD STP including cost of flushing tank of 75 KLD @Rs. ~~16,000/ KL~~ 25000 Per K.L	L.S.			~~38,40,000/-~~ 6000000.00
				Rs.	~~52,83,750/-~~ 8248650.00
	Add 3% Contingencies & P.E. Charges			Rs.	~~1,58,513/-~~ 253459.00
				Rs.	~~54,42,263/-~~ 8702109.00
	Add 49% Departmental Charges, price, Escalation, unforeseen, administration charges			Rs.	~~26,66,709/-~~ 4263033.00
				Rs.	~~81,08,972/-~~ 12966143.00
					Say Rs. ~~81.09~~ 129.66 Lacs

(C.O. TO FINAL ABSTRACT OF COST)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

STORM WATER R.C.C. PIPE DRAIN

SUB WORK NO. III — **STORM WATER DRAIN RCC PIPE DRAIN**

S.No.	Description	Qty.	Unit	Rate	Amount
1.	Providing lowering, cutting and jointing salt glazed RCC NP3 pipes and specials into trenches, including cost of excavation, bed concrete cost of manholes etc. complete in all respects				
	a) 400 mm dia. i/e R.C.C. Pipe AV. Depth Upto 2 M	1360	M	~~2500~~ 2950	~~34,00,000/-~~ 4012000.00
2.	Provision for road gullies with pipe connection	L.S.			2,00,000/-
3.	Provision for Rainwater Harvesting Pits	8	No.	~~2,50,000/-~~ 450000 each	~~20,00,000/-~~ 3600000
4.	Provision for lighting, watching and temporary diversion	L.S.			1,00,000/-
5.	Provision for cutting of roads and carriage of materials etc. and other unforeseen items	L.S.			1,00,000/-
6.	Provision for making connection with existing system	LS.			1,00,000/-
				Rs.	~~59,00,000/-~~ 8112000.00
	Add 3% contingencies & P.E. Charges			Rs.	~~1,77,000/-~~ 243360
				Rs.	~~60,77,000/-~~ 8355360
	Add 49% Departmental Charges, price, Escalation, unforeseen, administration Charges			Rs.	~~29,77,730/-~~ 4094126
				Rs.	**~~90,54,730/-~~**
					12449486.00

Say Rs. ~~90.55~~ Lacs 124.50

(C.O. TO FINAL ABSTRACT OF COST)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. IV **ROADS AND FOOTPATHS**

			AMOUNT (RS.)
1.	Provision for leveling and earth filling as per site conditions 7.40625 Acres @ 150,000/- per acre	Rs.	~~11,25,675/-~~ 1110937.00
2.	GSB =200 MM WMM 250 mm 50 mm thick…DBM….. ~~20~~ 30 mm thick ~~M.S.S.~~ B.C 5780 sq. m. @ Rs. ~~1200/-~~ 1500 per sq. m.	Rs.	~~69,36,000/-~~ 8670000.00
3.	Provision for footpath on both sides of 12M wide roads 620 sq. m. @ Rs. 750/- per sq. m.	Rs.	4,65,000/-
4.	Providing for Kerbs & Channels of C. Conc. 1 : 2 ½ : 5 with base concrete and pointing etc. 1860 @ Rs. 600/-	Rs	11,16,000/-
5.	Provision for cement concrete parking 3010 sq. m. @ Rs. 1200/- per sq. m.	Rs.	36,12,000/-
6.	Provision for traffic light arrangement and making approach to each plot L.S.	Rs.	2,00,000/-
7.	Provision for Indicator Board & Guide Map etc.	Rs.	1.00,000/-
8.	Provision for demarcation burji, carriage of material and unforeseen items	Rs.	2,00,000/-
		Rs.	~~137,54,675/-~~ 15473937.00
	ADD : 3% Contingencies & P.E. Charges	Rs.	~~4,12,640/-~~ 464218.00
		Rs.	~~141,67,315/-~~ 15938155.00
	Add 49% Departmental Charges, price, Escalation, unforeseen, administration Charges	Rs.	~~69,41,984/-~~ 7809696.00
		Rs.	**~~211,09,299/-~~** 23747851.00
			237.48
		Say Rs.	**~~211.09~~ Lacs**

(C.O. TO FINAL ABSTRACT OF COST)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. V **STREET LIGHTING**

AMOUNT (RS.)

Providing street lighting with underground on roads as per standard H.S.E.B. Specifications		
Total Area: 7.40625 Acres		
7.40625 acres @ Rs. 2,50,000/- per acre	Rs.	18,76,125/-
ADD: 3% contingencies & P.E. Charges	Rs.	56,284/-
	Rs.	19,32,409/-
Add 49% Departmental Charges, price, Escalation, unforeseen, administration Charges	Rs.	9,46,880/-
	Rs.	**28,79,289/-**

Say Rs. 28.79 Lacs

(C. O. TO FINAL ABSTRACT OF COST)

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COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. VI

ESTIMATE FOR DEVELOPMENT OF LAWNS & PLANTATION OF ROAD SIDE TREES

		AMOUNT (RS.)
1.	Development of Lawn Areas	
	a) Trenching the ordinary soil upto depth of 60 cm including removal and stacking of serviceable material and 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 including cost of imported earth and manure	
	b) Rough dressing of turfed area.	
	c) Grassing with `Doob Grass' including watering and maintenance of lawns for 30 days till the grass forms a thick lawn free from weeds and fit for moving in rows 7.5 cm apart in either direction including provision for hedges and barbed wire, fencing around park	
	7.40625 acres organized green @ Rs. 150,000/- per acre	Rs. 11,25,675/-
2.	Providing tree guards and planting trees along road at 12 M interval	
	No. of Trees = 155 Nos.	
	155 Nos. @ Rs. ~~1300~~ 1800/- each	Rs. ~~201,500~~ 279000
		Rs. ~~13,27,175~~/- 1404675.00
	Add 3% contingencies & P.E. Charges	Rs. ~~39,815~~/- 42140.00
		Rs. ~~13,66,990~~/- 1446815.00
	Add 49% Departmental Charges, price, Escalation, unforeseen, administration Charges	Rs. ~~6,69,825~~/- 708939.00
	TOTAL	**Rs. ~~20,36,815~~/- 2155754.00**
	Say Rs. ~~20.37~~ 21.56 Lacs	

(C.O. TO FINAL ABSTRACT OF COST)

ACPL Design Limited NEW DELHI

COMMERCIAL COLONY AREA MEASURING 7.40625 ACRES AT SECTOR-73 GURUGRAM

SUB WORK NO. VII **MAINTENANCE OF SERVICES**

			AMOUNT (RS.)
1.	Provision for maintenance charges for water supply, sewerage, drainage, roads, street-light, horticulture etc. complete including operation and establishment charges as per HUDA norms after completion		
	7.40625 acres @ Rs. 7,50,000/- per acre	Rs.	56,28,375/-
2.	Provision for resurfacing of roads after five years of Ist Phase		
	5780 sq.m @ Rs.600/- per sq.m.	Rs.	34,68,000/-
3.	IInd Phase after five years of Ist Phase		
	~~One layer of 10mm thick 53 to 22.4 mm guage complete~~ of 75 mm thick WBM ~~specification~~ and aggregate to MOT specification, Table 500-9 and Table 400-6, Grading Number 3 with ~~20 mm thick pre-mix carpet~~. 30mm thick B.C		
	5780 sq.m. @ Rs. 750/- per sq.m.	Rs.	43,35,000/-
		Rs.	134,31,375/-
	Add : Contingencies @ 3%	Rs.	4,02,941/-
		Rs.	138,34,316/-
	Add : Departmental Charges @ 49%	Rs.	67,78,815/-
		Rs.	**206,13,131/-**
		Say Rs. 206.13 Lacs	

(C.O. TO FINAL ABSTRACT OF COST)

ACPL Design Limited NEW DELHI