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# SERVICE ESTIMATE, DESIGN REPORT AND CALCULATION OF

### **INTERNAL DEVELOPMENT WORKS**

#### FOR

PROPOSED "COMMERCIAL PLOTTED COLONY OVER ANAREA MEASURING 4.15625 ACRES" (LICENSE NO.125 OF 2023 DATED 15.06.2023) IN THE REVENUE ESTATE OF VILLAGE GURUGRAM, IN SECTOR - 14, GURUGRAM – MANESAR URBAN COMPLEX BEING DEVELOPED BY M/S SPJ PROPERTIES PVT. LTD.

.4.15625 Acres commercial plotted colony in sec -14, Gurugram

SERVICE ESTIMATE, DESIGN REPORT AND CALCULATIONS OF INTERNAL DEVELOPMENT WORKS FOR PROPOSED "COMMERCIAL PLOTTED COLONYOVER AN AREA MEASURING 4.15625 ACRES" (LICENSE NO.125 OF 2023 DATED 15.06.2023) IN THE REVENUE ESTATE OF VILLAGE GURUGRAM, IN SECTOR - 14, GURUGRAM – MANESAR URBAN COMPLEX BEING DEVELOPED BY M/S SPJ PROPERTIES PVT. LTD.

#### **REPORT** :-

Gurugram town of Haryana State situated on N.H. -48 road at a distance of 35 Km from Delhi. Being in the national capital region the town has fast developing tendency and potential. Further, it has also started sharing the growing residential, commercial and Industrial load of Delhi. In order to review the growing pressure of population in National Capital of Delhi, It has been decided by the Haryana Government to develop various infrastructure facilities in Gurugram - Manesar Urban Complex. The layout plan was approved vide DTCP Haryana Chandigarh Drg. No. DTCP-9329 dated 15.06.2023. This report is for a part of service estimate for proposed "commercial plotted colony" area measuring 4.15625 acres" (License No.125 of 2023Dated 15.06.2023) in the Revenue Estate of Village Gurugram, in Sector - 14, Gurugram – Manesar urban complex being developed by M/s SPJPROPERTIES PVT. LTD. has been prepared with the following provisions which are as under:-

#### 1. WATER SUPPLY

The source of water supply in this area is by HSVP/GMDA Mains. It has been proposed to construct underground tanks of capacity as per attached details and the location for domestic purpose and for fire protection. The underground tanks will be fed from the HSVP/GMDA based supply, which will feed O.H. tanks on the roof of the SCO's and has been designed as per the Hazen Williams formula. Presently there is HSVP/GMDA W/S in this area. However the provision of tube well has been taken in this estimate due to non-availability of water but after getting the approval from the competent authority through tube well / tankers / any other approved source till HSVP/GMDA W/S will made available. The proposed tube well shall be 510mm bore drilled with reverse rotary rig and installed with 80mm i/d housing pipe and 50mm i/d slotted tube as strainer.

#### DESIGN

The scheme has been designed for population of 4350 persons, considering 1 person per 3 sqm area for ground floor and 1 person per 6 sqm for first floor for plotted commercial colony and considering @ 10% for shopkeeper @ 45 LPCD and @ 90% for visitors @ 15 LPCD and office area 1 person per 10 sqm for 2<sup>nd</sup>& 3<sup>rd</sup>floor and considering @ 90% for official @ 45 LPCD and @ 10% for visitors @ 15 LPCD and other requirement etc. as per design calculations.

#### **PUMPING EQUIPMENTS**

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

#### 2. SEWERAGE

The scheme is designed for sewer connecting to the STP and bypass connection to HSVP/GMDA sewer scheme.

The sewer lines have designed for three times average D.W.F in relation to water supply demand. It has assumed that about 80% of the domestic and flushing water supply shall find its way into the proposed sewer. Sewer lines shall be running by gravity and discharge to STP proposed. Treated water will be used for Irrigation & Flushing purpose (through recycling) under the pipe line system.

#### 3. STORM WATER DRAINAGE

It has been proposed to lay R.C.C pipes with required number of manholes for disposal of storm water, which will be connected to the HSVP/GMDA drain. The intensity of rain fall has been taken as 6.00mm (1/4")per hour. A minimum size of 400mm i/d R.C.C pipe for storm water drain will be provided and designed as per manning's formula. Necessary provision of rainwater harvesting arrangement has also been taken in this estimate.

#### 4. <u>ROADS</u>

Road have been provided to above areas and estimate is prepared as revised specifications adopted by HSVP/GMDA.

#### 5. <u>STREET LIGHTING AND ELECTRIFICATION</u> Provision for external lighting of proposed area has been made.

#### 6. HORTICULTURE

Estimate and details of plantation, landscaping, signage etc. has been included.

#### 7. FIRE FIGHTING

As per N.B.C, fire tanks and required capacity pumps have been taken in the estimate and marked on the plan.

#### 8. SPECIFICATIONS

The work will be carried out in accordance with the standard specifications of PH as laid down by the Haryana Government / HSVP/GMDA.

#### 9. <u>RATES</u>

The estimate has been based on the present market rates.

#### 10. <u>COST</u>

The total cost of the scheme including cost of all services works out to Rs.612.05Lacs including 3% contingencies and 49% departmental charges + price as calculation and cost per acre comes out to Rs.147.26Lacs. 178.92

For SPJ PROPERTIES PVT. LTD.

(Authorized Signatory) Sign./Director

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#### **DESIGN CALCULATION**

То	tal Area of Plot (Commerc	cial)		<u></u>		525 Acres Or
Do	missible Ground Courses	~ (2) 250/		_		9.72 Sqm
	rmissible Ground Coverag rmissible FAR @ 150%	e ( <i>W</i> , 35%)		-		.902 Sqm
	posed Ground coverage			=		9.58 Sqm .32 Sqm
	ea Under Public Utility			_		) Sqm
	posed FAR Achieved			=		7.086Sqm
	s. Of S.C.O.'s			_	46 No	-
					10 14	
I)	WATER REQUIREMEN	<u>VT</u>				
<b>A)</b> .	Ground + First Floor					
1	Area on Ground Floor (S	hopping Area)S.C.O.'s	=	5886.3	32 Sqn	1
	Occupancy @ 3m <sup>2</sup> / pers	son		=	1963	Persons
2	Shopping area on First f	loors		<u> </u>	5886.	32Sqm
	Occupancy @ 6 m <sup>2</sup> /pers	on		-	981 F	Persons
	Total occupancy	-		=		Person
	Water Requirement @ 10	% shopkeeper				
	=295 nos. @ 45 LPCD			=	13275	5 LPD
	Water Requirement @ 90 =2649 nos. @ 15 LPCD	% visitors		=	39-	
		Total				LPD(A)
B.	2 <sup>nd</sup> Floor &4rth Floor (C	Office Area)				
i)	Office Area (Remaining	area 25227.086 - 11772. 2X 5886	64)	=	13454	1.446 Sqm
	oddupanoy o rom / r			andrean Alberte	1346	Persons
	Water Requirement @ 9 @ 45 LPCD	0% official = 1212Persons		=	54540	חסו
	Water Requirement @ 10	0% visitors = 134 Nos		-	0-0-1	
	@ 15 LPCD			=	2010	
		Total			56550	)LPD(B)
C) I	For Public Utility Servic	es L.S.		=	10000	.00 LPD(C)
	ITC. STAFF + GUARD I sidering water requirement					
	+ Guard etc. L.S.	ant for fine. Stan		=	60 Pe	rsons
	Nater Requirement @ 45	5% LPCD				<u>LPD</u> (D)
	Fotal Water Requirement	(A+B+C+D)		=	1 22 2	60.00 LPD
	i otali viator i loqui officia					LD Say 130 KLD
II)	FIRE DEMAND					
	(i) For UGT i.e. Pop			= 4350	Person	S
		0 = (4.350) ½ x 100x1/3				
	(Considering 1,			= 69.52	KLD	
	Add. 15 % extra	for marginal factor		= 10.43		
			Total	= 79.95	KLD	Say 100.00 KLD

V.

(11)	Garden Irrigation Requirement (For Total Area)	= 30.00 KLD
IV.	Total Water Requirement (Excluding Fire Demand)	= 130.00 KLD
	Hence Domestic Water Requirement (67%) Hence Flushing Water Requirement (33%)	= 130 x 67% =87.00 KLD = 130 x 33% =43.00 KLD
	Day Requirement @ 60%	= 53.00 K.L. for Domestic Say 60.00 K.L. = 26.00 K.L. for Flushing Say 30.00 K.L.

4.15625 Acres commercial plotted colony in sec -14, Gurugram

But it is proposed to construct an underground tank capacity <u>60 K.L.</u> in two compartment for domestic use, 30 K.L. for non-potable water in two compartment (at STP) and 100 K.L. for fire fighting purposes for UGT in two compartment as shown location in the plan with UGT.

hoses for	our in two compartmen	it as shown location in tr	he plan with UGT.	
Total	Capacity of UGT	= 60 + 100	= 160.00 KLD	
Total	storage capacity of S.T.P	. ( 30 + 30 )	= 60.00 KLD	
Tube	Well		For UGT	
a)	Yield		= 15 K.L. / Hr.	
b)	Working Hour per day		= 16 Hr. / Per Day	
c)	Total water demand		= 80 M3/Day	
d)	Number of tube well re	quired	= 0.333	
	(Water Demand / Disch	arge / Hr. working		
	Per day)			
e)	Add 5% extra		= 0.016	
		Total	= 0.349 Nos	
		Say	= 1 Nos	
		-		

(Water to the proposed development is to be supplied by HSVP/GMDA. However, it is proposed to install only one no.tube wells for augmentation / standby purposes and provision has also been taken in the estimates due to non-availability of water but after getting the approval from competent authority..

I) P	umping Machinery for Tube wells		
a)	Gross Working Head		= 80 Mtr
b)	Average fall in S.L		= 2 Mtr
c)	Depression Head		= 6 Mtr
d)	Friction loss in main		= 10 Mtr
	Total		= <u>98 M</u> tr
e)	Discharge		= 15000 LPH (Or 4.17 LPS Say 4.50 LPS)
f)	Horse Power		
	HP = (4.50 x 98) / ( 75 x 0.60)		= 9.80 H.P.
		Say	= 10.00 H.P.
It is prope	osed to provide 1 No. pumping set of	4.50 LPS	S discharge at <u>98</u> Mtr head (1W)
II) Bo	osting Machinery for domestic wate	r For U	GT

Total Water Requirement	a = 88.00 KLD
Pumping per hour @ 8 hr. pumping / day	= 8 <mark>8</mark> /8 KL / hr.
	= 10.875KL / hr
	= 181.25 lpm = 3.02lps
	Say 4.00lps

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Gross working head	For UGT
Suction lift	= 7.00 mts.
<ul> <li>Frictional loss in mains &amp; specials</li> </ul>	= 6.00 mts.
<ul> <li>Clear Head required</li> </ul>	= 35.00 mts.
Total	= 48.00 mts.
Say	= <u>48.00 mts</u> .
Pump HP	$= (4.00 \times 48)/(75 \times 0.60)$
	= 4.26 H.P.

It is proposed to provide 2 No. of pumping set of 4.00 lps discharge at 48 mts Head each (1W + 1SB) for UGT

Say

= 5.00 HP

III)	Boosting Machinery for flushing water at STP		
	Total Water Requirement		= 43 K.L.D
	Pumping per hour @ 8 hr. pumping / day		= 43 /8 KL / hr.
			= 5.375 KL / hr.
			= 89.58 lpm = 1.49lps,
	¢	Say 1	No.2.00lps each
	Gross working head		
	- Suction lift		= 7.00 mts.
	<ul> <li>Frictional loss in mains &amp; specials</li> </ul>		= 6.00 mts.
	- Clear Head required		= 35.00 mts.
	Total		= 48.00 mts.
	Say		= 48.00 mts.
	Pump HP		$= (2.00 \times 48) / (75 \times 0.60)$
			= 2.13 HP
		Say	= 3.00 HP

It is proposed to provide 2 No. of pumping set of 2.00lps discharge at 48 mts Head each (1W + 1S)

#### IV) Boosting Machinery for Irrigation water

Total Water Requirement		= 30 KLD
Pumping per hour @ 5 hr. pumping / d	ау	= 30 /5 KL / hr.
		= 6.00 KL / hr.
		= 100.00 lpm = 1.67lps
	Say	= 2.00 LPS
Gross working head		
- Suction lift		= 3.00 mts.
- Frictional loss in mains & specials		= 3.00 mts.
- Clear Head required		= 25.00 mts.
Total		= 31.00 mts.
Say		= 31.00 mts.
Pump HP		= (2.00 x 31) / (75 x 0.60)

M/s SPJ Properties Pvt. Ltd.

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= 1.38 HP

Sav = 2.00 HP

It is proposed to provide 2 No. of pumping set of 2.00 lps discharge at 31 mts Head each (1W +15)

V) DG Set for pumping		
DG Set Requirement		
Submersible Pump (1 x 10)		= 10.00 HP
Domestic Pump (1 x 5.00)		= 5.00HP
For External Electrification		=15.00 HP
Total pump load		= 30.00 HP
	5	= 30.00 x 0.746 x 1.50
		= 33.57K.W
Total DG capacity		= 1 No. 40 KVA

Hence it is proposed to provide 1 No. D.G. Set of 40 KVA capacity at UGT For STP (DG set) = Flushing + Irrigation = 3+2+5 = 10 HP = 10 x 0.746x 1.50 = 11.19 KVA or 15 KVA

#### VI) FLOW TO SEWAGE TREATMENT PLANT

Total Water Requirement =87 KLD for domestic &43 KLD for flushing

- i) 80% of total Domestic Water Demand = 80% of 87 KLD = 69.60 KLD
- ii) 80% of total Flushing Water Demand =80% of 43 KLD = 34.40KLD

ADD caperity of Irigation Total Considering 5% marginal factor levent

G. Total

110

=104.00 KLD 20 KLD 2-e 10 = 109.20 KLD 109.20 **9** Say 110 KLD

110 / Proposed STP Capacity = 110KLD Or0.11 MLD

For SPJ PROPERTIES PVT. LTD.

Authoris

(Authorized Signatory)

FINAL	ABSTRACT	OF COST
1 11 49 440		

R. NO.	SUB WORK	DESCRIPTION	AMOUNT
			(Rs. In Lacs)
			10.9.00
1	SUB WORK NO.I	WATER SUPPLY SCHEME	-97.74-13
			54.34
2	SUB WORK NO. II	SEWERAGE SCHEME -87	-00 52.41
3	SUB WORK NO. III	STORM WATER DRAINAGE	62.00
-		Tenin Walth Diamage	241.22
4	SUB WORK NO. IV	ROAD NETWORK	1.50 189 47-
5	SUB WORK NO. V	STREET LIGHTING	-9.57   611
6	SUB WORK NO. VI	HORTICULTURE (PLANTATION & ROAD SIDE TREES)	4.01
-			221.45
7	SUB WORK NO. VII	MTC. OF SERVICES & RESURFACING OF ROADS	-205.38-
_		TOTAL	<u>8 35,18</u> 612.05
		IUTAL	012.03 ··
			70070

743.67 103 129.00 Cost Per Acre = Rs. 612.05 Lacs / 4.15625 = Rs. 147.26 Lacs Per Acre 1775 178.92/05 ACR -138-78

AUTHORISED SIGNAFORN PERTIES PVT. LTD.

Authorised Sign./Director

Executive Engineer HSVP Division No7 VI Gurugram 7

Superintending Engineer, HSVP Circle, Gurugram

Checked subject to Comments In forwarding letter No...... Dt...... and notes attached with estimate

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WATER SUPPLY

# O O U U U U

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#### SUB WORK NO. 1 (Abstract of cost)

SR. NO.	SUB WORK	DESCRIPTION	AMOUNT
	l		(Rs. in Lacs)
			36.10
1	Sub Head No. 01	Head Works	21.10 24
			17.50
2	Sub Head No. 02	Pumping Machinery	-11.60 147.
			24105
3	Sub Head No. 03	Rising Main from Plant Room	23.57-25
4	Sub Head No. 04	External Fire Hydrants	4.62
5	Sub Head No. 05	Irrigation	2.80
			85:31
		TOTAL	9 (63.69 71
		Add 3% contigencies & P.H. Services	1.91 2.4
		TOTAL	7.8 -65.60 7.34
		Add 49% Departmental Charges + Price escalation	3,0532.14 35
	a	TOTAL	97.745 108
		Say in Lacs 30	192-97.74-
			100.00

109.00

c.o. to Sinal assmall of ond

M/S SPJ Properties Pvt. Ltd.

#### SUB WORK NO. 1 Sub Head No. 01

#### WATER SUPPLY HEAD Works

Sr. NO.	Description	Amount in Rs.
	incl 100 bl cap for fire	960000/-
1	a) Construction of U.G. tanks and Fire TanK Including pipes, valve & Specials. i) UGT 160 KLD @ Rs. 4500/- per KLD	720000.00 8.80
	b) Construction of the LANCED COMPANY CONTRACT	360000
_	b) Construction of storage tank at STP = 60 KLD @ Rs. 4500/- per KLD	<del>-270000.00-</del>
2	Provision for construction of Boosting Station 1 Nos @ Rs. 250000/-each	250000.00
3	Boring and installing tube well reverse rotary rig complete with pipes and strainer to a depth of about 98 Mtr complete in all respect. 1 Nos @ Rs. 700000/- each only for desideing purpose with 15,00	700000.00 15.00/a
4	Provision for construction of tube well chamber size 1.50m x 1.50m complete in all respect. 1 Nos @ Rs. 100000/- each	100000.00
5	Provision for carriage of material and unforeseen items L.S.	20000.00
6	Provision of special for tube well and rising main to U.G.T. L.S. Pour for bounder well and energy due to Side 1 Pour for for both 2 Medit TOTAL	50000.00 2.00 (m 2.00 (m 2110000.00-
0	Say in Lacs	-21.10
	(C/O To Abstract of cost for Sub Work No.1)	5 36.106

SUB WORK NO. 1 Sub Head No. 02

#### WATER SUPPLY **Pumping Machinery**

Sr. NO.	Description	Amount in Rs.				
1	Providing and installing Hydro pneumatic pumping set of following capacities for domestic water Supply with specials	2.00 la				
	4.00 ips at 48 mts head - 2 No. (1W+1SB) - @ Rs. 80,000/- each Set (5.00HP)	160000.00-				
2	Providing and installing Hydro Pneumatic pumping set of following capacities for Flushing water supply	1.2.				
	2.00 lps at 48 mts head - 2 No. (1W+1SB) @ Rs. 50,000/- 1 Set (3.00 HP each)	100000.00				
3	Providing and installing Submersible pump for tube wells with specials					
	4.50 lps at 98 mts head - 1 Nos (1W) @ Rs. 1,00,000/- 1 Set (10HP each)	200000.00				
4	Providing and installing Hydro Penumatic pumping set of following capacities for irrigation drainage					
	2.00 - lps at 31 mts head 2 Nos (1W + 1SB) @ Rs. 15,000/- (2.0 HP )	30000.00				
5	Provision for D.G. Set for stand by arrangement for all machinery (40+15) = 1 No. 25 KVA @ Rs. 10,000/-per kVA	550000.00 6 w la				
6	Provision for making foundations & erection of pumping machinery	50000.00				
7	Provision for pipes, valve & specials inside boosting chamber	10000.00				
8	Provision for electric services connection including electric fittings for boosting chambers and pump chamber etc.					
9	Provision for carriage of materials and other unforeseen items L.S.	20000.00				
	TOTAL 1410000/	-1160000.00				
	Say in Lacs	11.60-				

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SUB WORK NO. 1 Sub Head No. 03

WATER SUPPLY Rising main upto Plant Room, Domestic & Flushing Water Supply

Sr. NO.	Description	Amount in Rs.
1	Providing, laying, jointing & testing pipe lines including cost of excavation etc. complete in all respects (Dom. & Fluming water line	17.81
i)	100mm dia D.I. Pipe 1219 Mtr @ Rs. 1460/- Per Mtr	-1779740.00
ii)	150mm i/d D.I. Pipes 🛛 🗞 Mtr @ Rs. 2040/- Per Mtr	16320.00
2	Providing and fixing sluice valve including cost of surface box and masonry chamber etc. complete in all respect	auto
	i) 100mm i/d 10 No. @ Rs. 11000/- each ii) 150mm i/d 2 No. @ Rs. 1 <b>5</b> 000/- each	<del>110000.00</del>
	1/130/min //d 2 No. @ Rs. 15000/- each 3000	D <del>26000.00~</del>
3	Providing and fixing indicating plates for sluice valve 12 No. @ Rs. 2000/-	\$4000.00
4	Provision for carriage of materials and other unforeseen items	-50000.00-
5	Provision for making connection with Govt. Pipe etc.	2. 100 \$00000.00
6	Provision for cutting the road and making good the same	1 \$0000.00
7.	Pour and diving air value and scours	1.00
	manny chamber Say in Lacs	2356060.00
	(C/O To Abstract of cost for Sub Work No.1)	23.57- 25.10 2.4.05

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SUB WORK NO. 1 Sub Head No. 04 WATER SUPPLY Fire Rising Main

13

Sr. NO.	Description	Amount in Rs.				
1	Providing, Laying, jointing and testing Heavy Class M.S. Pipes for fire rising main including cost of fittings, valves, connection etc. complete in all respect					
a)	100mm dia - 96M @ Rs. 1460/- Per Mtr	140160.00				
2	Providing and fixing fire Hydrant with accessories 16 No. @ Rs. 15000/- each	240000.00				
3	Provision for carriage of materials (Lump sum)	25000.00				
4	Providing and fixing indicating plate -16 No. @ Rs. 2000/- each	32000.00				
5	Provision of road cutting and making its condition as original - L.S.	25000.00				
	TOTAL	462160.00				
	Say in Lacs	4.62				

(C/O To Abstract of cost for Sub Work No.1)

SUB WORK NO. 1 Sub Head No. 05

WATER SUPPLY Irrigation

14

Sr. NO.	Description	Amount in Rs.
1	Providing, Laying, jointing and testing UPVC pipe lines suitable for 6 kg pressure including cost of fittings, valves, connection etc. complete in all respect	0.54/0
	i) 25mm i/d 180 M @ Rs. 300/- Per Mtr	_90000.00
2	Providing and fixing 20mm dia, Irrigation hydrant valve complete in all respect 30 No. @ Rs. \$000/- each	-90000.00 Ja
2	Provision for indicating plates with boxes etc.	
	30 Nos. @ R.s 2000/- Each	60000.00
3	Provision for carriage of materials and other unforeseen items (Lump sum)	20000.00
4	Provision for road cutting and making as original condition L.S.	20000.00
		3.04 la
	TOTAL	-280000.00
	Say in Lacs	2.80

(C/O To Abstract of cost for Sub Work No.1)

54.34

SUB WORK NO. II

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#### SEWERAGE SCHEME

Sr. NO.	Description	Amount in Rs.	
1	Providing, jointing, cutting and testing stoneware pipe grade A and lowering into trenches including cost of excavation, bed concrete, cost of manholes etc.		
	complete -2270/- 1700/	354120/-	
	a) SW Pipe 200mm i/d avg. depths 0 - 2.00M 156 M @ Rs1700/- per Mtr	265200.00 2	165
	b) SW Pipe 250mm i/d avg depth 2.00 M 229 M @ Rs. 2000/-per Mtr-2557/-	458000.00-59	4.69
	c) SW Pipe 300mm i/d avg depth 3.00 M M @ Rs. 2400/- per Mtr 2.700/ -	-9600.00   ••	8001
2	Providing, laying, jointing & testing pipe lines including cost of excavation etc.	3500	ſ ſ
	complete in all respect - 150mm dia Heavy Class DI pipes (overfow for STP)		
	a) 150MM i/d D.I. Pipe - 290 M @ Rs. 2040/- Per Mtr	591600.00	
3	Provision of lighting and watching etc.	50000.00	
		2,00	
4	Provision for cartage of material & cutting of roads etc.	-50000.00-	
	Seture 1 a	2100 as	
5	Provision for making connection with Govt. sewer line con master load	<b>30</b> 0000.00	
6	Provision for STP 110 KLD (Tertiary Treatment Level with recycling storage).	1760000.00	F.bt
	Complete in all respect. @ Rs. 16,000/- per KLD	3750000/-	
	TOTAL 66 70470/	3414400.00	35.1
	Add 3% contigencies & P.H. Services	102432	1.06
	TOTAL S840584	- 3516832 -	1 0-0
	Add 49% Departmental Charges + Price escalation	1723248 24	618
	TOTAL		36.4
	Say in Lacs	- <del>52.41</del> -	17.8
	(C/O to Final Abstract of cost)	87.00	ans

#### SUB WORK NO. III

STORM WATER SCHEME

Sr. NO.	Description	Amount in Rs.
.1	Providing, lowering, laying, jointing RCC pipe class Np3 with cement joint, manholes, specials into trenches including manholes, chambers etc. excavation, backfilling and disposal of surplus earth complete in all respect	
	a) RCC Np3 pipe 400mm i/d = 616 M @ Rs. 2500/- Per Mtr	1817200/
	2/ 100 100 ppc 4001111 / 4 = 010 M @ KS. 2500/- Per Mtr	1540000.00
2	F	15:40 10
	Provision for road gulley & with pipe connection L.S.	-350000.00
2		2120 In
3	Provision for lighting and watching L.S.	\$0000.00
_		
4	Provision for timbering and shoring L.S.	20000.00
		21.00
5	Provision for cartage of material L.S.	-50000.00
6	Provision for making connection with Govt. storm water drain L.S.	
7	Providing rain water harvesting arrangement for 05 No. pits @ Rs. 250000/- each	17:50 1250000.00- 2250000
	TOTAL 49672 00	3490000.00
	Add 3% contigencies & P.H. Services   4 9016/	104700.00
-	TOTAL SIL 62161	3594700.00-
	Add 49% Departmental Charges + Price escalation	1761403.00 2
	TOTAL 7623162/-	-5356103.00
	Say in Lacs	-53.57
	(C/O to Final Abstract of cost)	-5356103.00 -53.37 -76-25

M/S SPJ Properties Pvt. Ltd.

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#### Sub Work No. 4

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#### **ROAD WORKS**

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (in Rs.)	
1	Provision for leveling & earth filling as per site conditions	Per Acre	4.15625	100000 175000	727 34	14/.
2	<ul> <li>i) Providing and laying 100mm thick PCC under pavement, cement concrete of specified grade 1:4:8 and 150mm thick RMC grade M-40</li> <li>ii) Providing and laying Bituminous road (250mm GSB, 300mm WMM, 50mm DBM, 30mm BC).</li> </ul>	Sqm	8080	1 200-	12120 -9696000	800
3	Provision for kerbs & channels of C.C. 1.2:4	Metre	1400	600	840000	
4	Provision for making approach and pavement to building, provision for C.C pavement	Sqm	L.S.		150000	
5	Interlocking tile 80mm thick for surface of pavement etc.	Sqm	1430	<b>18</b> 00	14,36	ĺ
6	Provision for parking arrangement, guide map and indicating board etc.	LS			1 50000	
7	Provision for carriage of material	LS			00000	
8	Pour for Trame light On		1	(LS)	1,00	
	Sub Total			15081344		155
	Add 3% contingencies & PH Services			452440/	- 370369-	150
	Sub Total			15533789/	1 12715994	9.1
	Add 49% Departmental Charges , Curre	leun		1645541	ALL PROPERTY AND A DESCRIPTION OF	161
	mile esceleminital A	dum				79.
	Say Rs. In Lacs				-189.47 -	
					12100	24

18

#### Sub Work No. 5

#### **STREET LIGHTING**

S. No:	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)
1	Providing lighting at surrounding area s per standard specifications of HVPN	Acre	4.1563	450000 2 50000	- <del>623437.5</del> 1639 •75
	Add 3% contingencies & PH Services				<del>18703 -</del> 3117 2/-
	Total				- <del>642141-</del> 1076247/
	Add 49% Departmental Charges, proce	esce	lapon	e	314649 524421
	Total				<u>956790-</u> 1 S 9 4 6 6 8/
	Say Rs. In Lacs				9.57 16.00

Sub Work No. 6

#### HORTICULTURE

S. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)	
			1-	(III No.)	(11173.)	
1	Development of Lawn Areas					
a.	Trenching of ordinary soil upto depth of 60					
	cm i/c removal & stacking of serviceable			1		
	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					
с	Grassing with "Cynadon dactylon" i/c					
	watering and maintenance of lawns for 30					
	days till the grass forms a thick lawn, free					
	from weeds and fit for moving in row 7.5 cm		1			
	part in eighter direction					
d	organized green 1200 Sqm (Appx)Or 0.30					
	Acres (Considering for part area L.S.)	Acre	0.3	150000	45000	
2	Providing and planting trees along boundary					
	@12 m interval (Length appx 1400M) =					
	1400/12 = 119 Nos 1/6.66					
	Say No. of trees = 120 Nos					
	Cost details : Excavation = Rs. 100					
	Manure = Rs. 100					
	Tree Plant = Rs. 100					
	Tree Guard = Rs. 1500					
	Total = Rs. 1800					
		Each	120	1800	216000	
	Sub Total				261000	
	Add 3% contingencies & PH Services				7830	
	Sub Total				<b>268830</b> 131727	
	Add 49% Departmental Charges					
	Total				400557	
	Say Rs. In Lacs				4.01	

#### Sub Work No. 7

#### Mtc. Of services & Resurfacing of Road

5. No.	Description	Unit	Qty	Rate (In Rs.)	Amount (In Rs.)	
1	Mtc. Of water supply, sewer, storm water drain, roads, street light, hort. Etc. for period of 10 years including operation charges full establishment etc. complete in all respects 4.15625 acres @ Rs. 5.00 lacs per acre	Acre	4.1563	-500000 	-2078125 -33,25 -311722	=/-
2	Provision for resurfacing of roads after 5 years of 1st phase with provision of 50mm thiCK DBM including leveling coarse and 30mm BC as per crust design whichever is safer	Sqm	8080	-600 660	4848000- 53:33	las
3	2nd phase after next five years of 2nd phase (50mm DBM & 30mm BC or as per crust design whichever is safer	Sqm	8080	-800- 8.95	-6464000 66-66	las
	Sub Total		14	429225/	13390125	153.2
	Add 3% contingencies & PH Services			4328771-	- 401704	4.60
	Sub Total		b	+4866212	/	-
	Add 49% Departmental Charges , WWW	selle		728243	6757996	127.8
	Say Rs. In Lacs	feline	š 5	2214452	20549825- -205.38-	77.3
	Jay NS. III Lacs	1			221-45	235.

SUMMARY	OF	DESIGN	REQUIREMENT
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S. No.	Description	Qty	Unit
1	Total Population	4350	Persons
2	Total Water Requirement (Domestic)	87	KLD
3	Total Water Requirement (Flushing)	43	KLD
4	Total Water Requirement (Horticulture)	30	KLD
5	U. G Tank (Domestic + Fire) 60+ 100 KL = 160 KL	1	No.
6	No. of Domestic WS pumps UGT	1+1	Set
7	No. of Flushing pumps	.1+1	Set
8	No. of submersible pumps	1	No.
9	Generating sets (40 KVA + 15 KVA = 55 KVA )	1	55 KVA
10	S.T.P. (110 KLD)	1	No.

TOTAL MATERIAL STATEMENT FOR WATER SUPPLY i.e. DOMESTIC, FLUSHING & RISING MAIN ETC.

S. No.	Description	Size of pipe upto valve in 100mm	Size of pipe upto valve in 150mm	Size of pipe upto valve in 200mm
1	Domestic	466 M	5 M	-
2	Flushing	458 M	3 M	-
3	Rising Main	295 M	•	
	Total	1219 M	8 M	

Say 1220m 10mh

# MATERIAL STATEMENT OF WATER SUPPLY SCHEME (DOMESTIC)

23

S. No.	Line Des	ignation	Size of Pipe Provided	Length of Pipe (Mtr)	L	ength in M	ltr
	From	То			100MM	150MM	200MM
1	UGT	A	150	5		5	-
2	A	В	100	105	105		-
3	B	С	100	128	128		_
4.	A	A1	100	128	128		_
5	A1	C	100	105	105		
	Total			471	466	5	<u> </u>

Total for 100mm i/d D.I. Pipe Length Total for 150mm i/d D.I. Pipe Length Total

466 Mtr 5 Mtr 466 Mtr

# MATERIAL STATEMENT OF WATER SUPPLY SCHEME (FLUSHING )

S. No.		ignation	Size of Pipe Provided	Length of Pipe (Mtr)	L	ength in N	ltr
	From	To			100MM	150MM	200MN
1	STP	a	150	3		3	20014114
2	9	b	100	101	101		
3	b	с	100	128	128		
4	а	a1	100	128	128		
5	a1	С	100	101	101		
	Total			461	458	3	0

Total for 100mm i/d Pipe Length Total for 150mm i/d Pipe Length Total

458 Mtr 3 Mtr = 461 Mtr

# MATERIAL STATEMENT FOR BOREWELL RISING MAINS AND Govt. MAIN

S. No.	Name	of Line	Size of Pipe Provided	Length of Pipe (Mtr)	Length	in Mtr
	From	То			150mm	100mm
1	T.W.	UGT	100	15	0	15
2	Govt. Line	UGT	100	280	0	280
	Total			295	0	295

# H.

### MATERIAL STATEMENT FOR SEWERAGE SCHEME

S. No.	Lir	ne No.	Length (In Mtr)	Pipe Dia		Length in Mt	ľ
					200mm i/d	250mm i/d	300mm i.d
	From	То					
1	A	В	88	200	88	_	_
2	В	С	102	250		102	-
3	C2	C1	68	200	68		
4	C1	С	127	200		127	
5	C	S.T.P.	4	300	0		4
6	STP	Govt line	(BY Pumping ) 150m	m i/d D.I. PIPI		-	
	Total		389		156	229	4

200mm i/d Pipe Length 250mm i/d Pipe Length 300mm i/d Pipe Length 150mm i/d D.I. PIPE (BY PLUMBING) =

156 Mtr 230m 229 Mtr

4 Mtr 290 Mtr

## MATERIAL STATEMENT OF STORM WATER DRAINAGE SCHEME

Sr. No.	Line R	eference	400mm i/d RC Np3 Pipe
	From	То	Length in Mtr
1	A	B	102
2	В	С	135
3	C3	C2	105
4	C2	C1	72
5	C5	C4	50
6	C6	C4	36
7	C4	C1	27
8	C1	С	29
9	С	Govt. S.W.D.	60
	Total Length		616

Total Length 400mm i/d RCC Np3 pipe = 616 Mtr TOTAL RAIN WATER HARVESTING (RWH)= 5 No.

Material	Statement	of Road	Works

i <b>) 6.00 Mtr wide Road</b> a) Road / Parking				
a) Road No1=120.00 x 6.00 M =			700.00	~
b) Road No2 = 110.0 x 6.00 M =				Sqm.
c) Road No. $-3 = 120.0 \times 6.00$ M =				Sqm.
d) Road No. $-4 = 108.0 \times 6.00$ M =			720.00	
e) Road No5 = 48.0 x 6.00 M =			648.00	-
f) Road No. $-6 = 48.0 \times 6.00$ M =			288.00	•
b) Parking Area			288.00	sqm.
a) Parking Noi = 72.0 x 48.00 M =			3456.00	Com
b) Parking Noii = 30.0 x 24.00 M =			720.00	
b) Parking Noiii = 23.00 8.00 M =			18%00	-
Total			7684.00	Sqm.
Add. 5% extra for Curves			384.20	Sqm.
Total			8068.200	
		Say	8080.00	Sqm.
ii) Kerbs & Channels		51.00		
a) 6.00 m wide road = 2 X 554 m =			1108.00	Sam.
b) Parking = 72.0 + 48.0 + 64.20 + 40.	.0 =		224.20	-
Total			1332.20	Sqm.
Add. 5% extra for Curves			66.61	Sqm.
Total			1398.81	Sqm.
		Say	1400.00	Sqm.
iii) Pavement :-				
i) Pavement - (a ) = 68.00 x 3.0 M =		204.00	Sqm.	
ii) Pavement - (b ) = 48.00 x 3.0 M =		144.00	Sqm.	
iii) Pavement - (c ) = 78.00 x 3.0 M =		234.00	Sqm.	
iv) Pavement - (d ) = 40.00 x 3.0 M =		120.00		
v) Pavement - (e ) = 21.60 x 6.0 M =		129.60		
vi) Pavement - (f ) = 20.50 x 6.0 M =		123.00		
vii) open surface parking =L.S.		400.00		
Totai		1354.60	Sqm.	
Add. 5% extra for Curves		67.73	Sqm.	
Total		1422.33	Sqm.	
Sa	äγ	1430.00	Sqm.	

## MATERIAL STATEMENT FOR EXTERNAL FIRE FIGHTING

Total length of water supply line ( Domestic ) = 471 M Fire hydrant Considering @ 30M c/c each ( 471/30 ) = 16 Nos. For 100mm dia with Fire Hydrant = 16 Nos For 100mm dia pipe = 16 x 6.00 = 96.00 Mtr

0

SUBHEAD : IRRIGATION WATER SUPPLY SCHEME - DESIGN CALCULATION (HORTICULTURE)

HYDRAULIC STATEMENT OF IRRIGATION WATER SUPPLY

Formation Available Level head (M)		F			
		ı			
Loss of Head in Line (M)	1. 1	)a			
Length (M)		180			
Total Friction Loss in	m/m	æ			
<b>Hydraulic</b> Radius		r			
Size of the Size of the Hydraulic pipe Pipe Radius required Recommen	d (mm)	C7			
Size of the pipe required	25 00	00.24			
Velocity (m/s)	1				
Peak Flow in LPH	e				
Population Peak Flow Velocity in LPH (m/s)	30000				
Line Reference	From	Flushing	Water	Supply	line
S. No.					

30 Nos connections are to be done from flushing water supply line i.e. 30 Nos x 6 Mtr/each = 180 Mtr for 25mm i/d Note :-

SUBHEAD : DOMESTIC WATED STIDNAY CONTRACT STORE	THE ACTION AND THE ACTION ACTION ACTION ACTION ACTION ACTION	T OF WATER SI (DB) V SCHENNE (SOLATION)
		IT URAULIC STATEMENT OF WATER SLID

Requirement in LPH         In LPH         (m/s)         pipe         Pipe         Frecommend         mean of the monol         requision         Available         Available         Available         Available           4354 $8'080$ $32655$ $0.29$ $100$ $150$ $0.001$ $5$ $0.01$ $22025$ $268.29$ 4354 $8'080$ $32655$ $0.29$ $100$ $150$ $0.001$ $5$ $0.01$ $22025$ $268.29$ 2408 $48160$ $18060$ $0.39$ $100$ $0.001$ $128$ $0.33$ $2201.0$ $267.99$ $1946$ $38920$ $14594$ $0.39$ $100$ $0.001$ $128$ $0.38$ $2201.0$ $267.90$ $943$ $18860$ $70725$ $0.20$ $80$ $100$ $0.001$ $105$ $0.11$ $219.90$ $267.90$ $943$ $18860$ $70725$ $0.20$ $80$ $100$ $0.001$ $105$ $0.11$ $219.90$ $267.90$ $943$	_		Population		Peak Flow Velocity Size of the	Velocity	Size of the	Size of the	Total	Beneth (AA)	1 Acc al	L		
4354 $87080$ $32655$ $0.29$ $100$ $150$ $0.01$ $5$ $0.01$ $22025$ $268.29$ 2408 $48160$ $18060$ $0.39$ $100$ $100$ $100$ $100$ $2012$ $261.30$ $267.31$ $944$ $19800$ $7455$ $0.2$ $80$ $100$ $0.001$ $128$ $0.32$ $2010$ $267.91$ $944$ $38920$ $14554$ $0.3$ $100$ $100$ $100$ $128$ $0.36$ $270.92$ $267.84$ $943$ $18860$ $7072$ $0.20$ $80$ $100$ $100$ $100$ $213$ $2703$ $267.84$ $943$ $18860$ $7072$ $0.20$ $80$ $1000$ $1001$ $105$ $2700$ $267.84$ $943$ $18860$ $7072$ $0.20$ $80$ $1000$ $1001$ $100$ $213.90$ $267.84$ $941$ $18860$ $7072$ $802$ $8$		Kererence		Requirement in LPD (As per 20.0 LPCD)	in LPH	(m/s)	pipe required (m)	Pipe Recommend (mm)	Friction Loss in M/M	(m) ingram	Head in Line (M)	Formation Level (L/E)	Available head (M) (L/E)	Remarks
2408 $48160$ $18060$ $0.39$ $100$ $100$ $0.03$ $105$ $0.2.25$ $2.87.9$ $934$ $19800$ $7455$ $0.2$ $80$ $100$ $0.001$ $128$ $0.32$ $220.10$ $267.94$ $1946$ $38920$ $14534$ $0.39$ $100$ $0.001$ $128$ $0.13$ $219.90$ $267.84$ $943$ $13860$ $707.5$ $0.20$ $80$ $100$ $0.001$ $128$ $0.38$ $220.05$ $267.91$ $943$ $18860$ $707.5$ $0.20$ $80$ $100$ $0.001$ $128$ $0.38$ $220.05$ $267.80$ $943$ $18860$ $707.5$ $0.20$ $80$ $100$ $0.001$ $128$ $0.38$ $220.05$ $267.80$ $943$ $18860$ $707.5$ $80.11$ $100$ $0.011$ $128$ $0.316$ $279.05$ $267.80$ $100$ $18860$ $707$ $80.16$ <	_	UGT -A	4354	87080	32655	0.29	100	150	0.001	ď	100			
994         1980         7455         0.2         80         100         0.01         128         0.13         220.10         267.97           1946         38920         14594         0.39         100         100         0001         128         0.13         219.90         267.84           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         7075         8.0         100         0.001         105         0.11         219.90         267.80           943         1         105         105         105         105         105         105         105         105	_	A-8	2408	48160	18060	0.39	100	100	CUO O		10.0	\$7.032	268.29	Finish Ground level of UGT i.e. at
1346         38920         14594         0.2         80         100         0.001         128         0.13         219.90         267.84           943         18860         7072.5         0.20         80         100         0.003         128         0.38         20.05         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.38         230.05         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         7072.5         0.20         80         100         0.001         105         0.11         219.90         267.80           943         18860         707         100         100         0.001         105         105         106         106         106         106         106         106         106         106         106         106         106         106         106	-	B-C	766	10890	1411			-	con.n	SUL	0.32	220.10	267.97	water works F.S.L. = 220.30
1946         38920         14594         0.39         100         100         0.003         128         0.38         220.05         267.91           943         18860         707.5         0.20         80         100         0.001         105         0.31         219.90         267.80           943         18860         707.5         0.20         80         100         0.001         105         0.11         219.90         267.80           1         1         1         1         1         1         1         219.90         267.80           1         1         1         1         1         1         1         1         1         1           1 <td>1</td> <td></td> <td></td> <td>DODET</td> <td>/455</td> <td>0.2</td> <td>80</td> <td>100</td> <td>0.001</td> <td>128</td> <td>0.13</td> <td>219.90</td> <td>267 84</td> <td>Rooting Lond - AB Down</td>	1			DODET	/455	0.2	80	100	0.001	128	0.13	219.90	267 84	Rooting Lond - AB Down
943         18860         7072.5         0.20         80         100         0.01         105         0.11         219.90         267.80           1	- I.	A-A1	1946	38920	14594	0.39	100	100	0.003	128	0.38	330.05		
0.11     219.90     267.80       105     0.11     219.90     267.80       105     105     105     101       105     105     105     105	-	A1-C	943	18860	7072 5	0.00	00	005			0000	CU.U22	I6./02	Haudraulic head = 268.30 Mtr at
	-					0.40	00	DOT	0.001	105	0.11	219.90	267.80	water works
											Ī			
							-							
											T			

SUB HEAD : FLUSHING WATER SUPPLY SCHEME - DESIGN CALCULATION

HYDRAULIC STATEMENT OF WATER SUPPLY (FLUSHING)

Remarks		14		Hinishing G.L. at STP = 220.30	ad = 48.00	Flushing Hydraulic head at		= 268.30 M								
2				FINIShing G.L	Boosting Head	Flushing Hv	0	STP								
Available head (M)		13	00 030	67.802	268.09	267.96		268.04	267.94							
Formatio		12	320.25	C7°077	220.10	219.90	300 OF	GN'N77	219.90							T
Loss of head in line (M)		11	0.01	7010	0.2	0.13	0.75	1.1	0.1							T
Length in Mtr		10	m	100	TOT	128	178		101							T
Total friction loss in (m/m)		თ	0.001	0000	700.0	0.001	0.002		0.001							T
Size of pipe recomm ended		~	150	100		100	100		DOT			T				
Size of pipe required (in recomm M)	8	1	100	80		08	80	d	00							
Velocity (m/sec)	ų		0.29	0.27	000	n'zn	0.27	000	0.50							
Peak flow in LPH	L		1014/	8930	2020	none	7216	3497								
Totał water requirement in LPD (as per 9.89 LPCD)	4	12061	TOOPL	23815	9831		19246	9326								
Population	m	4354		2408	994	1040	946T	943								
Line Reference	2	STP -a		a - b	b-c	6 1 6	T O D	a1-c								
S. No.	-	€	T	~	m	4	·	S		t					+	-

# SEWERAGE SCHEME - DESIGN CALCULATION

# DESIGN STATEMENT OF SEWERAGE SCHEME

$\mu$ <th>Node</th> <th></th> <th>discharge as per 29.89 LPCD (IN LPD)</th> <th>Sew. Quantity after evaporation losses (20%</th> <th>Sewerage Discharge peak at 3 times</th> <th>pipe</th> <th>Gradient</th> <th>Velocity m/sec</th> <th>Carrying Cap. Of pipe (In LPS)</th> <th>Length in Mtr</th> <th>Fall + Extra Fall</th> <th>Ground level</th> <th>eve</th> <th>Formation level</th> <th>on level</th> <th>invert</th> <th>invert Level</th> <th></th> <th>T.</th> <th>Depth of M.H</th>	Node		discharge as per 29.89 LPCD (IN LPD)	Sew. Quantity after evaporation losses (20%	Sewerage Discharge peak at 3 times	pipe	Gradient	Velocity m/sec	Carrying Cap. Of pipe (In LPS)	Length in Mtr	Fall + Extra Fall	Ground level	eve	Formation level	on level	invert	invert Level		T.	Depth of M.H
3         4         5         6         7         8         9         10         5tat         End         5tat </th <th></th> <th></th> <th>LPD</th> <th>СРD</th> <th>m3/sec</th> <th>mm</th> <th>mtr</th> <th>milean</th> <th>1.1</th> <th></th>			LPD	СРD	m3/sec	mm	mtr	milean	1.1											
994         29711         2376         0.003         200         225         0.76         0.012         88         0.33         19.35         16         17         18           2408         71375         57580         0.0019         250         305         0.76         0.012         88         0.33         219.35         219.36         20.10         218.46         18	2	m	4	4	e	,		hac/m	m3/sec		W	Start	End	Start	End	Start	End	Chart		End
344         2971         23768         0.0003         200         225         0.76         0.012         88         0.39         219.50         219.50         220.10         218.50         218.51           2408         71375         57580         0.0019         250         305         0.76         0.019         102         0.33         219.55         219.50         220.10         218.59         218.48         218.64         218.64         218.64         218.64         218.64         218.64         218.64         218.64         218.64         218		100		ľ	0		80	თ	10	11	32	13	1a	15	10			1 10002		E10
2408         71975         57580         0.0019         250         305         0.76         0.019         102         103.5         219.90         219.90         219.90         219.90         219.90         219.90         219.90         218.90         218.48         218.48         218.48         218.48         218.48         218.45         218.48         218.45         218.46         218.46         218.46         218.46         218.46         218.46         218.46         218.46		124	11/67	23768	0.0008	200	225	0.76	0.012	88	+	-	+	_	9		.18	19		20
943         28186         27548         0.0007         250         305         0.76         0.019         163         0.2025         218.48         218.48         218.45           1946         58166         4532         0.0007         200         225         0.76         0.012         68         0.3         219.55         220.05         218.85         218.55         218.45         218.55           1946         58166         4532         0.0016         250         305         0.76         0.019         127         0.8         219.55         210.05         218.45         218.55         218.55           4354         130141         104112         0.0036         300         385         0.76         0.017         4         0.01         220.05         220.05         218.52         218.67           4354         130141         104112         0.0036         300         385         0.76         0.017         4         0.01         220.05         220.05         218.07         218.07           2455         218.10         220.05         220.05         220.05         220.05         220.05         218.07         218.07         218.07         218.07         218.07         218.07 </td <td>B-C</td> <td>2408</td> <td>71975</td> <td>ETEON</td> <td>0,000</td> <td></td> <td></td> <td></td> <td></td> <td>}</td> <td>-</td> <td>_</td> <td>-</td> <td>_</td> <td>220.10</td> <td>218.90</td> <td>218.51</td> <td>1.00</td> <td></td> <td>1.59</td>	B-C	2408	71975	ETEON	0,000					}	-	_	-	_	220.10	218.90	218.51	1.00		1.59
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150mm (d D.1. Pipe (BY PumPing)     300     385     0.76     0.027     4     0.01     220.05     220.30     218.07     218.07       150mm (d D.1. Pipe (BY PuMPing)	- STP	4354	130141	10441							-		_	_	220.25	218.52	218.10	1.53		2.15
150mm i/d D.I. PiPE (BY PUMPING)     290     1     220.00     219.30     218.07     218.05       290     1     220.00     219.30     219.60     218.30     217.30			TLANC	777407	0.0036	300	385	0.76	0.027	4	t	+-		-+-	1		218.07			
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05./12 00-01-2	wer line			150mm ij	/d D.I. PIPE (	BY PUMPi	( 9N			290	_		_	-	219.60	019 30	40 P F C			
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DESIGN CALCULATION OF STORM WATER DRAINAGE SCHEME INTENCITY OF RAIN FALL = 0.006 MITR /HR

:NCITY OF RAIN FALL = 0.006 MTR /HR IMPERMEABILITY FACTOR = 0.6

No.	Node	(Self)	(Self)	Area Area	Area	Area	*2+		5	dia dia	ed of o	Velocity	Gep. drain	Fall + Extra Fall	Ground Level	d Level	Formation Level	n Level	invert Level	Level	Depth of ' M.H's		Average Depth	Remarks
		SQM	In Acre	In Acre	ân	lin Hactor	mm / hr.		in Mtr	in mm	In Mtr	IN m/sec	SdT NI	IN ME	Start	End	Start	End	Start	End	Start	End		
त्त्व	2	M	4	5	6	-	e	a	01	11											-			
-	A - R	JEED	0.02		0		5.71	10.0		=	77	13	14	15	16	17	18	5	20	21	22	23	24	25
+		2007	60.0	>	0.03	0.26	6:00	4.51	102	400	570	0.76	98.57	0.18	220.05	219.85	220:25	220.10	219.05	218.87		-	1	RWH - 1
		3375	0.83	0.63	1.46	0.59	po-s	20:24	135	400	570	0.76	98.57	0.24	219.85	219.50	220.10	219.90	218.87	218.63	+	+	-	C - HIVIA
m	C3-C2	3570	0.88	0	0.88	0.36	6.00	6.25	105	400	570	0.76	98.57	0.18	220.00	220.00	220.30	-	719.10	00010	-	+	-	7
4	C2 - C1	1800	0.44	0.88	1.32	0.53	16-60	929	72	400	570	0.76	98.57	0.13	220.00	210 55	320.05	_	14.00	76.012	+	-		
ۍ ا	C5 - C4	1650	0.41	0	0.41	0.17	6:00	262	50	400	570	0.76	98 57		00.000	00 010	CD.022	-	76'917	218./9	-	-	-	RWH - 3
_	C6 - C4	1080	0.27	0	0.27	0.11	- AL	190	36	400	670	32.0				DELET'S			719.10	10,012	1.00	0.99	1.00	
-	C4 - C1	560	014	0.62	0 0	0.00	12 64				2		10.00	000	CK.KT.2	06'617	220.10	220.00	219.10	219.04	1.00 (	0.96 0	0.98	
+				00.0	70'0	0.33		A.GC	27	400	570	0.76	98.57	0.05	219.90	219.55	220.00	219.85	219.01	218.96	0.99	0.89	0.94 8	RWH - 4
-	 	725	0.18	2.14	2.32	0.94	18-14	Heat.	29	400	570	0.76	98 57	0.05	71055	210 50	-	-	1		+	+	+	
Ś	C - Govt. S.W.D. line	1500	0.37	3.18	3.55	1.68	E	<del>20.10</del>	60	400	570	0.76	98.57		-		00 010	210.50		218.74		_		
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#### FORM LC -V (See Rule 12) HARYANA GOVERNMENT TOWN AND COUNTRY PLANNING DEPARTMENT

#### Licence No. 125 of 2023

and the second second

This Licence has been granted under the Haryana Development and Regulation of Urban Areas Act, 1975 & the Rule 1976, made there under to SPJ Properties Pvt. Ltd., A-11, Pitampura, New Delhi-110034 for setting up Commercial Plotted Colony over an area measuring 4.15625 acres in the revenue estate of village Gurugram, Sector-14, District Gurugram Manesar Urban Complex.

- The particulars of the land, wherein the aforesaid Commercial Plotted Colony is to be set up, are given in the Schedule annexed hereto and duly signed by the Director General, Town & Country Planning, Haryana.
- 2. The Licence is granted subject to the following conditions: -
  - That the licencee will pay the Infrastructure Development Charges amounting to Rs. 2,52,30,516/- in two equal instalments. First Instalment will be due within 60 days of grant of license and second Instalment within six months of grant of license failing which 18% PA interest will be liable for the delayed period.
  - ii. That area coming under the sector roads and restricted belt / green belt, if any, which forms part of licensed area and in lieu of which benefit to the extent permissible as per policy towards FAR is being granted, shall be transferred free of cost to the Govt.
  - iii. That the licencee shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.



That the licencee shall construct portion of service road, internal circulation roads, forming the part of site area at your own cost and shall transfer the land falling within alignment of same free of cost to the Govt. u/s 3(3)(a)(iii) of the Harvana Development and Regulation of Urban Areas Act, 1975.

- That the licencee shall be fiable to pay the actual rates of External Development.
   Charges as and when determined and demanded as per prescribed schedule by the DGTCP Haryana.
- vi. That the licencee shall integrate the services with Haryana Shehari Vikas. Pradhikaran services as and when made available.
- vii. That the licencee have not submitted any other application for grant of license for development of the said land or part thereof for any purpose under the

provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Scheduled Roads and Controlled Area Restrictions of Unregulated Development Act, 1963.

- viii. That the licencee have understood that the development /construction cost of 24 m/18 m major internal roads is not included in the EDC rates and applicant company shall pay the proportionate cost for acquisition of land, if any, alongwith the construction cost of 24 m/18 m wide major internal roads as and when finalized and demanded by the Department.
- ix. That the licencee shall obtain NOC/Clearance as per provisions of notification dated 14.09.06 issued by Ministry of Environment & Forest, Govt. of India before execution of development works at site.
- x. That the licencee shall make arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available from External Infrastructure to be laid by Haryana Shehari Vikas Pradhikaran.
- xi. That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.
- xii. That the licencee shall make provision of solar power system as per guidelines of Haryana Renewable Energy Development Agency and shall make operational where applicable before applying for an Occupation Certificate.
- xiii. That the licencee shall use only LED fitting for internal lighting as well as campus lighting.
- xiv. That the licencee shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two month period from the date of grant of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.
- xv. That the licencee shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein applicant company has to deposit thirty percentum of the amount from the floor/space holders for meeting the cost of Internal Development Works in the colony.



That the licencee shall permit the Director or any other office authorized by him to inspect the execution of the layout and the development works in the colony and to carry out all directions issued by him for ensuring due compliance of the execution of the layout and development works in accordance with the license granted.

xvii.

 That the licencee shall not give any advertisement for sale of commercial area before the approval of layout plan / building plans of the same.

- xviii. That the licencee shall pay the labour cess as per policy instructions issued by Haryana Government vide Memo No. Misc. 2057-5/25/2008/2TCP dated 25.02.2010.
- xix. That the licencee shall keep pace of construction at least in accordance with sale agreement executed with the buyers of the flats as and when scheme is launched.
- xx. That the licencee shall submit the additional bank guarantee, if any required at the time of approval of Service Plans/Estimate. With an increase in the cost of construction and increase in the number of facilities in Layout Plan, applicant company would be required to furnish an additional bank guarantee within 30 days on demand. It is made clear that bank guarantee of Internal Development Works/EDC has been worked out on the interim rates.
- xxi. That the licencee shall specify the detail of calculations per Sqm/per sqft, which is being demanded from the flat/shop owners on account of IDC/EDC, if being charged separately as per rates fixed by Govt.
- xxii. That the provisions of the Real Estate (Regulation and Development) Act, 2016 and rules framed thereunder shall be followed by the applicant in letter and spirit.
- xxiii. That no pre-launch/sale of commercial site will be undertaken before approval of the layout plan.
- xxiv. That the owner/developer shall derive maximum net profit at the rate of 15% of the total project cost of the development of the above said Commercial Colony after making provisions of the statutory taxes. In case, the net profit exceeds 15% after completion of the project period, the surplus amount shall be deposited within two months in the State Government Treasury by the Owner/Developer or they shall spend this money on further amenities/facilities in their colony for the benefit of the resident therein.

XXV.

xxvi.

Director General Town & Country Planning & Haryana, Chandigarh

That the licencee execute the development works as per Environmental Clearance and comply with the provisions of Environment Protection Act, 1986, Air [Prevention and Control of Pollution of Act, 1981] and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, you shall be liable for penal action by Haryana State Pollution Control Board or any other Authority Administering the said Acts.

That, the owner/developer shall integrate its bank account in which 70% allottee receipts are credited under Section-4(2)(l)(D) of the Real Estate Regulation and Development Act, 2016 with the on-line application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipts from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.

- xxvii. That such 10% of the total receipts from each payment made by an allottee, which is received by the Department shall get automatically credited, on the date of receipt in Government treasury against EDC dues.
- xxviii. Such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.
- xxix. The implementation of such mechanism shall, however, have no bearing on the EDC instalment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that the EDC instalments that are due for payment get paid as per prescribed schedule.
- xxx. That the licencee shall abide by with the Act/Rules and the policies notified by the Department for development of commercial colonies and other instructions issued by the Director under section 9A of the Haryana Development and Regulations of Urban Areas Act, Haryana Development and Regulations of Urban Areas Act, Haryana Development and Regulations of Urban Areas Act, 1975.
- xxxi. That the licencee shall obey all the directions/restrictions imposed by the Department from time to time.
- xxxii. That the licencee shall not encroach the revenue rasta, if any passes through the applied site and keep it thoroughfare movement of the general public.
- 3. That licenced land forming the part of Sector, Road, Service roads, Green belts and 24/18 mtrs wide road shall be transferred within a period of 30 days in favour of Government from the date of approval of Zoning Plan, if applicable.
- 4. That the licencee shall demolish the temporary construction from the site before issuance of zoning plan.
- 5. The licence is valid up to 14 0 6 2028

Dated: 15/06/2023. Place:

Endst. No. LC-5045/JE (SK)/2023/ 19076

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(T. L. Satyaprakash, IAS) Director General, Town & Country Planning Haryana, Chandigarh

Dated: 15/06/2023

A copy along with a copy of schedule of land is forwarded to the following for information and necessary action: -

- SPJ Properties Pvt. Ltd., A-11, Pitampura, New Delhi-110034 alongwith a copy of agreement, LC-IV B, Bilateral agreement & layout plan.
- Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
   Chief Administrator, USVE, Panchkula.
- 3. Chief Administrator, HSVP, Panchkula.
- 4. Chief Administrator, Housing Board, Panchkula alongwith copy of agreement.
- 5. Managing Director, HVPN, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula
- 6. Joint Director, Environment Haryana-Cum-Secretary, SEAC, Paryavaran Bhawan, Sector-2, Panchkula.
- 7. Addl. Director Urban Estates, Haryana, Panchkula.

- 8. Administrator, HSVP, Panchkula 9
- Chief Engineer, HSVP, Panchkula,
- 10.
- Superintending Engineer, HSVP, Gurugram along with a copy of agreement. 11. Land Acquisition Officer, Gurugram.
- 12.
- Senior Town Planner, Gurugram along with layout plan. 13.
- District Town Planner, Gurugram along with a copy of agreement and layout plan. 14. Chief Accounts Officer O/o DTCP, Haryana, Chandigarh along with a copy of
- 15. Nodal Officer (Website) to update the status on the website.

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(Narender Kumar) District Town Planner (HQ) For: Director General, Town & Country Planning Haryana Chandigarh

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To be read with License No. 125 Dated15106.of 2023

Detail of land owned by SPJ Properties Pvt. Ltd.

Village	Khasra no.	
	Klidstid NO.	Area
5. C		(B-B)
Gurugram	4234/1747	2-17
	4235/1747	3-7
	5416/4228/1741	0-9
	Total	6-13
		Or 4.15625 Acres

Note: - Khasra no. 4235/1747(0-5-1) is under mortgage.

Director General Town & Country Planning Haryana, Chandigath Turn Lury