



हरियाणा शहरी विकास प्राधिकरण

HARYANA SHEHARI
VIKAS PRADHIKARAN

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Address: C-3, HSVP, HQ Sector-6
Panchkula

CE-I No. 273249
Dated: 14.10.2024
Annexure-A

SUB:- Request for approval of service plan estimate in respect of license no. 104 of 2024 dated 01.08.2024 for setting up Industrial Plotted Colony area over an admeasuring 129.65625 acres at Village-Shidrawali, Tehsil Manesar, District Gurugram, Haryana being developed by M/s Signature Global India Limited.

Technical note and comments:-

1. All detailed working drawings would have to be prepared by the colonizer for Integrating the internal services proposals with the master proposals of town.
2. The correctness of the levels will be the sole, responsibility of the colonizer for the integration of internal proposals, with the master proposals, of town and will be got confirmed before execution.
3. The material to be used shall the same specifications as are being adopted by HSVP and further shall also confirm to such directions, as issued by Chief Engineer, HSVP from time to time.
4. The work shall be carried out according to Haryana PWD specification or such specifications as are being followed by HSVP. Further it shall also confirm to such other directions, as are issued by Chief Engineer, HSVP from time to time.
5. The colonizer will be fully responsible to meet the demand of water supply and allied services till such time these are made available by State Government/ HSVP. All link connections with the State Government/ HSVP system and services will be done by the colonizer. If necessary extra tube-wells shall also be installed to meet extra demand of water beyond the provision according to EDC deposited.
6. Structural design & drawings of all the structures, such as pump chamber, boosting chamber, RCC OHSR, underground tanks, quarters, manholes chamber, sections of RCC pipes sewer and SW pipes, sewer, ventilating shafts for sewerage and Masonry Ventilation Chamber for Chamber for storm water drainage, temporary disposal/ arrangement etc. will be as per relevant I.S codes and PWD specifications, colonizer himself will be responsible for structural stability of all structures.
7. Potability of water will be checked and confirmed and the tube-wells will be put into operation after getting chemical analysis of water tested.
8. Only C.I/D.I pipes will be used in water supply and flushing system, UPVC/HDPE pipe for irrigation purposes.



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9. A minimum 100 i/d C.I/D.I, 200mm i/d SW and 400mm id RCC NP-3 pipes will be used for water supply, sewerage and storm water drainage respectively.
10. Standard X-section for S.W. pipes sewer, RCC pipes sewer etc. will be followed as are being adopted in Haryana Public Health Engineering Deptt. or HSVP. If needed, the same may be sought by the colonizer from concerned Executive Engineer of HSVP.
11. The developer may be directed to get the Sewage Treatment Plant (STP) got designed from a Govt. Institute like IIT, NIT etc. so as to ensure that the technology adopted by him is appropriate. He must take this action before construction of STP and submit documentary proof for the same at the time of grant of occupation certificate. The efficacy of such STP shall be checked randomly by the concerned Regional Officer of HSPCB.
12. The X-section, width of roads, will be followed as approved by the Chief Town Planner, Haryana, Chandigarh. The kerbs and channels will also be provided as per approved X-section and specifications. If needed, the same may be sought by the colonizer from concerned Executive Engineer of HSVP.
13. The specifications for various roads will be followed as per IRC/MORTH specifications.
14. The wiring system of street lighting and specifications of street lighting fixture will be as per relevant standards.
15. This shall confirm to such other conditions as are incorporated in the approved estimate and the letter of approval.

[Signature]
Executive Engineer (W),
for Chief Engineer-I, HSVP,
Panchkula.

PROJECT: PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

REPORT

Gurgaon town of Haryana State is situated on Delhi - Jaipur national Highway No.8 at a distance of 30 kms for Delhi. Haryana Government has established various residential sectors along with infrastructure facilities in Gurugram. It is now the proposed development Industrial Plotted Colony is 129.65625 ACRES, site at Village Shidrawali, Gurugram.

WATER SUPPLY

At present the source of water supply in this area is GMDA/HSVP water supply. As the underground water is potable, provision. It has been proposed to construct underground tanks of capacity as per attached details and at location for domestic purpose and for fire protection. The underground tanks will be fed from the GMDA/HSVP water supply mains passing along sector dividing master road, from there water will be pumped to Overhead water storage tank (OHT) on the roof of the each plot.

DESIGN

The scheme has been designed for population as given in attached sheets. The rate of water supply per head/day has been taken as 172.50 liters per head per day as per HUDA Norms.

PUMPING EQUIPMENTS

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. Power Backup will be provided separately or added to the capacity of main generator.

SEWERAGE SCHEME

Sewerage scheme of colony is designed for Sewer connecting to the Proposed Sewage Treatment Plant (STP) of (930 KLD for Industrial Plotted) & (STP 2050 KLD for Residential Plotted, Community Building-1, Community Building-2 & Commercial Building) capacity which cater the requirement of residential colony. The required STP capacity for (930 KLD for Industrial Plotted) & (STP 2050 KLD for Residential Plotted) (Total Waste Water Generation shall be STP for Industrial Plotted 923 KLD & for Residential Plotted STP 2035 KLD). The calculation of the same is attached. The Sewerage System has been marked on respective plans.

The sewer lines have been designed for three times average D.W.F in relation to water supply demand. It has been assumed that about 80% of the domestic & 90% of flushing water supply shall find its way into the proposed sewer. Sewer lines shall be laid to a gradient maintaining minimum 0.75 m/sec self-cleaning velocity. Necessary provision for laying Solid Wall pipe sewer line, construction of required number of manholes etc., have been made in the estimate. Design statement for entire sewerage system has been prepared and attached with the estimate.



STORM WATER DRAINAGE

Rainwater precipitation of the proposed development will be collected through a series of catch basin /channels and piping and will be connected to the proposed Rainwater Harvesting System. Surplus water will be disposed off to the GMDA Storm Drain. Intensity of rainfall has been taken as 1/4" (6.25 mm) per hour.

SPECIFICATIONS

Development work will be carried out in accordance with the standard specifications of P.H as laid down by the Haryana Govt./GMDA.

Roads:

Cost of road has been taken in the estimate.

Street Lighting:

Provision for external lighting has been made.

Horticulture:

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

Rates:

The estimate has been based on the present market rates.

Cost:

Total cost of the internal development scheme, including cost of all services, works out to be Rs. ~~43243.87~~ lacs (Rs. ~~102.15~~ lacs per acre) including 3% contingencies @ 40% departmental charges.

11064.50 85.33

Authorized Signatory



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WATER REQUIREMENT / CONSUMPTION

S.No.	Description	Population	Total Water Requirement	Domestic Water Requirement	Flushing Water Requirement
	Daily Water Requirement	Person.	LPD	LPD	LPD
[A]	RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING				
1.1	Total Residential Population @ 172.5 LPD (Domestic 115.0 LPD & Flushing 57.5 LPD)	11529	1988752.5	1325835.0	662917.5
1.2	Visitors Population @ 15 LPD (Domestic 5 LPD & Flushing 10 LPD)	1153	17295.0	5765.0	11530.0
1.3	Operation & Maintenance Population @ 45 LPD (Domestic 25 LPD & Flushing 20 LPD)	400	18000.0	10000.0	8000.0
	TOTAL DAILY WATER REQUIREMENT FOR RESIDENTIAL TOWER		2024047.5	1341800.0	682447.5
	SAY (KLD)		2025.0	1342.0	683.0
[B]	COMMUNITY BUILDING - 1:				
1.0	Fixed / Staff Population @ 45 LPD (Domestic 25 LPD & Flushing 20 LPD)	668	30060.0	16700.0	13360.0
1.1	Visitors Population @ 15 LPD (Domestic 5 LPD & Flushing 10 LPD)	6012	90180.0	30060.0	60120.0
	TOTAL WATER REQUIREMENT FOR CLUB AREA		120240.00	46760.00	73480.00
	SAY (KLD)		121.0	47.0	74.0
[C]	COMMUNITY BUILDING - 2:				
1.0	Fixed / Staff Population @ 45 LPD (Domestic 25 LPD & Flushing 20 LPD)	736	33120.0	18400.0	14720.0
1.1	Visitors Population @ 15 LPD (Domestic 5 LPD & Flushing 10 LPD)	6615	99225.0	33075.0	66150.0
	TOTAL WATER REQUIREMENT FOR CLUB AREA		132345.00	51475.00	80870.00
	SAY (KLD)		133.0	52.0	81.0
[D]	COMMERCIAL BUILDING :				
1.0	Fixed / Staff Population @ 45 LPD (Domestic 25 LPD & Flushing 20 LPD)	180	8100.0	4500.0	3600.0
1.1	Visitors Population @ 15 LPD (Domestic 5 LPD & Flushing 10 LPD)	1618	24270.0	8090.0	16180.0
	TOTAL WATER REQUIREMENT FOR CLUB AREA (Community -02)		32370.00	12590.00	19780.00
	SAY (KLD)		33.0	13.0	20.0
	GRAND TOTAL WATER DEMAND (KLD)		2312.0	1455.0	860.0
[E]	INDUSTRIAL PLOT				
1.0	Fixed / Staff Population @ 45 LPD (Domestic 25 LPD & Flushing 20 LPD)	22323	1004535.0	558075.0	446460.0
1.1	Visitors Population @ 15 LPD (Domestic 5 LPD & Flushing 10 LPD)	2233	33495.0	11165.0	22330.0
	TOTAL WATER REQUIREMENT FOR INDUSTRIAL PLOT		1038030.00	569240.00	468790.00
	SAY (KLD)		1040.0	570.0	470.0

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PUMPING MACHINERY REQUIREMENT

1.0	HSVP/GMDA Main Water supply calculation for Industrial Plotted Area			
a)	Required fresh water per day		570.0	m3/day
b)	Supply Duration		8	Hrs.
c)	Line flow rate		1220.00	LPM
d)	Proposed line dia		150	mm
e)	Flow velocity		1.15	m/sec
f)	Length of line		550	Mtr.
g)	Friction head loss (By Hazzan & William Formula)		10.46	Mtr.
2.0	HSVP/GMDA Main Water supply calculation for Residential Plotted Area			
a)	Required fresh water per day		1455	m3/day
b)	Supply Duration		8.00	Hrs.
c)	Line flow rate		3100.00	LPM
d)	Proposed line dia		150	mm
e)	Flow velocity		2.93	m/sec
f)	Length of line		450	Mtr.
g)	Friction head loss (By Hazzan & William Formula)		33.79	Mtr.
3.0	PUMPING MACHINERY REQUIREMENT FOR RESIDENTIAL PLOTS			
3.1	Underground and overhead Tank		1455	m3/day
a)	Proposed underground tank for domestic use (1.0 day storage)		1485.00	m3
3.2	Fire Water Tank Capacity (Residential Population 13.08 Thousand + Industrial Population 24.55 Thousand)		873 KL	say 900 KL
3.3	Total Fire water demand (285 KL) Say = 300 KL		300	m3
b)	Total Domestic and Fire Underground water requirement		1785.00	m3
3.3	Total Flushing water demand		1200	m3/day
c)	Proposed underground tank for flushing use (one day storage)		860.00	m3
			say 850 KL	

STP for Residential plots

$$\text{Total Req.} = 1455 + 860 = 2315 \text{ KL} @ 80\% = 1852 \text{ KL}$$

Add 10% for marginal Factor :

$$\frac{1852}{20\%} = 2071 \text{ KL}$$

say 2050 KL

CETP for Industrial plots

$$\text{Total Req.} = 1040 \text{ KL} @ 80\% = 832 \text{ KL}$$

$$\text{Add 10\% for marginal Factor} = \frac{83.20}{915.20 \text{ KL}}$$

say 930 KL



4.0	PUMPING MACHINERY REQUIREMENT FOR INDUSTRIAL AREA			
4.1	Underground and overhead Tank			570
a)	Proposed underground tank for domestic use (1.0 day storage)		582.00	m3/day
			582.00	m3
4.2	Total Domestic Underground water requirement		582.00	m3
4.3	Total Flushing water demand		470.00	m3/day
b)	Proposed underground tank for flushing use (one day storage)		470.00	m3
5.0	Pumps For Domestic water Supply for RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING			
a)	Domestic water requirement per day (excluding filter back wash)		1455.00	m3/day
b)	Pumping Duration per day		8	hrs.
c)	Depth of Pump Room		6	Mtr.
d)	Clear head required (Ground to Tank Inlet Level)		15	Mtr.
e)	Residual Pressure		5	Mtr.
f)	Friction head loss		33.79	Mtr.
g)	Total head		59.79	Mtr.
		Say	60.00	Mtr.
	Discharge of pump		3031.25	LPM
		No. of Working Pumps	2.00	Nos.
		Say	1600.00	LPM
	Power Required (Flow x Head) / 4500 x 0.6		32.82	HP
	Say		35.00	HP
	It is proposed to provide domestic water transfer pumps (2W+1S) of capacity 1600.0 LPM Each Pump at 60 mtr. Head of 35.0 HP.			
6.0	Pumps For Domestic water Supply for INDUSTRIAL PLOT			
a)	Domestic water requirement per day (excluding filter back wash)		570	m3/day
b)	Pumping Duration per day		8	hrs.
c)	Depth of Pump Room		6	Mtr.
d)	Clear head required (Ground to Tank Inlet Level)		15	Mtr.
e)	Residual Pressure		5	Mtr.
f)	Friction head loss		44.31	Mtr.
g)	Total head		70.31	Mtr.
		Say	80.00	Mtr.
	Discharge of pump		1187.50	LPM
		No. of Working Pumps	2.00	Nos.
		Say	600.00	LPM
	Power Required (Flow x Head) / 4500 x 0.6		16.41	HP
	Say		20.00	HP
	It is proposed to provide domestic water transfer pumps (2W+1S) of capacity 600.0 LPM Each Pump at 80 mtr. Head of 20.0 HP.			



7.0	Pumps For Flushing water Supply for RESIDENTIAL PLOTS (STP-1)			
a)	Flushing water requirement per day		160.00	m3/day
b)	Pumping Duration per day		8	hrs.
c)	Depth of Pump Room		6	Mtr.
d)	Clear head required		15	Mtr.
e)	Residual Pressure		5	Mtr.
f)	Friction head loass		5	Mtr.
g)	Total head		31.00	Mtr.
		Say	40.00	Mtr.
	Discharge of pump		333.33	LPM
		No. of Working Pumps	1.00	No.
		Say	330.00	LPM
	Power Required (Flow x Head) / 4500 x 0.65		4.38	HP
	Say		5.00	HP
	It is proposed to provide Flushing water transfer pumps (1W+1S) of capacity 330 LPM Each pump at 40 mtr. Head of 10 HP.			
8.0	Pumps For Flushing water Supply for RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING (STP-2)			
a)	Flushing water requirement per day		700.00	m3/day
b)	Pumping Duration per day		8	hrs.
c)	Depth of Pump Room		6	Mtr.
d)	Clear head required		15	Mtr.
e)	Residual Pressure		5	Mtr.
f)	Friction head loass		10	Mtr.
g)	Total head		36.00	Mtr.
		Say	40.00	Mtr.
	Discharge of pump		1458.33	LPM
		No. of Working Pumps	1.00	No.
		Say	1460.00	LPM
	Power Required (Flow x Head) / 4500 x 0.65		21.62	HP
	Say		25.00	HP
	It is proposed to provide Flushing water transfer pumps (1W+1S) of capacity 1460 LPM Each pump at 40 mtr. Head of 25 HP.			
9.0	Pumps For Flushing water Supply for INDUSTRIAL PLOT (STP-3)			
a)	Flushing water requirement per day		470.00	m3/day
b)	Pumping Duration per day		8	hrs.
c)	Depth of Pump Room		6	Mtr.
d)	Clear head required		15	Mtr.
e)	Residual Pressure		5	Mtr.
f)	Friction head loass		22.13	Mtr.
g)	Total head		48.13	Mtr.
		Say	50.00	Mtr.
	Discharge of pump		979.17	LPM
		No. of Working Pumps	1.00	No.
		Say	980.00	LPM
	Power Required (Flow x Head) / 4500 x 0.65		18.40	HP
	Say		20.00	HP
	It is proposed to provide Flushing water transfer pumps (1W+1S) of capacity 980 LPM Each pump at 50 mtr. Head of 20 HP.			



10.0	Pumps For Irrigation water Supply for RESIDENTIAL PLOTS & INDUSTRIAL PLOT				
1	Irrigation water requirement per day			86.00	m3/day
2	Pumping Duration per day			4	hrs.
3	Proposed Pumping Head			50.00	Mtr.
4				358.33	LPM
5	Discharge of pump	No. of Working Pumps		1.00	No.
6		Say		360.00	LPM
7	Power Required (Flow x Head) / 4500 x 0.65			6.36	HP
	Say		7.50	10.00	HP
	It is proposed to provide Irrigation water transfer pumps (1W+1S) of capacity 360 LPM Each pump at 50 mtr. Head of 10-7.50 HP.				
11.0	Capacity of Generator Set for RESIDENTIAL PLOTS & INDUSTRIAL PLOT	Nos.	HP		
1	Domestic Water Transfer Pump for Residential Plots	2	35.0	70	HP
2	Domestic Water Transfer Pump For Industrial Plots	2	20.0	40	HP
3	Flushing Water Transfer Pump (STP-1)	1	5.0	5	HP
4	Flushing Water Transfer Pump (STP-2)	1	23.0	23	HP
5	Flushing Water Transfer Pump (STP-3)	1	20.0	20	HP
6	Irrigation Water Transfer Pump	1	7.50	10.0	HP
7	Lighting (LS)			25	HP
				173	HP
	or		x 0.746 / 0.8	161.32	KVA
			Say	180.00	KVA
	Requirement of 180 KVA capacity will be added in to the main D.G. set to provide standby supply.				



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Estimate for Providing in Internal Development works-Group Housing Colony including 49% department charge					
					Amount (Lacs.)
Sub Work - I	Water Supply (Domestic + Recycled Water (Flushing & Irrigation) + Fire Fighting)				1399.20 1177.83 lacs
Sub Work - II	Sewerage System				1341.07 1334.41 lacs
Sub Work - III	Storm Water Drainage				1287.30 1084.70 lacs
Sub Work - IV	Roads & Footpath				2958.37 3776.20 lacs
Sub Work - V	Street Lighting				497.00 497.00 lacs
Sub Work - VI	Horticulture				84.87 81.24 lacs
Sub Work - VII	Maintenance of Services for 10 years including resurfacing of roads after 1st 5 years & II phase i.e. 10 years of maintenance (as per HUDA norms)				5076.50 3726.16 lacs
Total					13243.87 11064.47 lacs
Cost per acre = Rs. 13243.87 / 129.65625 = 102.15 Lacs					85.33
Say = 102.15 Lacs per acre					11064.50 Acre
					85.33
Authorized Signatory					

Executive Engineer
HSVP Division No. V
Gurugram

Superintending Engineer,
HSVP Circle-I, Gurugram



Checked subject to Comments
In forwarding letter No. 273249
Dt. 14/10/2024 and notes
Attached with the estimate

Executive Engineer (M)
for Chief Engineer,
HSVP, Panipat

Director
Town & Country Planning
Haryana, Chandigarh

FINAL ABSTRACT OF COST OF SUBHEAD 1 - WATER SUPPLY

Description	Amount (Lacs.)
Sub Head - (I A) Pumping Machinery + Head works	343.91 389.00 lacs
Sub Head - (I B) Domestic Water Distribution System Dom.+ Rising main	195.54
Sub Head - (I C) Recycled Water Distribution System (Flushing Supply)	271.86
Sub Head - (I D) Recycled Water Distribution System (Irrigation Supply)	163.61
	275.92
	19.32
	20.00
Total	911.88 767.47 lacs
Add 3% Contingencies	27.35 23.02 lacs
Total	939.03 790.49 lacs
Add 49% Departmental Charges	460.13 387.34
Grand Total	1399.16 1177.83
(CO to final abstract of cost)	Say 1399.20



Water Supply

Head Works

- ②
- (i) Boring & installing 200 mm/d T.W. with reverse/ direct rotary rig. Complete with strainer to a depth of about 20 m complete along with machinery.
5 Nos @ ₹ 15.00 lacs each ₹ 75.00 lacs
- (ii) Const. of Pump chamber as per standard design of PWD/P&S/HSP design (L.S.) ₹ 10.00 lacs
- (iii) Const. of boundary wall around the T.W. side
(i) Water works 2 Nos (L.S.) ₹ 7.50 lacs
(ii) T.W. 3 Nos (L.S.) ₹ 10.00 lacs
- (iv) Prov. for footpath hedges and lawn at T.W. ₹ 5.00 lacs
- (v) Prov. for staff obs for intake staff
5 Nos @ ₹ 7.50 lacs each ₹ 37.50 lacs
- (vi) Prov. for Const. of boosting chamber ₹ 10.00 lacs
- ₹ 155.00 lacs

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Sub Work I				Water Supply (Domestic + Recycled Water + Fire Fighting)		
Sub Head No. (I A)				Pumping Machinery		
S. No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs. in Lacs)	
[A] FOR RESIDENTIAL PLOTS & INDUSTRIAL PLOTS						
1	Providing & installing electricity driven pumping set capable of delivering 1600 LPM of water against a total head of 80 m complete with motor and other accessories (For Domestic - 35.0 HP). For Residential Plots.	Nos.	(2+1) 3	760000	22.50 21.00	
2	Providing & installing electricity driven pumping set capable of delivering 600 LPM of water against a total head of 80 m complete with motor and other accessories (For Domestic - 20.0 HP). For Industrial Plots.	Nos.	(2+1) 3	4.00 550000	12.00 16.50	
3	Providing & installing electricity driven pumping set capable of delivering 330 LPM of water against a total head of 40 m complete with motor and other accessories (For Flushing - 10.0 HP). For Residential Plots (STP-1).	Nos.	(1+1) 2	100000	2.00 2.00	
4	Providing & installing electricity driven pumping set capable of delivering 1460 LPM of water against a total head of 40 m complete with motor and other accessories (For Flushing - 25.0 HP). For Residential Plots (STP-2).	Nos.	(1+1) 2	500000	10.00 12.00	
5	Providing & installing electricity driven pumping set capable of delivering 980 LPM of water against a total head of 50 m complete with motor and other accessories (For Flushing - 20.0 HP). For Industrial Plots (STP-3).	Nos.	(1+1) 2	4.00 875000	8.00 13.50	
6	Provision for diesel engine generator set each for standby Arrangements for booster pump complete with gear haed arrangements of following capacities. 1 No. - 180 KVA @	No.	(6.5) 1	2160000	21.00 21.60	
7	Provision for making foundations & erection of pumping machinery.	LS	-	-	2.50 1.50	
8	Provision for pipes, valves & specials inside the pump chamber.	LS	-	-	2.50 1.50	
9	Provision for carriage for materials and other unforeseen items.	LS	-	-	2.50 1.50	
10	Construction of UG Tank For Residential Plots 1200 KL incl 300 KL fire reserve & 550 KL R water tank near STP separately	KL	1200 + 550 2645.00 1750 KL	5500/6500	96.25 171.93	
11	Construction of UG Tank For Industrial Plots 350 KL + 200 KL fire & 300 KL for flushing	KL	850 1052.00	5500/6500	60.38 46.75	
12	Provision of Chlorination Plant complete	No.	2	100000	2.00	
13	Provision for electrical service connection including electrical fittings & boosting chamber (LS) including cost of Transformer	LS	(1+1) 2 No	1.50 lac	3.00 5.00	
14				150000	2.00	
(C.O. to abstract of cost of Sub-work No.I)					234.00 343.91 Lacs	

Head Works Pl. see opto. ⑧

Rs 155.00 lac
Rs 389.00 lac

Sub Work I			Water Supply (Domestic + Recycled Water + Fire Fighting)			
Sub Head No. (I B)			Domestic Water Distribution System			
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)	
1	Providing, laying, jointing and testing DI pipe lines for domestic water supply including cost of excavation complete in all respects as per specification. (Domestic Water Supply)					
i)	100 mm dia	M	8500	1460	2600	124.16 221.80 165
ii)	150 mm dia	M	960	2040	3200	19.58 30.72 125
iii)	200 mm dia	M	300	2700	3800	8.10 11.40 125
2	Providing, fixing & Testing Sluice valves including cost of complete in all respects.					
i)	100 mm i/d	Nos.	30	12000		3.60
ii)	150 mm i/d	Nos.	8	15000		1.20
iii)	200 mm i/d	Nos.	4	30000		0.80 1.20
3	Provision for carriage of material and other unforeseen items (LS)	LS				5.0 0.50
4	Providing for road cutting & making good to its in original conditions.	LS				2.0 0.50
5	Provision for connection to GMDA Master Water Supply line on 24m wide road including all fitting & accessories.	LS	1	(L.S.) 150000		2.0 1.50
	(G.O. to abstract of cost of Sub-work No.1)					271.86
6.	Prov. and fixing fire Hydrants Complete with masonry chamber			Say (L.S.)	15.0	271.86 Lacs
	For Domestic Water Supply material refer Annexure-I.					

- 7) Prov. and fixing air valve and scour valve or Scour Taps incl. cost of brick masonry (L.S.) 2.50 lacs
- 8) Prov. for rising main from fire water-line to UGT 150 mm & slomber @ ₹ 2040/m ₹ 10.40 lacs
- 9) Prov. & fixing indicating plate for sluice valve and air valve (L.S.) ₹ 1.50 lacs
- ₹ 195.54 lacs



Sub-Work No. 1		Water Supply (Domestic + Recycled Water + Fire Fighting)				
Sub Head No. (I C)		Recycled Water Distribution(Flushing)				
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)	
1	Providing, laying, jointing and testing DI pipe lines for flushing including cost of excavation complete in all respects as per specification (for Flushing water supply).					
i)	100 mm dia	M	10100	1460/2600	147.46 262.60	lacs
ii)	150 mm dia	M	250	2040/3200	5.10 8.00	
2	Cost Sluice Valve. for Flushing water supply					
i)	100 mm i/d	Nos.	30	12000	3.60	
ii)	150 mm i/d	Nos.	5	15000	0.75	
3	Provision for carriage of material and other unforeseen items .	LS			5.00 0.50	
4	Providing for road cutting & making good to its in original conditions.	LS			1.00 0.50	
(C.O. to abstract of cost of Sub-work No.1)					275.02	
par. 4. fixing indicating plate for sluice valve, air valve etc.			35 Nos	Say @ 2000	0.70 275.02	Lacs
For Flushing water Supply material refer Annexure-I					163.61 lacs	



Sub -Work No. 1			Water Supply (Domestic + Recycled Water + Fire Fighting)			
Sub Head No. (I D)			Recycled Water Distribution (Irrigation Line)			
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)	
1	Providing, laying, jointing and testing PE-100 (HDPE) pipe lines for flushing including cost of excavation complete in all respects as per specification. (Gardent Hydrant)					
i)	25 OD pipe	M	1164	500	3.42	5.80
ii)	32 OD pipe	M	240	550	0.33	1.32
iii)	40 OD pipe	M	345	600	1.95	2.07
iv)	50 OD pipe	M	625	700	3.25	4.55
v)	63 OD pipe	M	20	800		0.16
vi)	90 OD pipe	M	0	1000		0.00
2	Providing and fixing 20mm dia Irrigation hydrant valve complete in all respect.	Nos.	26	5500	1.30	1.43
3	Providing & fixing External Gardent Hydrant with masonry chambers	Nos.	26	4500	1.30	1.17
4	Providing, fixing & Testing Sluice valves including cost of complete in all respects.					
i)	25 mm i/d	Nos.	1	4000		0.04
ii)	32 mm i/d	Nos.	2	5000		0.10
iii)	40 mm i/d	Nos.	4	6000		0.24
iv)	50 mm i/d	Nos.	4	7000		0.28
v)	63 mm i/d	Nos.	1	8000		0.08
5	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	9	15000		1.35
6	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	9	4500	0.18	0.41
7	Provision for carriage of materials etc. and other unforeseen charges	LS	-	-	2.50	0.50
8	Provision for cutting of roads & making good to its in original condition	LS	-	-	2.00	0.50
(C.O. to abstract of cost of Sub-work No.I)			Total		19.32	20.00
			Say		19.32	20.00
For Irrigation water supply material refer Annexure-III						Lacs



Sub Work II		Sewerage Scheme			
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Providing, lowering, jointing, cutting ^{5.60} uPVC Pipe (Solid wall Pipe SN8 as per IS 15328) pipe and specials into trenches including cost of excavation, bed concrete, cost of manholes complete.				
i)	200 mm dia	M	7800	1700 2300	132.60 179.40
ii)	250 mm dia	M	2350	2000 2500	45.70 58.75
iii)	300 mm dia	M	750	2800 2800	21.60 21.00
iv)	350 mm dia	M	20	3200	0.64
2	Provision for lighting, watching and temporary diversion of traffic	LS	1	-	25.00 1.50
3	Provision for cutting of roads and carriage of materials etc. and other unforeseen charges	LS	1	-	50.00 2.50
4	Provision for vent shafts	LS	3	6.3 200000	20.00 6.00
5	Provision for centering & shuttering, shoring & barricading.	LS	1		10.00 4.50
6	Provision for watch & ward & lighting etc.	LS	1		5.00 0.80
7	Provision for temporary disposal arrangements	LS	1		5.00
8	Cost of 930 KLD Sewerage Treatment Plant ^{CETP} (MBBR + UF SYSTEM) FOR INDUSTRIAL PLOTS BOD : < 10 mg/l COD : < 50 mg/l TSS : < 10 mg/l.	KLD	930 KLD	18000 20000/KL	167.40 186.00
9	Cost of 2050 KLD Sewerage Treatment Plant (MBBR + UF SYSTEM) FOR RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING (STP-2) BOD : < 10 mg/l COD : < 50 mg/l TSS : < 10 mg/l.	KLD	2050 KLD	16000 18000/KL	369.00 328.00
10	Provision for connection to External sewage line for STP-1. (150 mm dia HDPE pipe). (For Residential Plots)	M	750	2040 2500	15.30 18.75
11	Provision for connection to External sewage line for STP-2 & STP for Industrial Plots. (150 mm dia HDPE pipe). (For Residential Plots, Community Building-1, Community Building-2 & Commercial Building & Industrial Plots)	M	1250	2040 2500	25.50 31.25
12	Provision for connection to GMDA External Master Sewerage line on 24m wide road.	LS Each	2	200000	4.00
Total					873.84 869.49
Add 3% contingencies & P.E. changes					26.21 26.08
					900.05 895.57
Add 49% Deptt. Charges, Price escalation Unforeseen, Admin.					441.05 438.83
Total					1341.07 1334.41
(C.O. to abstract of cost of Sub-work No. 1)					Say 1334.41 Lacs
For Sewage material refer Annexure-V					



Sub Work - III				Storm Water Drain	
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Providing, lowering, jointing, cutting DWC ^{R.E.G. HP3} SN8 Pipes (as per IS : 16098) and specials into trenches including cost of excavation cost of manholes, ventilating chambers etc. complete in all respects.				
i)	150 mm i/d	M	3000	2000	60.00
ii)	400 mm i/d	M	5750	2500	143.75
iii)	500 mm i/d	M	1100	27.00	29.70
iv)	600 mm i/d	M	650	30.00	19.50
v)	700 mm i/d	M	1000	35.00	35.00
vi)	800 mm i/d	M	300	50.00	26.00
vii)	900 mm i/d	M	550	65.00	35.75
viii)	1000 mm i/d	M	180	70.00	12.60
ix)	1100 mm i/d	M	50	75.00	3.75
x)	1200 mm i/d	M	770 [650]	100.00	52.00
xi)	1300 mm i/d	M	120	85.00	10.20
xii)	1400 mm i/d	M	270	125.00	33.75
	Provision for Road Gully with pipe connection complete (LS).	LS	1	(L.S.)	35.00
3	Provision for cutting of roads and carriage of materials etc. and other unforeseen items.	LS	1	-	50.00
4	Provision for Rain harvesting arrangements Recharge Pit including injection Bore, perforated pipe. ^{at selected places}	Nos	33 (L.S.)	350000	250.00
5	Provision for lighting, watching and temporary diversion of traffic.	LS	1	-	10.00
6	Following items to be added :				
a)	Provision of timing & shoring (LS)				20.00
b)	Provision for Lighting, watching and other unforeseen items (LS)				10.00
c)	Provision for Temporary disposal arrangement (LS) ^{till}		(L.S.)		50.00
7	Provision for connection to GMDA External Master Storm line on 24m wide road.	No.	2	150000.00	4.00
Total					838.80
Add 3% contingencies and P.E. charges					25.16
					863.96
Add 49% Deptt. Charges, Price escalation					483.35
					1347.31
Total					1081.66
(C.O. to abstract of cost of Sub-work No.1)				SAY	1081.70
For Storm Water Drainage material refer Annexure-IV					Lacs



Sub Work - IV					
S.No.	Width in Meter	Length in Meter	metalled width S. 60 m 10.0 m 14m (2x7m)	Area in Sq.m.	
i)	9	5975.00		53775.000	32862.50 Sym
ii)	18	3400.00		61200.000	3400.00 Sym
iii)	24	1050.00		25440.000	14770 Sym
	Total	10435.00		140415.000	81632.25 Sym
	Add 10% for curves	1043.50		14041.50	8163.25 Sym
	TOTAL AREA	11478.50		154456.50	89795.75
	TOTAL	11478.50		154456.50	89800 Sym
	SAY	11480.00		154460.00	
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Provision for levelling & earth filling as per site conditions 127.613 acres @ Rs. 1,80,000/-	Acres	129.656	170000.00	22042
2	Providing Laying 250 mm G.S.B. 250 mm W.M.M. 50 mm D.B.M. 30 mm B.C.	sq.m.	154460.00	1300.00	2007.98
3	Provision for kerbs & channels of CC 1:2.4, 22960 (11480 x 2) @ Rs.750/m	m	22960.00	750.00	17220
4	Provision for making approach and pavement to building including leveling & surveying	LS			35.0
5	Provision for carriage of material				100.0
6	TOTAL				20.0
7	Add 3% contingency & P.E. charges				73.70
	Add 49% deplt. Charges				2530.29
	(Total C/F to Summary of Sub Work IV)				1239.84
	Say				57.13
	For Road Works material refer Annexure-VI				1982.13
					971.24
					3953.77
Sub Work V					
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Providing street lighting on roads as per standard specifications of HVPN approx. 127.613 acres @ 2,50,000 per acres	per acre	129.656	250000.00	324.14
	Add 3% contingencies & P.E. charges				9.72
	Total				333.86
	Add 49% Deplt. Charges				163.59
	SAY				497.45
	Total				497.45

497.50 lacs



Sub Work VI				Horticulture	
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Development of lawn area				
	a) Trenching the ordinary soil upto depth of 60 cm. Including removal & packing of serviceable material & disposing at a lead of 50 M and making up the trenched area to proper level by filling with earth mixed with manure before & after flooding trench with water including cost of imported earth & manure.				
	b) Rough dressing of trenched area.				
	c) Grassing including watering & maintenance of lawns free from weeds & fit for mowing in rows including hedges, shrubs & green belts.				
	5.5107 acres @ Rs. 1.5 lacs/acre.	per acre	4.500	1.50 lacs 165000.00	7.43 7.43
	Provision of trees along road at 12 M intervals. (22960m / 12 = 1915 Nos.) @ Rs. 2000/- each <i>1913.33</i>	Each	1915 <i>2000</i>	2500.00 <i>2310</i>	47.86 <i>46.20</i>
	<i>2000</i>			Total	<i>52.95</i> 55.30
	Add 3% contingency charges				<i>1.58</i> 1.66
				Total	<i>54.53</i> 56.96
	Add 49% Deptt. Charges , price escalation, unwarren <i>Admin. Charges</i>				<i>26.71</i> 27.91
				Total	<i>81.24</i> 84.87
				SAY	<i>81.24</i> 84.87 Lacs

Sub Work VII				Maintenance Charges & Resurfacing of Roads	
S.No.	Description	Unit	Qty	Rate (Rs.)	Amount (Rs.)
1	Provision for maintenance charges for water supply, sewerage, storm water drainage, roads, street light, horticulture etc. complete including operation & establishments charges as per HUDA norms after completion & resurfacing of roads after 10 years or 1st phase.				
i)	127.613 acres @ 6.50 lacs per acre	per acre	129.656	800000.00	1037.25
2	Provision for resurfacing & strengthening of road after five years of 1st phase	Sq. mtr. <i>6mm</i>	154460.00 <i>84800</i> <i>3650</i> <i>93650</i>	650.00 <i>660</i>	1003.99 <i>618.09</i>
3	Provision for resurfacing & strengthening of road after ten years of 2nd phase	Sq. mtr.	154460.00 <i>93650</i>	820.00 <i>5</i>	1266.57 <i>772.61</i>
				Total	<i>3307.91</i> 2487.95
	Add 3% contingency & PE charges				<i>99.234</i> 99.234
				Total	<i>3407.05</i> 2500.78
	Add 49% Departmental charges				<i>1669.46</i> 1669.46
				Total	<i>5076.50</i> 5076.50
			SAY		<i>3726.16</i> 5076.50 Lacs



PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM, BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

ANNEXURE - I**MATERIAL STATEMENT FOR WATER SUPPLY SYSTEM**

S.No.	Description	40 mm dia Pipe (M)	50 mm dia Pipe (M)	65 mm dia Pipe (M)	80 mm dia Pipe (M)	100 mm dia Pipe (M)	150 mm dia Pipe (M)	200 mm dia Pipe (M)	VALVE CHAMBER (100 dia)	VALVE CHAMBER (150 dia)	VALVE CHAMBER (200 dia)
[A]	HSVP / GMDA Domestic Water Supply Line to W (Water Meter) FOR UGT-1 RESIDENTIAL BUILDING						210			1 Nos.	
[B]	Domestic Water Supply Line from Tanker to W (Water Meter) FOR UGT-1 RESIDENTIAL BUILDING						10			1 Nos.	
[C]	HSVP / GMDA Domestic Water Supply Line to W (Water Meter) FOR UGT-1 INDUSTRIAL BUILDING						280			1 Nos.	
[D]	HSVP / GMDA Domestic Water Supply Line from Tanker to W (Water Meter) FOR UGT-1 INDUSTRIAL BUILDING						10			1 Nos.	
	Total Length	0 Mtr	0 Mtr	0 Mtr	0 Mtr	0 Mtr	510 Mtr	0 Nos.	0 Nos.	4 Nos.	0 Nos.
-] DOMESTIC WATER SUPPLY PIPE :											
FOR INDUSTRIAL PLOTS											
1	W2 (WTP Pump Room) to W3						140			1	
2	W3 to W4					260			2		
3	W4 to W5=					250			3		
4	W5 to W6					1060			5		
5	W5 TO W7					840			3		
6	W3 TO W8					500			7		
7	W8 TO W9					320			2		
FOR RESIDENTIAL PLOTS											
9	WS1 TO WS2							150			2
10	WS2 TO WS3					360	170		4	2	
11	WS3 TO WS4					330			4		
12	WS3 TO WS5					715			4		
13	WS3 TO WS6					210			3		
14	WS6 TO WS7					350			1		
15	WS6 TO WS8					745			1		
16	WS3 TO WS9					300			1		
17	WS1 TO WS10					320		150	1		2
18	WS10 TO WS11					50	100			1	
19	WS11 TO WS12					300			5		
20	WS11 TO WS13					340			5		
21	WS10 TO WS14					660			8		
22	WS14 TO WS15					210			5		
	WS14 TO WS16					200			1		
	Total Length	0 Mtr	0 Mtr	0 Mtr	0 Mtr	8500 Mtr	450 Mtr	300 Mtr	30 Nos.	4 Nos.	4 Nos.
[D] FLUSHING WATER SUPPLY LINE :											
FOR COMMERCIAL PLOTS											
1	(STP Area) to F1						15			1	
1.1	F1 TO F2					290			2		
1.2	F2 TO F3					475			6		
1.3	F3 TO F4					1060			5		
1.4	F3 TO F5					820			4		
1.5	F1 TO F6					750			6		
1.6	F6 TO F7					260			2		



S.No.	Description	40 mm dia Pipe (M)	50 mm dia Pipe (M)	65 mm dia Pipe (M)	80 mm dia Pipe (M)	100 mm dia Pipe (M)	150 mm dia Pipe (M)	200 mm dia Pipe (M)	VALVE CHAMBER (100 dia)	VALVE CHAMBER (150 dia)	VALVE CHAMBER (200 dia)
2	FOR RESIDENTIAL PLOTS										
2.1	(STP1 Area) to F1						15			1	
2.2	F1 TO F2					330			4		
2.3	F1 TO F3					245			3		
2.4	F3 TO F4					80			1		
2.5	F4 TO F5					280			3		
2.6	F4 TO F6					410			5		
2.7	F4 TO F7					150			1		
2.8	F7 TO F8					485			6		
2.9											
2.12	(STP2 Area) to F1						15			1	
2.13	F1 TO F2					110				1	
2.14	F2 TO F3					968			5		
2.15	F2 TO F4					1752			10		
2.16	F1 TO F5						200			1	
2.17	F5 TO F6					940			12		
2.18	F5 TO F7					640			7		
	Total Length	0 Mtr	0 Mtr	0 Mtr	0 Mtr	10100 Mtr	250 Mtr	0 Mtr	30 Nos.	5 Nos.	0 Nos.
[E]	STP (Industrial Building) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.						810.0				
[F]	STP (Residential Plots) 100 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.					700					
[G]	STP (Residential Plots, Community-1, Community-2 & Commercial) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.						400				
	Total Length	0 Mtr	0 Mtr	0 Mtr	0 Mtr	750 Mtr	1250 Mtr	0 Mtr	0 Nos.	0 Nos.	0 Nos.



PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

ANNEXURE - IV

STORM WATER DRAINAGE MATERIAL STATEMENT - EXTERNAL

S.No.	Drainage Line	150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
FOR COMMERCIAL PLOTS													
1	M.H. 1		18										
2	M.H. 2		18										
3	M.H. 3		18										
4	M.H. 4		18										
5	M.H. 5		18										
6	M.H. 6		18										
7	M.H. 7		18										
8	M.H. 8		18										
9	M.H. 9			18									
10	M.H. 10			18									
11	M.H. 11				26								
12	M.H. 12				22								
13	M.H. 13				37								
14	M.H. 14				33								
15	M.H. 15				33								
16	M.H. 16				30								
17	M.H. 17				30								
18	M.H. 18					30							
19	M.H. 19					30							
20	M.H. 20					26							
21	M.H. 21					25							
22	M.H. 22					23							
23	M.H. 23					23							
24	M.H. 24					23							
25	M.H. 25					25							
26	M.H. 26								40				
27	M.H. 27								34				
28	M.H. 28								40				
29	M.H. 29								34				
30	M.H. 30								21				
31	M.H. 31										30		
32	M.H. 32										10		
33	M.H. 31A										15		



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
33	M.H. 32	M.H. 33										28		
34	M.H. 33	M.H. 34										24		
35	M.H. 34	M.H. 35										24		
36	M.H. 35	M.H. 36										22		
37	M.H. 36	M.H. 37										26		
38	M.H. 37	M.H. 38										26		
39	M.H. 38	M.H. 39										26		
40	M.H. 39	M.H. 40										26		
41	M.H. 40	M.H. 41										26		
42	M.H. 41	M.H. 42										37		
43	M.H. 42	M.H. 43										37		
44	M.H. 43	M.H. 44										30		
45	M.H. 44	M.H. 45										30		
46	M.H. 45	M.H. 46										30		
47	M.H. 46	M.H. 47										30		
48	M.H. 47	M.H. 48										30		
49	M.H. 48	M.H. 49										30		
50	M.H. 49	M.H. 50										15		
51	M.H. 50	M.H. 51										22		
52	M.H. 51	M.H. 52										27		
53	M.H. 52	M.H. 53											26	
54	M.H. 53	M.H. 54											26	
55	M.H. 54	M.H. 55											36	
56	M.H. 55	M.H. 56											24	
57	M.H. 56	M.H. 57												21
58	M.H. 57	M.H. 58												21
59	M.H. 58	M.H. 59												16
60	M.H. 59	M.H. 60												40
61	M.H. 60	M.H. 61												40
62	M.H. 61	M.H. 62												15
63	M.H. 62	M.H. 63												25
64	M.H. 63	M.H. 64												31
65	M.H. 64	M.H. 65												30
66	M.H. 65	TO RWH												10
67	TO RWH	EXTERNAL DRAIN												10
68	M.H. 66	M.H. 67		18										
69	M.H. 67	M.H. 68		18										
70	M.H. 68	M.H. 69		18										
71	M.H. 69	M.H. 70		18										
72	M.H. 70	M.H. 71		18										



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
73	M.H. 71	M.H. 72		18										
74	M.H. 72	M.H. 73		18										
75	M.H. 73	M.H. 74		18										
76	M.H. 74	M.H. 12		18										
77	M.H. 75	M.H. 76		18										
78	M.H. 76	M.H. 77		18										
79	M.H. 77	M.H. 78		27										
80	M.H. 78	M.H. 79		22										
81	M.H. 79	M.H. 80		18										
82	M.H. 80	M.H. 81		16										
83	M.H. 81	M.H. 82		31										
84	M.H. 82	M.H. 13		20										
85	M.H. 83	M.H. 84.		33										
86	M.H. 84.	M.H. 85		33										
87	M.H. 85	M.H. 86		33										
88	M.H. 83	M.H. 87		33										
89	M.H. 87	M.H. 16		16										
90	M.H. 88	M.H. 89		19										
91	M.H. 89	M.H. 90		19										
92	M.H. 90	M.H. 91		20										
93	M.H. 91	M.H. 92		12										
94	M.H. 92	M.H. 93		34										
95	M.H. 93	M.H. 94		34										
96	M.H. 94	M.H. 95		34										
97	M.H. 95	M.H. 96			16									
98	M.H. 96	M.H. 97			27									
99	M.H. 97	M.H. 98			30									
100	M.H. 98	M.H. 99				26								
101	M.H. 99	M.H. 100				24								
102	M.H. 100	M.H. 101					27							
103	M.H. 101	M.H. 102					33							
104	M.H. 102	M.H. 103					19							
105	M.H. 103	M.H. 104					37							
106	M.H. 104	M.H. 105					37							
107	M.H. 105	M.H. 106					42							
108	M.H. 106	M.H. 107					42							
109	M.H. 107	M.H. 25					20							



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
110	M.H. 108	M.H. 109		25										
111	M.H. 109	M.H. 110		30										
112	M.H. 110	M.H. 111		30										
113	M.H. 111	M.H. 112		30										
114	M.H. 112	M.H. 113		30										
115	M.H. 113	M.H. 114		30										
116	M.H. 114	M.H. 115		30										
117	M.H. 115	M.H. 116		30										
118	M.H. 116	M.H. 117		30										
119	M.H. 117	M.H. 118		15										
120	M.H. 118	M.H. 119			15									
121	M.H. 119	M.H. 120			29									
122	M.H. 120	M.H. 121												
123	M.H. 121	M.H. 122		38										
124	M.H. 122	M.H. 28		38										
				22										
125	M.H. 123	M.H. 124												
126	M.H. 124	M.H. 125		22										
127	M.H. 125	M.H. 126		38										
128	M.H. 126	M.H. 31A		38										
				22										
129	M.H. 127	M.H. 128												
130	M.H. 128	M.H. 129		30										
131	M.H. 129	M.H. 28		25										
				25										
132	M.H. 130	M.H. 131												
133	M.H. 131	M.H. 132		10										
134	M.H. 132	M.H. 133		20										
135	M.H. 133	M.H. 134		12										
136	M.H. 134	M.H. 31		12										
				25										
137	M.H. 135	M.H. 136												
138	M.H. 136	M.H. 137		30										
139	M.H. 137	M.H. 43		25										
				25										
140	M.H. 138	M.H. 139												
141	M.H. 139	M.H. 140		33										
142	M.H. 140	M.H. 46		13										
				20										
143	M.H. 141	M.H. 142												
				33										



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
144	M.H. 142	M.H. 143		12										
145	M.H. 143	M.H. 49		25										
146	M.H. 144	M.H. 145		25										
147	M.H. 145	M.H. 146		25										
148	M.H. 146	M.H. 147		26										
149	M.H. 147	M.H. 148		28										
150	M.H. 148	M.H. 149		28										
151	M.H. 149	M.H. 150		12										
152	M.H. 150	M.H. 151		40										
153	M.H. 151	M.H. 152			32									
154	M.H. 152	M.H. 153			17									
155	M.H. 153	M.H. 154			33									
156	M.H. 154	M.H. 155			14									
157	M.H. 155	M.H. 55			16									
158	M.H. 156	M.H. 157												
159	M.H. 157	M.H. 158		19										
160	M.H. 158	M.H. 159		15										
161	M.H. 159	M.H. 160		18										
162	M.H. 160	M.H. 161		18										
163	M.H. 161	M.H. 56		13										
164	M.H. 162	M.H. 163												
165	M.H. 163	M.H. 164		18										
166	M.H. 164	M.H. 165		18										
167	M.H. 165	M.H. 157		7										
168	M.H. 166	M.H. 167												
169	M.H. 167	M.H. 168		18										
170	M.H. 168	M.H. 169		18										
171	M.H. 169	M.H. 58		13										
172	CATCH BASIN TO MH		1236											
	FOR RESIDENTIAL PLOTS													
1	M.H. 1	M.H. 2		18										
2	M.H. 2	M.H. 3		18										
3	M.H. 3	M.H. 4		26										



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
4	M.H. 4	M.H. 5		17										
5	M.H. 5	M.H. 6		21										
6	M.H. 6	M.H. 7		18										
7	M.H. 7	M.H. 8		18										
8	M.H. 8	M.H. 9		18										
9	M.H. 9	M.H. 10		18										
10	M.H. 10	M.H. 11		13										
11	M.H. 11	M.H. 12		18										
12	M.H. 12	M.H. 13			18									
13	M.H. 13	M.H. 14			18									
14	M.H. 14	M.H. 15			18									
15	M.H. 15	M.H. 16			18									
16	M.H. 16	M.H. 17			18									
17	M.H. 17	M.H. 18			18									
18	M.H. 18	M.H. 19			35									
19	M.H. 19	M.H. 20			44									
20	M.H. 20	M.H. 21					27							
21	M.H. 21	M.H. 22					27							
22	M.H. 22	M.H. 23					18							
23	M.H. 23	M.H. 24					18							
24	M.H. 24	M.H. 25					18							
25	M.H. 25	M.H. 26					18							
26	M.H. 26	M.H. 27					22							
27	M.H. 27	M.H. 28					22							
28	M.H. 28	M.H. 29					24							
29	M.H. 29	M.H. 29a					17							
30	M.H. 29a	M.H. 30					17							
31	M.H. 30	M.H. 31					21							
32	M.H. 31	M.H. 32					22							
33	M.H. 32	M.H. 33					21							
34	M.H. 33	M.H. 34						19						
35	M.H. 34	M.H. 35						18						
36	M.H. 35	M.H. 36						20						
37	M.H. 36	M.H. 37						22						
38	M.H. 37	M.H. 38						22						
39	M.H. 38	M.H. 39						24						
40	M.H. 39	M.H. 40						26						
41	M.H. 40	M.H. 41						23						
42	M.H. 41	M.H. 42						26						
43	M.H. 42	M.H. 42a						29						
44	M.H. 42a	M.H. 43						30						



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
45	M.H. 43	M.H. 44							27					
46	M.H. 44	M.H. 45							24					
47	M.H. 45	M.H. 46							24					
48	M.H. 46	M.H. 47							20					
49	M.H. 47	M.H. 48							18					
50	M.H. 48	M.H. 49							12					
51	M.H. 43	M.H. 50							23					
52	M.H. 50	M.H. 51							21					
53	M.H. 51	M.H. 213							20					
54	M.H. 52	M.H. 53		18										
55	M.H. 53	M.H. 54		18										
56	M.H. 54	M.H. 55		10										
57	M.H. 55	M.H. 56		22										
58	M.H. 56	M.H. 57		22										
59	M.H. 57	M.H. 5		19										
60	M.H. 58	M.H. 59		18										
61	M.H. 59	M.H. 60		18										
62	M.H. 60	M.H. 57		10										
63	M.H. 61	M.H. 62		18										
64	M.H. 62	M.H. 63		18										
65	M.H. 63	M.H. 64		18										
66	M.H. 64	M.H. 65		18										
67	M.H. 65	M.H. 66		13										
68	M.H. 66	M.H. 11		25										
69	M.H. 67	M.H. 68		18										
70	M.H. 68	M.H. 69		18										
71	M.H. 69	M.H. 70		18										
72	M.H. 70	M.H. 71		18										
73	M.H. 71	M.H. 72		18										
74	M.H. 72	M.H. 73		5										
75	M.H. 73	M.H. 74		32										



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
76	M.H. 74	M.H. 75			9									
77	M.H. 75	M.H. 76			17									
78	M.H. 76	M.H. 77			17									
79	M.H. 77	M.H. 19			17									
	M.H. 77A	M.H. 78		18										
	M.H. 78	M.H. 79		18										
	M.H. 79	M.H. 80		18										
	M.H. 80	M.H. 81		18										
	M.H. 81	M.H. 82		18										
	M.H. 82	M.H. 74		18										
	M.H. 83	M.H. 84		18										
	M.H. 84	M.H. 85		20										
	M.H. 85	M.H. 76		5										
	M.H. 86	M.H. 87		18										
	M.H. 87	M.H. 88		20										
	M.H. 88	M.H. 19		5										
	M.H. 89	M.H. 90		18										
	M.H. 90	M.H. 91		18										
	M.H. 91	M.H. 20		16										
	M.H. 92	M.H. 93		18										
	M.H. 93	M.H. 94		18										
	M.H. 94	M.H. 95		18										
	M.H. 95	M.H. 96		18										
	M.H. 96	M.H. 97		7										
	M.H. 97	M.H. 98			36									
	M.H. 98	M.H. 99			42									
	M.H. 99	M.H. 100			20									
	M.H. 100	M.H. 101			20									
	M.H. 101	M.H. 102			22									
	M.H. 102	M.H. 25			17									
	M.H. 103	M.H. 104		12										
	M.H. 104	M.H. 105		18										
	M.H. 105	M.H. 106		18										
	M.H. 106	M.H. 107		13										
	M.H. 107	M.H. 98		5										



S.No.	Drainage Line	150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 108		18										
	M.H. 109		18										
	M.H. 110		11										
	M.H. 111		5										
	M.H. 112		18										
	M.H. 113		10										
	M.H. 114		18										
	M.H. 115		13										
	M.H. 116		13										
	M.H. 117		14										
	M.H. 118		18										
	M.H. 119		8										
	M.H. 120		18										
	M.H. 121		18										
	M.H. 122		18										
	M.H. 123		18										
	M.H. 124		13										
	M.H. 125		12										
	M.H. 126		18										
	M.H. 127		18										
	M.H. 128		18										
	M.H. 129		22										
	M.H. 130		18										
	M.H. 131		18										
	M.H. 132		18										
	M.H. 133		18										
	M.H. 134		6										
	M.H. 135		20										
	M.H. 136												
	M.H. 137												
	M.H. 138												
	M.H. 139			16									
	M.H. 140			21									
	M.H. 141			10									
	M.H. 142				14								
	M.H. 143				18								



 Sanelac Consultants Pvt. Ltd.

 N.D. 20

 6642

 P.H. 11

 10/10/2020

S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 141	M.H. 142				18								
	M.H. 142	M.H. 143				18								
	M.H. 143	M.H. 39				5								
	M.H. 144	M.H. 145		13										
	M.H. 145	M.H. 146		18										
	M.H. 146	M.H. 147		18										
	M.H. 147	M.H. 148		13										
	M.H. 148	M.H. 137		6										
	M.H. 149	M.H. 150		13										
	M.H. 150	M.H. 151		18										
	M.H. 151	M.H. 152		18										
	M.H. 152	M.H. 153		18										
	M.H. 153	M.H. 154		18										
	M.H. 154	M.H. 155		25										
	M.H. 155	M.H. 156		10										
	M.H. 156	M.H. 139		25										
	M.H. 157	M.H. 158		18										
	M.H. 158	M.H. 155		10										
	M.H. 159	M.H. 160		25										
	M.H. 160	M.H. 161		15										
	M.H. 161	M.H. 162		18										
	M.H. 162	M.H. 163		18										
	M.H. 163	M.H. 164		18										
	M.H. 164	M.H. 156		18										
	M.H. 165	M.H. 160		10										
	M.H. 166	M.H. 167		11										
	M.H. 167	M.H. 168		15										
	M.H. 168	M.H. 169		18										
	M.H. 169	M.H. 170		18										
	M.H. 170	M.H. 171		18										
	M.H. 171	M.H. 138		18										
	M.H. 172	M.H. 135		18										
	M.H. 173	M.H. 174		18										



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 174	M.H. 175		18										
	M.H. 175	M.H. 176		8										
	M.H. 176	M.H. 177		8										
	M.H. 177	M.H. 178		9										
	M.H. 178	M.H. 44		10										
	M.H. 179	M.H. 180		18										
	M.H. 180	M.H. 181		18										
	M.H. 181	M.H. 46		10										
	M.H. 182	M.H. 183		18										
	M.H. 183	M.H. 184		18										
	M.H. 184	M.H. 185		19										
	M.H. 185	M.H. 186		34										
	M.H. 186	M.H. 187		23										
	M.H. 187	M.H. 188		25										
	M.H. 188	M.H. 189			22									
	M.H. 189	M.H. 190			22									
	M.H. 190	M.H. 191			23									
	M.H. 191	M.H. 192			31									
	M.H. 192	M.H. 192a			22									
	M.H. 192a	M.H. 192b			28									
	M.H. 192b	M.H. 193			13									
	M.H. 193	M.H. 194					19							
	M.H. 194	M.H. 195					24							
	M.H. 195	M.H. 196					18							
	M.H. 196	M.H. 197					25							
	M.H. 197	M.H. 198					16							
	M.H. 198	M.H. 199					32							
	M.H. 199	M.H. 200					32							
	M.H. 200	M.H. 201							30					
	M.H. 201	M.H. 202							28					
	M.H. 202	M.H. 203							27					
	M.H. 203	M.H. 204							30					
	M.H. 204	M.H. 205							23					
	M.H. 205	M.H. 206							30					
	M.H. 206	M.H. 207							30					
	M.H. 207	M.H. 208							30					
	M.H. 208	M.H. 209							30					
	M.H. 209	M.H. 210							23					
	M.H. 210	M.H. 211							21					



S.No.	Drainage Line		150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 211	TO RWH							10					
	TO RWH	TO EXTERNAL DRAIN										10		
	M.H. 212	M.H. 213		18										
	M.H. 213	M.H. 214		18										
	M.H. 214	M.H. 215		18										
	M.H. 215	M.H. 216		18										
	M.H. 216	M.H. 217		18										
	M.H. 217	M.H. 218		18										
	M.H. 218	M.H. 219		18										
	M.H. 219	M.H. 220		18										
	M.H. 220	M.H. 221		18										
	M.H. 221	M.H. 222		18										
	M.H. 222	M.H. 223		18										
	M.H. 223	M.H. 224		18										
	M.H. 224	M.H. 225		18										
	M.H. 225	M.H. 226		22										
	M.H. 226	M.H. 227			19									
	M.H. 227	M.H. 228			8									
	M.H. 228	M.H. 188			12									
	M.H. 229	M.H. 230		18										
	M.H. 230	M.H. 231		18										
	M.H. 231	M.H. 232		18										
	M.H. 232	M.H. 233		21										
	M.H. 233	M.H. 234		18										
	M.H. 234	M.H. 235		10										
	M.H. 235	M.H. 226		25										
	M.H. 236	M.H. 237		18										
	M.H. 237	M.H. 238		18										
	M.H. 238	M.H. 239		18										
	M.H. 239	M.H. 235		18										
	M.H. 240	M.H. 241		18										
	M.H. 241	M.H. 242		18										
	M.H. 242	M.H. 227		18										
	M.H. 243	M.H. 244		18										
	M.H. 244	M.H. 245		18										



S.No.	Drainage Line	150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 245		18										
	M.H. 246		18										
	M.H. 247		18										
	M.H. 248		25										
	M.H. 249		16										
	M.H. 250				16								
	M.H. 251				39								
	M.H. 252												
	M.H. 253		18										
	M.H. 254		10										
	M.H. 255		13										
	M.H. 256		18										
	M.H. 257		18										
	M.H. 258		18										
	M.H. 259		18										
	M.H. 260		18										
	M.H. 261		18										
	M.H. 262		18										
	M.H. 263		18										
	M.H. 263A												
	M.H. 264		18										
	M.H. 265		18										
	M.H. 266		18										
	M.H. 267		18										
	M.H. 268		18										
	M.H. 269		18										
	M.H. 270		10										
	M.H. 271		15										
	M.H. 272			18									
	M.H. 273			18									
	M.H. 274			18									
	M.H. 274			12									
	M.H. 275												
	M.H. 276		18										
	M.H. 277		12										
	M.H. 278		23										
	M.H. 279		15										
	M.H. 280		20										
	M.H. 281			15									



S.No.	Drainage Line	150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 281			20									
	M.H. 282			15									
	M.H. 283			20									
	M.H. 284				8								
	M.H. 285				12								
	M.H. 286				10								
	M.H. 287				20								
	M.H. 288				18								
	M.H. 289				18								
	M.H. 290				12								
	M.H. 291				20								
	M.H. 292				18								
	M.H. 293				8								
	M.H. 294				20								
	M.H. 295				19								
	M.H. 296												
	M.H. 297												
	M.H. 298		18										
	M.H. 299		18										
	M.H. 300		18										
	M.H. 301		18										
	M.H. 302		10										
	M.H. 277		10										
	M.H. 303												
	M.H. 304		15										
	M.H. 305		15										
	M.H. 306		15										
	M.H. 307		15										
	M.H. 308		15										
	M.H. 309		8										
	M.H. 279		10										
	M.H. 310												
	M.H. 311		12										
	M.H. 312		15										
	M.H. 313		15										
	M.H. 314		15										
	M.H. 315		15										
	M.H. 316		15										
	M.H. 317		8										
	M.H. 281		10										



S.No.	Drainage Line	150 Dia Pipe Length (M)	400 Dia Pipe Length (M)	500 Dia Pipe Length (M)	600 Dia Pipe Length (M)	700 Dia Pipe Length (M)	800 Dia Pipe Length (M)	900 Dia Pipe Length (M)	1000 Dia Pipe Length (M)	1100 Dia Pipe Length (M)	1200 Dia Pipe Length (M)	1300 Dia Pipe Length (M)	1400 Dia Pipe Length (M)
	M.H. 318		18										
	M.H. 319		20										
	M.H. 320		15										
	M.H. 321		15										
	M.H. 322		15										
	M.H. 323		15										
	M.H. 324		15										
	M.H. 325		15										
	M.H. 326		8										
	M.H. 283		10										
	CATCH BASIN TO CMH	1715											
				1064	611		520	491					
	TOTAL	2951	5705	4052	590	920	259	501	169	0	607	112	259
	SAY	3000	5750	1100	650	1000	303	550	180	-50-	650	120	270
							520	500					



PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM, BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

ANNEXURE - III
MATERIAL STATEMENT FOR IRRIGATION SYSTEM

S. No.	GARDEN HYDRANT	GARDEN HYDRANT	25 Pipe Dia Length (M)	32 Pipe Dia Length (M)	40 Pipe Dia Length (M)	50 Pipe Dia Length (M)	63 Pipe Dia Length (M)	VALVE CHAMBER (25 dia)	VALVE CHAMBER (32 dia)	VALVE CHAMBER (40 dia)	VALVE CHAMBER (50 dia)	VALVE CHAMBER (63 dia)
FOR INDUSTRIAL PLOTS												
1	FOR INDUSTRIAL PLOTS											
2	A TO B		4	415					1			
1	FOR RESIDENTIAL PLOTS											
GARDEN IRRIGATION FROM STP TO A												
6	A TO B		1	55		20		1				
7	A TO C		2	80				1				
8	C TO D				120	265					2	
9	D TO E		2	50		265				1		
10	D TO F		6	80	100					1		
11	FOR RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING											
GARDEN IRRIGATION FROM STP TO I												
12	A TO B		9	205	75	142	10					1
14	A TO C		2	255	45	60	75			1	1	
											1	
	Total Length	26 Nos	1140 -1160 Mtr	220 -240 Mtr	322 -345 Mtr	625 -650 Mtr	10 -20-Mtr	1 Nos.	2 Nos.	4 Nos.	4 Nos.	1 Nos.



**PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES
(OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL
MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.**

ANNEXURE - V
SEWERAGE STATEMENT - EXTERNAL

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
FOR INDUSTRIAL PLOTS								
M.H. 1	M.H. 2		15					
M.H. 2	M.H. 3		17					
M.H. 3	M.H. 4		17					
M.H. 4	M.H. 5		17					
M.H. 5	M.H. 6		17					
M.H. 6	M.H. 7		17					
M.H. 7	M.H. 8		17					
M.H. 8	M.H. 9		18					
M.H. 9	M.H. 10		8					
M.H. 10	M.H. 11			35				
M.H. 11	M.H. 12			25				
M.H. 12	M.H. 13			8				
M.H. 13	M.H. 14			15				
M.H. 14	M.H. 15			30				
M.H. 15	M.H. 16			29				
M.H. 16	M.H. 17			20				
M.H. 17	M.H. 18			29				
M.H. 18	M.H. 19			29				
M.H. 19	M.H. 20			29				
M.H. 20	M.H. 21			29				
M.H. 21	M.H. 22			22				
M.H. 22	M.H. 23			40				
M.H. 23	M.H. 24			24				
M.H. 24	M.H. 25			24				
M.H. 25	M.H. 26			18				
M.H. 26	M.H. 27			27				
M.H. 27	M.H. 28			36				
M.H. 28	M.H. 29				25			
M.H. 29	M.H. 30				14			
M.H. 30	M.H. 31				14			
M.H. 31	M.H. 32				35			
M.H. 32	M.H. 33				35			
M.H. 33	M.H. 34				14			
M.H. 34	M.H. 35				10			
M.H. 35	M.H. 36				28			
M.H. 36	M.H. 37				22			
M.H. 37	M.H. 38				22			
M.H. 38	M.H. 39				18			
M.H. 39	M.H. 40				8			
M.H. 40	M.H. 13				27			



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 41	STP							
M.H. 900X800	M.H. 900X800		66			5		
M.H. 42	M.H. 43		15					
M.H. 43	M.H. 44		17					
M.H. 44	M.H. 45		17					
M.H. 45	M.H. 46		17					
M.H. 46	M.H. 47		17					
M.H. 47	M.H. 48		17					
M.H. 48	M.H. 49		17					
M.H. 49	M.H. 50		18					
M.H. 50	M.H. 11		8					
M.H. 51	M.H. 52		15					
M.H. 52	M.H. 53		17					
M.H. 53	M.H. 54		17					
M.H. 54	M.H. 55		17					
M.H. 55	M.H. 56		17					
M.H. 56	M.H. 57		17					
M.H. 57	M.H. 58		17					
M.H. 58	M.H. 13		18					
M.H. 900X800	M.H. 900X800		75					
M.H. 59	M.H. 60		33					
M.H. 60	M.H. 61		33					
M.H. 61	M.H. 62		33					
M.H. 62	M.H. 17		34					
M.H. 900X800	M.H. 900X800		70					
M.H. 63	M.H. 64		33					
M.H. 64	M.H. 65		33					
M.H. 65	M.H. 66		33					
M.H. 66	M.H. 67		33					
M.H. 67	M.H. 68		33					
M.H. 68	M.H. 69		32					
M.H. 69	M.H. 70		25					
M.H. 70	M.H. 71		21					
M.H. 71	M.H. 72			38				
M.H. 72	M.H. 73			24				
M.H. 73	M.H. 74			14				
M.H. 74	M.H. 75			27				
M.H. 75	M.H. 76			24				
M.H. 76	M.H. 77			31				
M.H. 77	M.H. 78			26				
M.H. 78	M.H. 79			43				
M.H. 79	M.H. 80			17				
M.H. 80	M.H. 81			25				
M.H. 81	M.H. 82			15				



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 82	M.H. 26			21				
M.H. 900X800	M.H. 900X800		150					
M.H. 83	M.H. 84		17					
M.H. 84	M.H. 85		33					
M.H. 85	M.H. 86		33					
M.H. 83	M.H. 87		33					
M.H. 87	M.H. 88		33					
M.H. 88	M.H. 89		33					
M.H. 89	M.H. 73		32					
M.H. 900X800	M.H. 900X800		105					
M.H. 90	M.H. 91		43					
M.H. 91	M.H. 92		24					
M.H. 92	M.H. 29		34					
M.H. 900X800	M.H. 900X800		48					
M.H. 93	M.H. 94		29					
M.H. 94	M.H. 31		31					
M.H. 900X800	M.H. 900X800		30					
M.H. 95	M.H. 96		32					
M.H. 96	M.H. 34		17					
M.H. 900X800	M.H. 900X800		60					
M.H. 97	M.H. 98		34					
M.H. 98	M.H. 99		34					
M.H. 99	M.H. 100		34					
M.H. 100	M.H. 35		33					
M.H. 900X800	M.H. 900X800		64					
M.H. 101	M.H. 102		34					
M.H. 102	M.H. 103		34					
M.H. 103	M.H. 104		34					
M.H. 104	M.H. 39		33					
M.H. 900X800	M.H. 900X800		102					
M.H. 105	M.H. 106		9					
M.H. 106	M.H. 107		25					
M.H. 107	M.H. 108		25					
M.H. 108	M.H. 109		27					
M.H. 109	M.H. 110		26					
M.H. 110	M.H. 111		22					
M.H. 111	M.H. 112			31				
M.H. 112	M.H. 113			16				
M.H. 113	M.H. 114			19				
M.H. 114	M.H. 115			30				
M.H. 115	M.H. 116			27				



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 116	M.H. 117			27				
M.H. 117	M.H. 118			24				
M.H. 118	M.H. 119			24				
M.H. 119	M.H. 120			8				
M.H. 120	M.H. 121			28				
M.H. 121	M.H. 122			38				
M.H. 122	M.H. 123			35				
M.H. 123	M.H. 124			35				
M.H. 124	M.H. 125			21				
M.H. 125	M.H. 126			28				
M.H. 126	M.H. 127			35				
M.H. 127	M.H. 128			14				
M.H. 128	M.H. 129			30				
M.H. 129	M.H. 130			30				
M.H. 130	M.H. 131			23				
M.H. 131	M.H. 132				23			
M.H. 132	M.H. 133				23			
M.H. 133	M.H. 41				25			
M.H. 900X800	M.H. 900X800		90					
M.H. 134	M.H. 135		39					
M.H. 135	M.H. 136		39					
M.H. 136	M.H. 137		39					
M.H. 137	M.H. 138		39					
M.H. 138	M.H. 115		27					
M.H. 139	M.H. 140		32					
M.H. 140	M.H. 122		17					
M.H. 900X800	M.H. 900X800		26					
M.H. 141	M.H. 142		29					
M.H. 142	M.H. 143		31					
M.H. 900X800	M.H. 900X800		96					
M.H. 143	M.H. 144		29					
M.H. 144	M.H. 143		31					
M.H. 900X800	M.H. 900X800		45					
FOR RESIDENTIAL PLOTS								
M.H. 1	M.H. 2		17					
M.H. 2	M.H. 3		15					
M.H. 3	M.H. 4		31					
M.H. 4	M.H. 5		17					
M.H. 5	M.H. 6			18				
M.H. 6	M.H. 7			17				
M.H. 7	M.H. 8			17				
M.H. 8	M.H. 9			17				
M.H. 9	M.H. 10			17				



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 10	M.H. 11			20				
M.H. 11	M.H. 12			15				
M.H. 12	M.H. 13			17				
M.H. 13	M.H. 14			17				
M.H. 14	M.H. 15			17				
M.H. 15	M.H. 16			17				
M.H. 16	M.H. 17			16				
M.H. 17	M.H. 18			19				
M.H. 18	M.H. 19			18				
M.H. 19	M.H. 20			16				
M.H. 20	M.H. 21			17				
M.H. 21	M.H. 22			17				
M.H. 22	M.H. 23			20				
M.H. 23	M.H. 24			14				
M.H. 24	M.H. 25				17			
M.H. 25	M.H. 26				18			
M.H. 26	M.H. 27				14			
M.H. 27	STP-1				6			
M.H. 900X800	M.H. 900X800		90					
M.H. 28	M.H. 29		17					
M.H. 29	M.H. 30		17					
M.H. 30	M.H. 31		10					
M.H. 31	M.H. 32		32					
M.H. 32	M.H. 33		29					
M.H. 33	M.H. 34		17					
M.H. 34	M.H. 35		17					
M.H. 35	M.H. 05		10					
M.H. 900X800	M.H. 900X800		45					
M.H. 36	M.H. 37		17					
M.H. 37	M.H. 38		17					
M.H. 38	M.H. 39		17					
M.H. 39	M.H. 40		17					
M.H. 40	M.H. 41		20					
M.H. 41	M.H. 11		24					
M.H. 42	M.H. 43		17					
M.H. 43	M.H. 44		17					
M.H. 44	M.H. 45		17					
M.H. 45	M.H. 46		17					
M.H. 46	M.H. 47		17					
M.H. 47	M.H. 48		18					
M.H. 48	M.H. 18		24					
M.H. 49	M.H. 50		15					
M.H. 50	M.H. 51		15					
M.H. 51	M.H. 52		15					
M.H. 52	M.H. 23		15					



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 53	M.H. 54		15					
M.H. 54	M.H. 55		14					
M.H. 55	M.H. 56		4					
M.H. 56	M.H. 57		28					
M.H. 57	M.H. 58		11					
M.H. 58	M.H. 59			17				
M.H. 59	M.H. 60			10				
M.H. 60	M.H. 61			7				
M.H. 61	M.H. 62			24				
M.H. 62	M.H. 19			18				
M.H. 63	M.H. 63A		15					
M.H. 63A	M.H. 64		19					
M.H. 64	M.H. 65		17					
M.H. 65	M.H. 66		17					
M.H. 66	M.H. 67		17					
M.H. 67	M.H. 68		16					
M.H. 68	M.H. 57		10					
M.H. 69	M.H. 70		17					
M.H. 70	M.H. 71		16					
M.H. 71	M.H. 60		10					
M.H. 72	M.H. 73		17					
M.H. 73	M.H. 74		16					
M.H. 74	M.H. 62		10					
M.H. 900X800	M.H. 900X800		119					
M.H. 75	M.H. 76		17					
M.H. 76	M.H. 64		17					
M.H. 77	M.H. 78		12					
M.H. 78	M.H. 79		41					
M.H. 79	M.H. 23		28					
M.H. 80	M.H. 81		17					
M.H. 81	M.H. 82		17					
M.H. 82	M.H. 83		17					
M.H. 83	M.H. 79		12					
M.H. 900X800	M.H. 900X800		21					
M.H. 84	M.H. 85		17					
M.H. 85	M.H. 86		17					
M.H. 86	M.H. 87		17					
M.H. 87	M.H. 84		17					
M.H. 88	M.H. 89		17					
M.H. 89	M.H. 90		17					
M.H. 90	M.H. 91			20				
M.H. 91	M.H. 92			17				

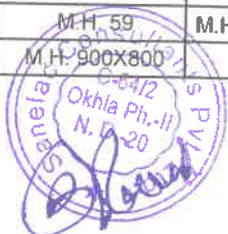


S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 92	M.H. 93			17				
M.H. 92	M.H. 27			31				
M.H. 94	M.H. 95		16					
M.H. 95	M.H. 96		17					
M.H. 96	M.H. 97		16					
M.H. 97	M.H. 98		6					
M.H. 98	M.H. 99		11					
M.H. 99	M.H. 100		17					
M.H. 100	M.H. 101		5					
M.H. 101	M.H. 91			24				
M.H. 102	M.H. 103		17					
M.H. 103	M.H. 104		18					
M.H. 104	M.H. 105		16					
M.H. 105	M.H. 101		7					
M.H. 106	M.H. 107		17					
M.H. 107	M.H. 108		17					
M.H. 108	M.H. 109		17					
M.H. 109	M.H. 92		7					
M.H. 900X800	M.H. 900X800		140					
FOR RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING								
M.H. 1	M.H. 2		17					
M.H. 2	M.H. 3		16					
M.H. 3	M.H. 4		12					
M.H. 4	M.H. 5		38					
M.H. 5	M.H. 6			35				
M.H. 6	M.H. 7			30				
M.H. 7	M.H. 8			36				
M.H. 8	M.H. 9			37				
M.H. 9	M.H. 10			9				
M.H. 10	M.H. 11			17				
M.H. 11	M.H. 12			17				
M.H. 12	M.H. 13			17				
M.H. 13	M.H. 14			17				
M.H. 14	M.H. 15			15				
M.H. 15	M.H. 16				18			
M.H. 16	M.H. 17				18			
M.H. 17	STP-2				15			
M.H. 900X800	M.H. 900X800		18					
M.H. 18	M.H. 19		17					
M.H. 19	M.H. 20		29					
M.H. 20	M.H. 21		35					
M.H. 21	M.H. 22		13					
M.H. 22	M.H. 23		35					



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 23	M.H. 24		25					
M.H. 24	M.H. 25		10					
M.H. 25	M.H. 26		25					
M.H. 26	M.H. 27			18				
M.H. 27	M.H. 28			17				
M.H. 28	M.H. 29			17				
M.H. 29	M.H. 30			17				
M.H. 30	M.H. 31				28			
M.H. 31	M.H. 32				33			
M.H. 32	M.H. 15				21			
M.H. 900X800	M.H. 900X800		5					
M.H. 33	M.H. 34		17					
M.H. 34	M.H. 35		17					
M.H. 35	M.H. 36		15					
M.H. 36	M.H. 26		8					
M.H. 900X800	M.H. 900X800		20					
M.H. 37	M.H. 38		8					
M.H. 38	M.H. 39		17					
M.H. 39	M.H. 40		17					
M.H. 40	M.H. 40		17					
M.H. 40	M.H. 34		9					
M.H. 900X800	M.H. 900X800		24					
M.H. 42	M.H. 43		17					
M.H. 43	M.H. 44		17					
M.H. 44	M.H. 45		17					
M.H. 45	M.H. 26		12					
M.H. 46	M.H. 47		16					
M.H. 47	M.H. 48		17					
M.H. 48	M.H. 49		18					
M.H. 49	M.H. 50		18					
M.H. 48	M.H. 51		17					
M.H. 51	M.H. 52		17					
M.H. 52	M.H. 53		17					
M.H. 53	M.H. 25		12					
M.H. 54	M.H. 55		15					
M.H. 55	M.H. 49		15					
M.H. 900X800	M.H. 900X800		24					
M.H. 56	M.H. 56a		7					
M.H. 56a	M.H. 57		17					
M.H. 57	M.H. 58		17					
M.H. 58	M.H. 59		17					
M.H. 59	M.H. 23		12					
M.H. 900X800	M.H. 900X800		12					



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 60	M.H. 61		17					
M.H. 61	M.H. 62		17					
M.H. 62	M.H. 63		17					
M.H. 63	M.H. 64		8					
M.H. 64	M.H. 22		11					
M.H. 900X800	M.H. 900X800		15					
M.H. 65	M.H. 66		16					
M.H. 66	M.H. 67		16					
M.H. 67	M.H. 20		12					
M.H. 68	M.H. 69		16					
M.H. 69	M.H. 24		18					
M.H. 900X800	M.H. 900X800		30					
M.H. 70	M.H. 71		17					
M.H. 71	M.H. 5		18					
M.H. 72	M.H. 73		17					
M.H. 67	M.H. 74		17					
M.H. 74	M.H. 75		17					
M.H. 75	M.H. 6		9					
M.H. 900X800	M.H. 900X800		10					
M.H. 76	M.H. 77		9					
M.H. 72	M.H. 78		17					
M.H. 72	M.H. 79		17					
M.H. 72	M.H. 80		17					
M.H. 72	M.H. 7		9					
M.H. 900X800	M.H. 900X800		12					
M.H. 81	M.H. 82		17					
M.H. 82	M.H. 83		17					
M.H. 83	M.H. 84		17					
M.H. 84	M.H. 85		17					
M.H. 85	M.H. 8		9					
M.H. 900X800	M.H. 900X800		6					
M.H. 86	M.H. 87		17					
M.H. 87	M.H. 88		17					
M.H. 88	M.H. 5		12					
M.H. 900X800	M.H. 900X800		18					
M.H. 89	M.H. 90		8					
M.H. 90	M.H. 91		8					
M.H. 91	M.H. 92		8					
M.H. 92	M.H. 93		8					
M.H. 93	M.H. 6		12					
M.H. 900X800	M.H. 900X800		30					



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 94	M.H. 95		8					
M.H. 95	M.H. 96		10					
M.H. 96	M.H. 97		18					
M.H. 97	M.H. 98		17					
M.H. 98	M.H. 99		8					
M.H. 99	M.H. 7		12					
M.H. 99a	M.H. 96		6					
M.H. 900X800	M.H. 900X800		30					
M.H. 100	M.H. 101		9					
M.H. 101	M.H. 102		18					
M.H. 102	M.H. 103		17					
M.H. 103	M.H. 104		21					
M.H. 104	M.H. 105		20					
M.H. 105	M.H. 106		12					
M.H. 106	M.H. 107		17					
M.H. 107	M.H. 108		17					
M.H. 108	M.H. 109		22					
M.H. 109	M.H. 110		22					
M.H. 110	M.H. 111		7					
M.H. 111	M.H. 112		17					
M.H. 112	M.H. 113		17					
M.H. 113	M.H. 114			17				
M.H. 114	M.H. 115			17				
M.H. 115	M.H. 116			17				
M.H. 116	M.H. 117			17				
M.H. 117	M.H. 118				12			
M.H. 118	M.H. 119				16			
M.H. 119	M.H. 120				10			
M.H. 120	M.H. 121				17			
M.H. 121	M.H. 122				17			
M.H. 122	M.H. 17				17			
M.H. 123	M.H. 124		17					
M.H. 124	M.H. 125		7					
M.H. 125	M.H. 126		8					
M.H. 126	M.H. 127		17					
M.H. 127	M.H. 128		9					
M.H. 128	M.H. 129		17					
M.H. 129	M.H. 130		17					
M.H. 130	M.H. 131		17					
M.H. 131	M.H. 103		12					
M.H. 900X800	M.H. 900X800		66					
M.H. 132	M.H. 133		7					
M.H. 133	M.H. 134		16					
M.H. 134	M.H. 135		17					
M.H. 135	M.H. 136		17					



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 136	M.H. 137		10					
M.H. 137	M.H. 138		17					
M.H. 138	M.H. 139		17					
M.H. 139	M.H. 140		17					
M.H. 140	M.H. 141			17				
M.H. 141	M.H. 142			13				
M.H. 142	M.H. 143			4				
M.H. 143	M.H. 144			17				
M.H. 144	M.H. 145			13				
M.H. 145	M.H. 146			3				
M.H. 146	M.H. 147			17				
M.H. 147	M.H. 148				12			
M.H. 148	M.H. 149				4			
M.H. 149	M.H. 150				17			
M.H. 150	M.H. 151				15			
M.H. 151	M.H. 152				18			
M.H. 152	M.H. 153				17			
M.H. 153	M.H. 118				5			
M.H. 900X800	M.H. 900X800		60					
M.H. 154	M.H. 155		17					
M.H. 155	M.H. 156		17					
M.H. 156	M.H. 157		17					
M.H. 157	M.H. 158		17					
M.H. 158	M.H. 159		6					
M.H. 159	M.H. 160		17					
M.H. 160	M.H. 137		16					
M.H. 161	M.H. 162		17					
M.H. 162	M.H. 158		10					
M.H. 900X800	M.H. 900X800		32					
M.H. 163	M.H. 164		17					
M.H. 164	M.H. 165		15					
M.H. 165	M.H. 166		8					
M.H. 166	M.H. 167		17					
M.H. 167	M.H. 168		17					
M.H. 168	M.H. 169		17					
M.H. 169	M.H. 170		17					
M.H. 170	M.H. 171		17					
M.H. 171	M.H. 172		17					
M.H. 172	M.H. 173		10					
M.H. 173	M.H. 140		16					
M.H. 900X800	M.H. 900X800		64					
M.H. 174	M.H. 175		17					
M.H. 175	M.H. 176		17					
M.H. 176	M.H. 177		17					
M.H. 177	M.H. 178		17					
M.H. 178	M.H. 179		17					
M.H. 179	M.H. 180		17					



SANELAC CONSULTANTS PVT LTD

S.No.	Name of Sewerage Line	MANHOLE	200 MM DIA	250 MM DIA	300 MM DIA	350 MM DIA	100 MM DIA	150 MM DIA
M.H. 180	M.H. 181		8					
M.H. 181	M.H. 182		10					
M.H. 182	M.H. 142		16					
M.H. 900X800	M.H. 900X800		25					
M.H. 183	M.H. 184		14					
M.H. 184	M.H. 185		7					
M.H. 185	M.H. 186		15					
M.H. 186	M.H. 188		15					
M.H. 188	M.H. 189		15					
M.H. 189	M.H. 190		15					
M.H. 190	M.H. 191		15					
M.H. 191	M.H. 145		15					
M.H. 900X800	M.H. 900X800		30					
M.H. 192	M.H. 193		15					
M.H. 193	M.H. 194		15					
M.H. 194	M.H. 195		15					
M.H. 195	M.H. 196		15					
M.H. 196	M.H. 197		15					
M.H. 197	M.H. 198		10					
M.H. 198	M.H. 148		16					
M.H. 900X800	M.H. 900X800		42					
M.H. 199	M.H. 200		8					
M.H. 200	M.H. 201		17					
M.H. 201	M.H. 202		17					
M.H. 202	M.H. 203		17					
M.H. 203	M.H. 204		10					
M.H. 204	M.H. 151		16					
M.H. 900X800	M.H. 900X800		48					
STP (Industrial Building) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.								810
STP (Residential Plots) 100 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.							700	
STP (Residential Plots, Community-1, Community-2 & Commercial) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.								400
TOTAL		0 Mtr	7761 Mtr	2259 Mtr	708 Mtr	5 Mtr	700 Mtr	1210 Mtr
SAY			7800 Mtr	2350 Mtr	750 Mtr	20 Mtr	750 Mtr	1250 Mtr

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PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

ANNEXURE - VI

MATERIAL STATEMENT FOR ROAD WORKS

TAG	LENGTH (M)	WIDTH (M)	AREA (6 MTR)	AREA (9 MTR)	AREA (12 MTR)	AREA (18 MTR)	AREA (24 MTR)	UNIT
[A]								
FOR INDUSTRIAL PLOT								
A	475.00	9.00		4275.00				SQM.
B	3400.00	18.00				61200.00		SQM.
C	280.00	24.00					6720.00	SQM.
TOTAL	4155 Mtr	54 Mtr	0 Mtr	4275 Mtr	0 Mtr	61200 Mtr	6720 Mtr	
FOR RESIDENTIAL PLOT								
A1	5500.00	9.00		49500.00				SQM.
A2	775.00	24.00					18600.00	SQM.
TOTAL	6275 Mtr	30 Mtr	0 Mtr	49500 Mtr	0 Mtr	0 Mtr	18600 Mtr	
GRAND TOTAL	10430 Mtr	84 Mtr	0 Mtr	53775 Mtr	0 Mtr	61200 Mtr	25320 Mtr	SQM.



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DOMESTIC WATER SUPPLY DESIGN STATEMENT MASTER SCHEME FOR INDUSTRIAL PLOTS & FOR RESIDENTIAL PLOTS.									
Sr. No.	DESCRIPTION	DOMESTIC WATER DEMAND IN M3/DAY		PEAK 3 times of Average Flow (m3/hr.)	DIA IN mm	PIPE LENGTH			HEAD LOSS (IN m)
		SELF	TOTAL			IN meter	Equivalent Pipe & Fittings 10%	VELOCITY IN m/sec.	
A]	HSVP / GMDA MAIN WATER SUPPLY LINE FOR INDUSTRIAL PLOTS & FOR RESIDENTIAL PLOTS.								
1	HSVP / GMDA Domestic Water Supply Line to W (Water Meter) FOR UGT-1 RESIDENTIAL BUILDING	1340.00	1297.00	162.125	150.00	120	12	132	6.41
2	HSVP / GMDA Domestic Water Supply Line to W (Water Meter) FOR UGT-1 COMMERCIAL BUILDING	768.00	743.00	92.875	150.00	360	36	396	6.86
B]	DOMESTIC WATER SUPPLY / DOMESTIC OHT FILLING FOR INDUSTRIAL PLOTS & FOR RESIDENTIAL PLOTS.								
	FOR COMMERCIAL PLOTS								
1	W (Water Meter Room) to W1 (WTP Pump Room)	743.80	743.80	92.975	150.00	10	1	11	0.19
2	W3 to W2 (WTP Pump Room)	743.80	743.80	92.975	150.00	140	14	154	2.67
3	W4 to W3	88.30	543.50	67.938	100.00	561	56.1	618	43.26
4	W5 to W4	39.70	455.20	56.900	100.00	840	84	924	46.59
5	W6 to W5	192.90	192.90	24.113	100.00	1985	198.5	2184	22.50
6	W7 TO W5	222.60	222.60	27.825	150.00	1481	148.1	1630	3.04
7	W8 TO W3	79.40	199.00	24.875	150.00	1026	102.6	1129	1.71
8	W9 TO W8	119.60	119.60	14.950	100.00	522	52.2	575	2.45

100mm ϕ DZ - 4301mL
150mm ϕ DZ - 2984mL



Sr. No.	DESCRIPTION	DOMESTIC WATER DEMAND IN M3/DAY		PEAK 3 times of Average Flow (m3/hr.)	DIA IN mm	PIPE LENGTH			VELOCITY IN m/sec.	HEAD LOSS (IN m)
		SELF	TOTAL			IN meter	Equivalent Pipe & Fittings 10%	TOTAL LENGTH		
	FOR RESIDENTIAL PLOTS									
12	WS2 TO WS1 (WTP Pump Room)	51.25	1297.00	162.125	150.00	130 Mtr	13	143	2.55	6.95
13	WS3 TO WS2	93.20	1117.15	139.644	100.00	1001 Mtr	100.1	1102	4.94	292.52
14	WS4 TO WS3	119.60	119.60	14.950	150.00	833 Mtr	83.3	917	0.24	0.54
15	WS5 TO WS3	116.50	116.50	14.563	150.00	1265 Mtr	126.5	1392	0.23	0.78
16	WS6 TO WS3	116.50	377.40	47.175	100.00	340 Mtr	34	374	1.67	13.33
17	WS7 TO WS6	110.30	110.30	13.788	100.00	758 Mtr	75.8	834	0.49	3.05
18	WS8 TO WS6	150.60	150.60	18.825	150.00	1374 Mtr	137.4	1512	0.30	1.37
19	WS9 TO WS3	150.60	150.60	18.825	100.00	634 Mtr	63.4	698	0.67	4.55
20	WS10 TO WS1	51.25	218.30	27.288	200.00	1009 Mtr	100.9	1110	0.24	0.49
21	WS11 TO WS10	15.60	167.05	20.881	100.00	100 Mtr	10	110	0.74	0.87
22	WS12 TO WS11	90.10	90.10	11.263	100.00	648 Mtr	64.8	713	0.40	1.80
23	WS13 TO WS11	61.35	61.35	7.669	150.00	668 Mtr	66.8	735	0.12	0.13
24	WS14 TO WS10	12.60	308.65	38.581	150.00	1589 Mtr	158.9	1748	0.61	5.96
25	WS15 TO WS14	61.35	61.35	7.669	100.00	434 Mtr	43.4	478	0.27	0.59
26	WS16 TO WS14	234.70	234.70	29.338	100.00	435 Mtr	43.5	479	1.04	7.09

100 mm d = 4788 m
150 mm d = 6447 m
200 mm d = 1110 m



PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

FLUSHING WATER SUPPLY DESIGN STATEMENT MASTER SCHEME FOR FOR INDUSTRIAL PLOTS & FOR RESIDENTIAL PLOTS.										
Sr. No.	NODE No.	FLUSHING WATER DEMAND IN M3/DAY		PEAK 3 times of Average Flow (m3/hr.)	DIA IN mm	PIPE LENGTH			VELOCITY IN m/sec.	HEAD LOSS (IN m)
		SELF	TOTAL			IN meter	Equivalent Pipe & Fittings 10%	Total Pipe Length		
A]	FLUSHING WATER SUPPLY LINE FOR INDUSTRIAL PLOTS & FOR RESIDENTIAL PLOTS.									
FOR COMMERCIAL PLOTS										
1	F1 TO (STP Area)	572.00	572.00	71.500	150.00	10 Mtr	1	11	1.12	0.08
2	F2 TO F1	72.70	408.00	51.000	100.00	383 Mtr	38.3	422	1.80	11.50
3	F3 to F2	32.70	335.30	41.913	100.00	673 Mtr	67.3	741	1.48	14.05
4	F4 TO F3	119.20	119.20	14.900	100.00	1459 Mtr	145.9	1605	0.53	4.49
5	F5 to F3	183.40	183.40	22.925	100.00	1199 Mtr	119.9	1319	0.81	8.19
6	F6 to F1	65.50	164.00	20.500	100.00	942 Mtr	94.2	1037	0.73	5.24
7	F7 TO F6	98.50	98.50	12.313	100.00	445 Mtr	44.5	490	0.44	0.96
FOR RESIDENTIAL PLOTS										
8	F1 TO (STP1 Area)	797.90	797.90	99.738	150.00	15 Mtr	1.5	17	1.57	0.22
9	F2 TO F1	59.80	789.70	98.713	100.00	522 Mtr	52.2	575	3.49	53.17
10	F3 TO F1	9.75	150.00	18.750	150.00	312 Mtr	31.2	344	0.29	0.20
11	F4 TO F3	9.75	140.25	17.531	100.00	110 Mtr	11	121	0.62	0.46
12	F5 TO F4	25.10	130.50	16.313	100.00	433 Mtr	43.3	477	0.58	1.58
13	F6 TO F4	55.20	55.20	6.900	100.00	961 Mtr	96.1	1058	0.24	0.71
14	F7 TO F4	25.10	50.20	6.275	100.00	230 Mtr	23	253	0.22	0.14
15	F8 TO F7	25.10	25.10	3.138	100.00	713 Mtr	71.3	785	0.11	0.12
21	F1 TO STP2 Area) to F	19.80	558.10	69.763	150.00	15 Mtr	1.5	17	1.10	0.11
22	F2 TO F1	21.80	21.80	2.725	100.00	226 Mtr	22.6	249	0.10	0.03
23	F3 TO F2	171.40	171.40	21.425	100.00	1454 Mtr	145.4	1600	0.76	8.76
24	F4 TO F2	172.50	172.50	21.563	100.00	885 Mtr	88.5	974	0.76	5.40
25	F5 TO F1	7.80	172.60	21.575	100.00	115 Mtr	11.5	127	0.76	0.70
26	F6 TO F5	103.40	103.40	12.925	100.00	1476 Mtr	147.6	1624	0.46	3.49
27	F7 TO F5	61.40	61.40	7.675	100.00	931 Mtr	93.1	1025	0.27	0.84

100 mm φ ~ 14482 mtr
150 mm φ ~ 389 mtr



PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65625 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED- 01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM, BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

STORM WATER DESIGN CHART

STORM WATER DESIGN CHART																				
S.No.	Formula used for Velocity adopted - Mannings Equation	Formula used - Rational				Total Area (Sq.m.)	Self Flow Q=10CIA & 30 mm Intensity of Rainfall (m3/Hr)	Total Net Flow in Line (M3/ Hr)	Total Net Flow in Line (LPS)	Water Section Pipe Dia	Velocity (m/sec)	Capacity of Pipe with full pipe (LPS)	Check for Carrying Capacity	Gradient	Pipe Length (m)	Fall Meter	Ground Level	Invert at Start In (-) meter	Invert at End in (-) meter	Depth of M.H.
		Q = 10 C I A																		
		Coefficient of Run off, Av. Value of 'C' taken as 0.7 (Av.)																		
		Intensity of Rain Fall - 30 mm/h																		
		Area in Hectares																		
		C	I	A																



PROJECT : PROPOSED REVISED LAYOUT PLAN FOR INDUSTRIAL PLOTTED COLONY MEASURING 129.65825 ACRES (OF ALREADY LICENSED LAND VIDE LIC NO. 104 OF 2024 DATED-01.08.2024) IN VILLAGE SHIDRAWALI, TEHSIL MANESAR, DISTRICT GURUGRAM. BEING DEVELOPED BY SIGNATUREGLOBAL (INDIA) LTD.

Total water supply (Av) as per detail for daily water consumption	
Formula used for Velocity adopted - Mannings Equation	
$V = \frac{1}{n} (D/4)^{2/3} (S)^{1/2}$	
n	
Value of n adopted for Solid Drain Pipes = 0.010	

SEWERAGE CALCULATION SHEET

Sr. No.	Node No.	Length (Meter)	Total Sewage Generated Per day Domestic 80 % & Flushing 100 % Goes to STP (KLD)			Peak = Av x 3 in KLD	Flow per second for area (LPS)	Pipe Dia / Size of SW Pipes	Gradient [1 : 200] (S)	Velocity created in (V) m/s	Capacity of Pipe with 1/2 full pipe (LPS)	Fall in (Meter)	Check for Carrying Capacity	Ground Level (Meter)	Invert at Start in (-) (Meter)	Invert at End in (-) (Meter)	Depth of M.H.
			Self (KLD)	Previous (KLD)	Total (KLD)												
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
FOR INDUSTRIAL PLOTS																	
1	S1 TO S2 (MH-1 TO MH-10)	151.0	72.00	-	72.0	216	2.50	200	195	0.97	15.26	0.77	OK	0.00	-0.900	-1.674	1.674
2	S1a TO S1b (MH-42 TO MH-50)	151.0	35.0	-	35.0	105	1.22	200	195	0.97	15.26	0.77	OK	0.00	-0.900	-1.674	1.674
3	S1c TO S1d (MH-51 TO MH-58)	142.0	47.0	-	47.0	141	1.63	200	195	0.97	15.26	0.73	OK	0.00	-0.900	-1.628	1.628
4	S3a TO S3 (MH-59 TO MH-62)	152.0	0.00	-	0.0	0	0.00	200	195	0.97	15.26	0.78	OK	0.00	-0.900	-1.679	1.679
5	S2 TO S3 (MH-10 TO MH-17)	160.0	89.00	154.0	243.0	729	8.44	250	300	0.91	22.31	0.53	OK	0.00	-1.674	-2.208	2.208
6	S3 TO S4 (MH-17 TO MH-22)	142.0	9.0	243.0	252.0	756	8.75	250	300	0.91	22.31	0.47	OK	0.00	-2.208	-2.681	2.681
7	S4 TO S5 (MH-22 TO MH-26)	108.0	11.0	252.0	263.0	789	21.04	250	300	0.91	22.31	0.36	OK	0.00	-2.681	-3.041	3.041
8	S5 TO S6 (MH-26 TO MH-34)	312.0	62.0	263.0	325.0	975	23.19	300	350	0.95	33.58	0.89	OK	0.00	-3.041	-3.932	3.932
9	S6 TO S7 (MH-28 TO MH-33)	454.0	136.0	325.0	461.0	1383	27.92	300	350	0.95	33.58	1.30	OK	0.00	-3.932	-5.230	5.230
10	S7 TO STP	5.0	0.0	804.0	804.0	2412	38.54	350	350	1.05	50.65	0.01	OK	0.00	-5.230	-5.244	5.244
11	S8 TO S9 (MH-63 TO MH-69)	218.0	145.00	-	145.0	435	5.03	200	195	0.97	15.26	1.12	OK	0.00	-0.900	-2.018	2.018
12	S9 TO S10 (MH-63 TO MH-74)	112.0	20.00	-	20.0	60	0.89	250	300	0.91	22.31	0.37	OK	0.00	-2.018	-2.391	2.391
13	S10 TO S5 (MH-74 TO MH-26)	252.0	86.00	-	178.0	534	6.18	250	300	0.91	22.31	0.84	OK	0.00	-2.391	-3.231	3.231
14	S11 TO S10 (MH-83 TO MH-73)	221.0	92.00	-	92.0	276	3.19	200	195	0.97	15.26	1.13	OK	0.00	-0.900	-2.033	2.033
15	S12 TO S13 (MH-105 TO MH-115)	240.0	95.0	-	95.0	285	3.30	200	195	0.97	15.26	1.23	OK	0.00	-0.900	-2.131	2.131
16	S13 TO S14 (MH-115 TO MH-125)	280.0	60.0	95.0	155.0	465	8.47	250	300	0.91	22.31	0.93	OK	0.00	-2.131	-3.064	3.064
17	S14 TO S7 (MH-125 TO MH-133)	240.0	62.0	244.0	306.0	918	10.63	250	300	0.91	22.31	0.80	OK	0.00	-3.064	-3.864	3.864
18	S15 TO S13 (MH-134 TO MH-138)	190.0	89.0	-	89.0	267	3.09	200	195	0.97	15.26	0.97	OK	0.00	-0.900	-1.874	1.874
FOR RESIDENTIAL PLOTS																	
1	S1 TO S2 (MH-1 TO MH-19)	752.0	188	-	188.0	564	6.53	200	195	0.97	15.26	3.86	OK	0.00	-0.900	-4.756	4.756
2	S2 TO S3 (MH-19 TO MH-27)	312.0	49	188.0	237.0	711	8.23	250	300	0.91	22.31	1.04	OK	0.00	-4.756	-5.796	5.796
3	S3 TO STP	5.0	0	237.0	237.0	711	18.23	250	300	0.91	22.31	0.02	OK	0.00	-5.796	-5.813	5.813
4	S4 TO S2 (MH-49 TO MH-62)	440.0	138	-	138.0	414	4.79	250	300	0.91	22.31	1.47	OK	0.00	-0.900	-2.367	2.367
4	S5 TO S3 (MH-94 TO MH-109)	432.0	150	-	150.0	450	5.21	250	300	0.91	22.31	1.44	OK	0.00	-0.900	-2.340	2.340



Sr. No.	Node No.	Length (Meter)	Total Sewage Generated Per day Domestic 80 % & Flushing 100 % Goes to STP (KLD)			Peak = Av x 3 in KLD	Flow per second for area (LPS)	Pipe Dia / Size of SW Pipes	Gradient [1 : 200] (S)	Velocity created in (V) m/s	Capacity of Pipe with 1/2 full pipe (LPS)	Fall in (Meter)	Check for Carrying Capacity	Ground Level (Meter)	Invert at Start in (-) (Meter)	Invert at End in (+)(Meter)	Depth of M.H.
			Self (KLD)	Previous (KLD)	Total (KLD)												
FOR RESIDENTIAL PLOTS, COMMUNITY BUILDING-1, COMMUNITY BUILDING-2 & COMMERCIAL BUILDING																	
1	S1 TO S2 (MH-1 TO MH-8)	654.0	146.0	-	146.0	438	5.07	200	195	0.97	15.26	3.35	OK	0.00	-0.900	-4.254	4.254
2	S2 TO S3 (MH-8 TO MH-14)	354.0	113.0	146.0	259.0	777	8.99	250	300	0.91	22.31	1.18	OK	0.00	-4.254	-5.434	5.434
3	S3 TO S4 (MH-14 TO MH-19)	113.0	20.0	259.0	432.0	1296	15.00	300	300	1.03	36.27	0.38	OK	0.00	-5.434	-5.811	5.811
4	S4 TO STP	5.0	0.0	432.0	1206.0	3618	41.88	350	350	1.05	50.65	0.01	OK	0.00	-5.811	-5.825	5.825
5	S5 TO S3 (MH-20 TO MH-27)	611.0	153.0	-	153.0	459	5.31	200	195	0.97	15.26	3.13	OK	0.00	-0.900	-4.033	4.033
6	S6 TO S7 (MH-100 TO MH-118) & COMMUNITY BUILDING - 1	448.0	221.0	-	221.0	663	7.67	200	195	0.97	15.26	2.30	OK	0.00	-0.900	-3.197	3.197
7	S7 TO S8 (MH-118 TO MH-127)	400.0	128.0	221.0	349.0	1047	12.12	250	300	0.91	22.31	1.33	OK	0.00	-3.197	-4.531	4.531
8	S8 TO S4 (MH-127 TO MH-135)	130.0	54.0	349.0	774.0	2322	26.88	300	350	0.95	33.58	0.37	OK	0.00	-4.531	-4.902	4.902
9	S9 TO S8 (MH-149 TO MH-201), COMMUNITY BUILDING - 2 & COMMERCIAL BUILDING	651.0	371.0	-	371.0	1113	12.88	200	195	0.97	15.26	3.34	OK	0.00	-0.900	-4.238	4.238
A	STP (Industrial Building) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.	810.0															
B	STP (Residential Plots near Commercial Building) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.	430.0															
C	STP (Residential Plots, Community-1, Community-2 & Commercial) 150 mm dia Overflow Discharge to External GMDA/HSVP Sewage line.	255.0															

