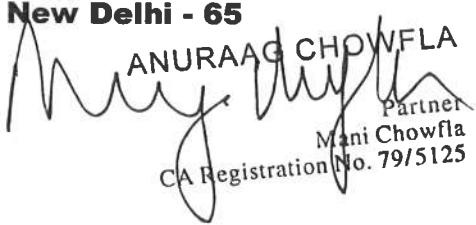


# **PIONEER PARK "PRESIDIA" GROUP HOUSING AT SECTOR 62, GURGAON**

## **SUBMISSION REPORT ON SERVICES PLAN / ESTIMATE**

### **ARCHITECTS**

**M/s Manichowla Architects**  
**56/3, Friends Colony,**  
**New Delhi - 65**

  
ANURAAG CHOWDHURY  
Partner  
Mani Chowdhury  
CA Registration No. 79/5125

For Pioneer Urban Land & Infrastructure Limited

  
Authorised Signatory

### **PLUMBING CONSULTANTS**

**M/s MKG CONSULTANTS**  
**A -8, Paryavaran Complex**  
**IGNOU Road,**  
**New Delhi - 110030.**  
**Tel. : 011 - 29532720**

  
M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

**PROJECTS**  
**PIONEER PARK "PRESIDIA" GROUP HOUSING**  
**AT SECTOR 62, GURGAON**

**SUBJECTS**

**ESTIMATE FOR PROVIDING WATER SUPPLY, SEWERAGE AND STORM WATER DRAINAGE FOR PIONEER PARK "PRESIDIA" GROUP HOUSING ,GURGAON**

Gurgaon town is an important town of Haryana State situated on Delhi-Jaipur National Highway No. 8 at a distance of 35 kms from Delhi. Being in the national capital region, the town has fast developing tendency and potential. Further it has also started sharing the growing industrial load of Delhi & Faridabad. In order of relieve the growing pressure of population in Delhi, it has been decided by the Haryana Govt. to establish various residential sectors along with infrastructure facilities in Gurgaon. Keeping in view the colony for residential development scheme has been planned. *Service plan Estimate of Group Water Supply Housing Colony measuring 10.30 Acres out of 24.66 Acres in Sec-62 village Chhata, Gurgaon has been framed vide DGTCP*  
1. **Source** DGTCP Memo No. 1675 dt. 09/02/11.

The source of water supply in this area is tubewell as underground water is sweet and fit for human consumption, moreover, the water is available at reasonable depth, the average yield of Tubewells, with approximate 60' to 80'; strainer will be about 20 KL per hour. 6 Nos. Tubewells are required to cope with the daily requirement of water for the initial period of 5 years by which time canal water is expected.

**2. Tubewells**

The proposed tubewells shall be 510 mm bore drilled with reverse rotary rig and installed with 80 mm i/d housing pipe and 50 mm i/d slotted tube as strainer. The provision taken in the estimate under the sub-head tubewell includes the cost of peagravel packing. The lift of tubewell is limited due to incrustation and rusting of strainer. Therefore, out of these tube wells the drilling of tubewells will be done for 2 Nos. tube wells and further tubewells will be drilled as the demand develops till the scheme is handed over the department or till the canal filtration scheme starts supplying water, whichever is earlier.

**3. Pump Chambers and Pumping Machinery**

It is proposed to equip each tubewell with an electricity driven pumping set-Ejecto type or submersible pump capable of delivering about 20,000 Ltrs per hour. It is also proposed to equip 2 Nos. pumping sets with stand by diesel gen set engines for operation during failure of electricity at four locations.

**4. Ground Storage**

Underground storage tank for One day of total daily demand of water supply have been proposed at two locations in the scheme. The same shall be fed by 6 Nos. of tube wells at present and shall be later augmented through HUDA mains canal supply at later date.

**6. Distribution System**

The distribution system for this development are has been designed for 172.5 Liters per person per day @3.0 times the average rate of flow on "Hazen

ANURAAG CHOWFLA  
Partner  
Mani Chowfla  
CA Registration No. 79/5125

M.K. Gupta  
MIE No. 045780/3  
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A-8, Paryavarjan Complex  
IGNOU Road  
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Williams" formula with C-100. Necessary provision for laying C.I./D.I. pipes only conforming to relevant IS standards along with valves and specials has been made in this Estimate.

#### 7. Rising Main

Rising mains from HUDA water main on sector road to water works have also been designed and provision for C.I. (class LA)/DI KA pipe line has been made in this estimate

#### 8. Sewerage

This colony has a terrain which is mainly flat with a gentle slopes with one side dropped by avg. 2 meter. Sewerage network has been proposed to slope towards the South providing for self cleaning velocities without any deep excavation. It would thus be possible to connect the internal sewers in the plans with HUDA main sewer proposed on the development plan road in close proximity of the last manhole without any pumping being involved. At Gurgaon normally it is possible to get 2.0 ft . / sec velocity.

The internal sewer lines have also been designed for three times average D.W.F in relation to water supply demand. It has been assumed that about 75 % of the domestic water supply shall find its way into the proposed sewer. All the SW / RCC pipes, sewer has been designed to run half/full/three fourth full.

Necessary design statement for entire internal sewerage system has been prepared and attached with estimate.

Necessary provision for laying SW/~~RESC~~ pipes sewer lines and manholes etc. has been made in this estimate.

#### 9. Storm water drainage

It has been proposed to lay underground RCC pipe drains on the road widths 40 ft. and above where it is possible to lay underground drains. The intensity of rain fall has been taken as  $\frac{1}{4}$  the inch per hour. The internal storm water drains will be jointed into external storm water drainage to be laid by HUDA on sector dividing roads. Necessary provision for kerbs and channels has been made in the estimate. The estimate for these closed drains has been included as sub work No. III A minimum size of 400 mm RCC storm water line will be provided.

#### 10. Specifications

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

#### 11. Rates

The estimate has been based on the present market rates and probable escalation in prices.

#### 12. Cost

The total cost of the Scheme including cost of all services works out to

Rs. ~~572.22~~ <sup>824.32</sup> Lakhs including 3% contingencies and 14% departmental charges, price, escalation unfrozen, Adm. charges).

ANURAAG CHOWFLA  
777.30 Lacs  
CA Registration No. 79/5125  
Mani Chowla  
Partner

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

### I. DESIGN CALCULATION :

S. N.	Daily requirement	Area in Sqmtr <i>Total nos. of units.</i>	Height of the building	Population	Service Population	Water Requirement Per Person	Total Water requirement (in Ltr)	
1	TOWER A	54	91.7	270	92	172.5	58995	
2	TOWER B	42	72.5	210		172.5	36225	
3	TOWER C	40	84.5	200		172.5	34500	
4	TOWER D	40	72.5	200		172.5	34500	
5	TOWER E	52	91.7	260		172.5	44850	
<del>6</del>	<del>EMB</del>			<del>120</del>		<del>135</del>	<del>16200</del>	
			NS.				16,000	
	<b>TOTAL</b>	<b>PS</b>					<b>225270</b>	<b>LPD</b> <b>50000 Ltrs.</b>
	<b>ADD 10% MISS.</b>	<b>shops</b>					<b>22527</b>	<b>LPD</b> <b>510070 Ltrs.</b>
	<b>GRAND TOTAL</b>						<b>247797</b>	<b>LPD</b>
	<b>SAY (GUM/DAY)</b>	<b>Total</b>					<b>26127</b>	<b>LPD</b> <b>270.70 KL</b>
	<i>Add 10% Grand Total</i>						<b>287337</b>	<b>LPD</b> <b>Say: 300KL</b>
							<b>300</b>	<b>met with treated effluent</b>
	<b>Horticulture Water Requirement</b>							
	<b>7.44 Acres @ 15000 l/acres</b>						<b>150 420</b>	<b>KL</b>
	<b>6.00</b>	<b>25,000</b>						
								<b>420.70 KLD</b>

### I. Total Water Demand in m<sup>3</sup> / day

- (a) For Domestic Purpose - Part 1  
Say

$$\text{fire demand} = 100 \times \sqrt{P} \quad 100 \times \sqrt{1.11}$$

300 250 m<sup>3</sup> /day  
300 250 m<sup>3</sup> /day

105 KL

### II. TUBEWELLS

- (a) Yield  
(b) Working Hours per Day

20-15 KL/hr  
12 Hours per Day

(c) Total water demand

410 360 250 m<sup>3</sup> /day (Excluding fire)

(d) Number of Tubewells reqd.

1.75 1.67 1.68

(=Water Demand/Discharge/Hours working per day)

0.17 0.17 0.14

(e) Add 10% as standby

1.92 1.87 1.53

Total  
Say

Nos.  
Nos.

2.00

Water to the proposed development is to be supplied by HUDA and it is proposed to install the tube-wells for augmentation/standby purposes.

### III. PUMPING MACHINERY FOR TUBEWELLS

- (a) Gross Working Head  
(b) Average fall in S.L  
(c) Depression Head  
(d) Friction loss in main

80 50 Meters  
2 6 Meters  
6 10 Meters  
10 15 Meters  
Total 98 68 Meters

Architect Urban Land & Infrastructure Limited

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

Authorised Signatory

Alkaagachha  
Partner  
Mani Chowdhury  
CA Registration No. 79/5125

(e) Discharge	12.0988	20000	LPH
(e) Horse Power		8.3951	HP
HP = $(22,000 \times 68 \times 1) / (60 \times 60 \times 75 \times 0.6)$			

$20000 \times 98$   
Say 12.09 10.00 HP

#### IV. UNDER GROUND & OVERHEAD WATER TANKS

(a) Total water demand (Daily for Domestic purposes)	420X70%	294	m³/day
(b) Proposed underground tanks for domestic use. (One day Storage)		294	m³
(c) Proposed OverHead tanks for domestic use. (Half day Storage)		150 125	m³
(d) Minimum Separate Static Storage for fire fighting purpose provided. But it is proposed to Construct an U.G.T of 30KL for new water 30KL for domestic use & 20KL for fire fighting purposes i.e. Total = 50KL		200	m³

V. BOOSTING MACHINERY (Water Supply Pumps)

(a) Daily Domestic Water Demand	420X70%	294	m³/day
(b) Discharge per hour @ 12 hr. pumping / day		24.33 20.83 347.2	m³/Hour LPM
Say		408 1.0	
(c) No. of Working pump		408	LPM
(d) Proposed Pump discharge (Working)		408 947.22 400.00	LPM (Each Pump)
Say		410	
Gross Working Head			
(d) Suction lift – positive suction		0	Meters
(e) Frictional Loss in Mains & Specials		25	Meters
(f) Max Clear Head required		125 100 125	Meters
Total		150	Meters
(g) H.P. of each pump required		21.03 17.00	HP
$(400 \times 125) / (60 \times 75 \times 0.65)$			
410X150		40.00	HP
Say			

It is proposed to provide 2 Nos.of pumps (1 working + 1 standby) of 10 HP Each  
for Flushing Pump Pl.see opposite.

VII. GENERATING SETS: 2x12.50 1x25

HP of Tubewell pump 25  
HP of Domestic Pump 25  
100 of Jockey Pump Total 30  
in KVA  
HP of Flushing Pump Say 1x10

Add for lighting

25 30.00  
25 54.00  
30 84  
30 60.87  
10 65  
90 10 HP  
 $100 \times 0.746 \times 1.50 = 111.90$   
Say, 120 kVA

ANURAAG CHOWFLA  
Partner  
Mani Chowla  
CA Registration No. 79/5125

M.K. Gupta  
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MKG Consultants  
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New Delhi-110 030

FINAL ABSTRACT OF COST

		Amount in Rs. Lacs
SUB WORK NO. I	WATER SUPPLY SCHEME	135.49
SUB WORK NO. II	SEWERAGE SCHEME	64.07
SUB WORK NO. III	STORM WATER DRAINAGE	47.96
SUB WORK NO. IV	ROADS & FOOT PATHS	153.62
SUB WORK NO. V	STREET LIGHTING	9.45
SUB WORK NO. VI	HORTICULTURE	8.97
SUB WORK NO. VII	MTC CHARGES INCL RESURFACING OF ROADS AFTER 1st 5 YEARS AND 2nd YEAR	151.67
	TOTAL	572.22

(Rupees Five Hundred Seventy Two Lacs and Twenty Two Thousand Only)

( Seven Hundred Ninety nine Lacs and Sixty thousand only )

Eight hundred Twenty one Lacs and Thirty two thousand Cost per Acre only

on behalf of HUDA & Infrastructure Limited

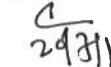
777.30 Lacs 75.46 Lacs  
~~821.32~~ 77.34  
~~799.60~~ = 773.9 Lacs  
~~821~~ 10.30  
 Per Acres.

AUTHORISED SIGNATORY

  
Authorised Signatory

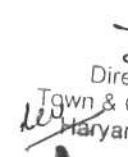
  
Executive Engineer  
HUDA Division No. 1  
Gurgaon

Checked subject to comments  
in forwarding letter No.....9338  
Dt. 24.2.11, and notes attached  
with the estimate

  
Executive Engineer (W)  
for Chief Engineer  
HUDA Panchkula  


  
Superintending Engineer  
HUDA Circle-II, Gurgaon

  
M. K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

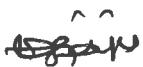
  
Director General  
Town & Country Planning,  
Haryana, Chandigarh

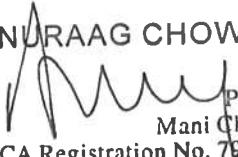
## SUB WORK No. 1 (Abstract of Cost)

## Water Supply &amp; Fire Fighting

32.84 Lacs			
1	Sub Head No. 01	Head Works	RS.2,001,500 22.00 Lacs
2	Sub Head No. 02	Pumping Machinery	RS.2,670,000 6.05 Lacs
3	Sub Head No. 03	Rising Main	RS.1,411,000 14.49 Lacs
4	Sub Head No. 04	Distribution System	864,000 1.657 Lacs
5	Sub Head No. 05	External Fire Hydrant	400,000 0.05 Lacs
6	Sub Head No. 06	Irrigation	491,620.00 9.70 Lacs
		TOTAL	RS.8,828,420 116.15.500/-
		Add 3% contingencies & PH Charges	RS.264,843.00 2.91 Lacs 3,48,465/-
		TOTAL	RS.9,092,964 149,63,965/-
		Add 49% Departmental charges + Price escalation	RS.4,455,552.16 99.90 Lacs 58,62,343/-
		TOTAL	RS.13,548,516 178,26,308/-
		Say in lacs	125.49 Say Rs. 178.30 Lacs.
			Rs. 148.85 Lacs.

For Pioneer Urban Land &amp; Infrastructure Limited

  
 Authorised Signatory

ANURAAG CHOWFLA  
  
 Partner  
 Mani Chowla  
 CA Registration No. 795125

M.K. Gupta  
 MIE No. 045780/3  
 MKG Consultants  
 A-8, Paryavaran Complex  
 IGNOU Road  
 New Delhi-110 030

**Sub Work No. 1**  
**Sub Head No. 01**

**Water Supply & Fire Fighting**  
**Head Works**

**Amount in Rs.**

1. Boring and installing tubewell with reverse rotary rig Complete with pipe and strainer to a depth of about 120 metre in all respect 2 Nos. @ Rs. 500,000/- each.	RS.1,000,000	
2. Provision for rising mains, connecting tubewells with water main and Bye-pass arrangements. a) 100 mm dia - 120m @ Rs. 950/- per m b) 150 mm dia - 100m @ Rs. 1350/- per m	RS.144,000 RS.135,000	1,44,000/- 1,35,000/- 140000/-
3. Providing Tubewell Submersible Pumps : Capacity 20000 lph at 98 M head , 2 Nos. @ Rs. 165,000/- each	RS.330,000	4,00,000/- 300
4. Provision for carriage for materials and other foreseen items L.S	RS.100,000	
5. Construction of U.G. tanks 325 KL @ Rs. 2500/KL (125 Domestic + 200 Fire) (300 + 300 lacs + 200 lacs)	RS.842,500	15,00,000/- 24.00 lacs
6. Provision for construction of Tubewell chambers of Size 1.5x1.5x1.5 m for Housing tubewell - 2Nos @ Rs. 125000/-	RS.250,000/-	1.50 lacs
7. Provision for unforeseen items/carriage of material	RS.250,000/-	0.50
<b>TOTAL</b>	<b>RS.2,991,500</b>	<b>36,94,000/- 32.84 lacs</b>
(C/O To Abstract of Cost for Subwork No.1)		

**Sub Work No. 1**  
**Sub Head No. 02**

**Water Supply & Fire Fighting**  
**Pumping Machinery**

**Amount in Rs.**

1. Providing and installing electricity driven pumping Set capable of delivering about 400 LPM of water against a total Head of 125 M complete with motor and other accessories (25 HP) 1 Set (1w+1 sby) (for domestic Water)	RS.1,500,000	4.00 lacs
2. Provision for diesel engine genset each for standby arrangements For Pumps complete with gear head arrangements of following capacities.	RS.120,000	12.00
1 No. 68 KVA @ Rs.120,000/- Each (L.S.)	RS.120,000	1,50,000/-
3. Provision for making foundations and erection of Pumping Machinery: - Lump Sum	RS.300,000	1.00
3 (a) providing and installing Elect. driven pumping set capable of delivering about 175 LPM of water against a total Head of 150m Complete in all respects (10HP) (1w+1 Standby)	RS.300,000	2.00 lacs
ANURAG CHOWFLA (1w+1 Standby)	CA Registration No. 79/5125	2.00 lacs

Parikh Chandra & Infrastructure Limited

*ADP/PSN*  
Authorised Signatory

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

4. Provision for pipes, valves and specials inside boosting chamber.	
- Lump Sum	1.00 RS.300,000/- ✓
5. Provision for electric service connection including electrical Fittings for tube-well and boosting chamber etc. including cost	
- Lump Sum <i>el. transformer</i>	RS.300,000 → 5,00,000/- 1.50
6. Provision for carriage of material and other unforeseen Items etc. L/S	RS.150,000 → 2,00,000/- 0.50 ————— RS.2,670,000 → 29,50,000/- 22.00
<b>TOTAL</b>	
(C/O To Abstract of Cost for Subwork No.1)	

**Sub-Work No. 1**  
**Sub Head No. 03**

**Water Supply & Fire Fighting**  
**Rising Main from HUDA**

*Amount in Rs.*

1. Providing , laying , jointing and testing pipe lines including Cost of excavation etc. complete in all respects.  
~~top - 80 mm dia. G.I. pipe 320m @ Rs. 2500/Mtr-/-~~ 1400/-  
~~150 - 50 mm dia. G.I. pipe 60m @ Rs. 2000/Mtr-/-~~ Part length future connection.  
~~150 - 40 mm dia. G.I. pipe 40m @ Rs. 1800/Mtr-/-~~ 750/- 1400/-
2. Providing and fixing sluice valve including cost of surface box and masonry chamber etc. complete in all respects.  
~~150 - 40 mm i/d 1 No. @ Rs. 6000/-~~ 1500/- 1400/-
3. Providing and fixing indicating plates for sluice valve and air Valves. - 1 No. @ Rs. 8000/- each  
~~1000/-~~ 1000/-
4. Providing and fixing air release valve and scour valve 1 Nos. @ Rs. 5000/- each 750/-
5. Provision for carriage for materials and other unforeseen items( (Lump) RS.50,000/- 2500/-
6. Making Water Supply Connection  
~~250,000/-~~ 250,000/- 5000/-

C. O. 5450/- Contd....

For Pioneer Urban Land & Infrastructure Limited

*Adnan*  
Authorised Signatory

**ANURAAG CHOWFLA**  
Partner  
Mani Chowla  
CA Registration No. 79/5125

*M.K. Gupta*  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi- 110 030

7. Provision for cutting of roads and making good to its original Conditions.

IN  
RS. 554 SW  
50000

RS. 100,000/-

### TOTAL

(C/O To Abstract of Cost for Subwork No.1)

RS. 1,411,000

14,18,000/-

604 SW

Total Water requirement	250.000 600.00	cum/day
hours of Pumping	16.000	hours
Q- Flow	15.625 37.500	m3/Hr
	0.004 0.010	m3/sec
L- Length of Pipe	365.000 320.00	m
Dia of Pipe	40.000 100.00	mm
	0.040 0.100	m
A	0.001 0.008	m2
V	3.454 1.250	m/s
f (constant)	0.040	
Friction Losses (Hf)	221.827 10.200	m
Fittings, Bends & Other Losses @ 25%	65.482 2.550	m
Total, Say	270.000 12.750	m

Sub Work No. 1  
Sub-Head No. 04

### Say - 15.000 Water Supply & Fire Fighting Distribution System for dam and flushing

Amount in Rs.

G/I DI

1. Providing, Laying, jointing and testing G.I pipe line including Fittings, valves, cost of excavation etc. complete in all respect.

RS. 28,500  
RS. 50,000  
RS. 66,000  
RS. 157,500  
RS. 144,000  
RS. 54,000  
RS. 28,000

13.05 lacs

G.I Pipe 25 mm , 95 M @ Rs.300/- per meter  
G.I Pipe 32 mm , 125 M @ Rs.400/- per meter  
~~45M~~ G.I Pipe 40 mm , 110 M @ Rs.600/- per meter  
~~38M~~ G.I Pipe 50 mm , 210 M @ Rs.750/- per meter  
~~210M~~ G.I Pipe 65 mm , 160 M @ Rs.900/- per meter  
~~65M~~ G.I Pipe 80 mm , 45 M @ Rs.1200/- per meter  
G.I Pipe 100 mm , 20 M @ Rs.1400/- per meter

13.05 2. Provision for carriage of materials and other unforeseen items (Lump RS.200,000/- 50000/-)

3. Providing and fixing valves including chamber:-

RS. 16,000 19,000/- 20,000  
RS. 20,000 24,000/-

- 80 mm dia 2 No. @ Rs. 8000/- each 9500/- 10000/-  
- 100 mm dia 2 No. @ Rs. 10000/- each 12000/-

RS. 100,000 8,71,000/-

50000/-

14.49

4. Provision for air valve(LS)

Total (C/O To Abstract of Cost for Subwork No.1)

5. Prov for Cutting of road and  
making good to its in original Conditions. (L.S.)

Authorised Signatory

ANURAG CHOWFLA  
Partner  
Mani Chowla  
CA Registration No. 79/5125

M. K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

## fire fighting

**Sub Work No. 1**  
**Sub-Head No. 05**

### External Fire Hydrant

#### *Amount in Rs.*

1. Providing , Laying , jointing and testing M.S. pipes lines  
for fire rising main including cost of fittings, valves, connection etc.  
complete in all respect .

(i) 150mm i/d 925 m @ Rs. 1500/ m ✓	RS.1,387,500 ✓
(ii) 80mm i/d 250 m @ Rs. 300/- m <del>250/-</del> 625/-	RS.75,000 <del>2,37,500/-</del> 150000/-
2. Providing and fixing fire Hydrant 25 Nos. '@ Rs. 800/- 10,000/- Each 5 Nos. @ 1500/- <del>14000/-</del>	70,000/-
3. <del>1/6 of Value + 150mm i/d</del>	RS.200,000 <del>2,50,000/-</del>
3. Providing for carriage of material (L.S.)	RS.100,000 ✓ 25000/-
4. Providing for indication Plates 25Nos. '@ Rs. 1000/-	RS.25,000 ✓
<b>Total</b> (C/O To Abstract of Cost for Subwork No.1)	<del>RS.400,000</del> <del>20,75,000/-</del> 16.57 Lax

**Sub-work No. I**  
**Sub-Head No. 06**

### Water Supply & Fire Fighting. Irrigation

#### *Amount in Rs.*

1. Providing , Laying, Jointing and testing pipe line Confirming to IS 4985 (uPVC) including cost of excavation  
etc. complete in all respect.

a) 25 mm dia 100 metre @ Rs. 250/- M	RS.25,000 ✓
b) 32 mm dia 205 metre @ Rs. 300/- M 350/-	RS.61,500 <del>71,750/-</del>
c) 40 mm dia 275 metre @ Rs. 400/- M 450/-	RS.140,000 <del>1,23,750/-</del>
d) 50 mm dia 180 metre @ Rs. 500/- M 550/-	RS.90,000 <del>99,000/-</del>
e) 80 mm dia 80 metre @ Rs. 900/- M 600/-	RS.72,000 ✓ <del>48,600/-</del>
f) 100 mm dia 15 metre @ Rs. 1200/- M 950/-	RS.18,000 ✓ <del>142.50</del>

2. Providing and fixing 25 mm dia. irrigation hydrant Valve complete in all respect. ~~25 Nos. @ Rs. 300/- each~~

~~25 nos. @ Rs. 300/- Each~~

RS.15,000 ✓ 98,000/-

For Pioneer Urban Land & Infrastructure Limited

3. Provision for carriage of Material and other as foreseen items

25000/-  
RS.100,000 ✓  
504750/-  
6,07,500/-  
RS.494,020

  
Authorised Signatory

**TOTAL**  
(C/O To Abstract of Cost for Subwork No.1)

ANURAAG CHOWFLA  
Partner  
Mani Chowla  
CA Registration No. 79/5125

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

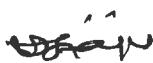
## Sub-Work No. II

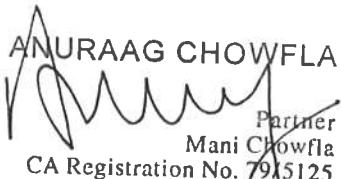
## SEWERAGE SCHEME

Amount in Rs.

1. Providing , jointing , cutting and testing SW pipe class "A" and lowering into trenches including cost of Excavation, bed concrete, cost of manholes etc. complete		1112-SW   -
a) SW pipe 200 mm i/d avg. depth 0-2 M 1020 M @ Rs. 1250/M 1500/- P/Mts. 890 1250/-	RS.4,275,000	15,30,000/-
2. Provision for cartage of material (L.S.)	RS.200,000	5000/-
3. Provision for lighting and watching (L.S.)	RS.200,000	1.00
4. Provision for making HUDA Connection (L.S.)	RS.500,000	1.00
5. Provision for Temp Disposal   STP 240 kLP for 6.24 MLD 6. Provision for effluent at roads and making gurd	RS.2,000,000 50000/-	2500000/- 50,0000/-
Total Add 3% contingencies & PH charges to its in original conditions, Total Add 49% Prc Escalation,Departmental charges , unforseen Admin Charges .	RS.4,175,000 RS.425,250 RS.4,300,250 RS.2,107,123	44,30,000/- 2,12,900/- 76,52,900/- 37,49,921/-
<b>TOTAL</b>	<b>RS.6,407,373</b>	<b>114,02,921</b>
(Cost to Final abstract of cost)	Say in lacs	64.07
		<i>Say Rs. 64.07 Lacs</i>

For Piouser Urban Land &amp; Infrastructure Limited

  
 Authorised Signatory

ANURAAG CHOWFLA  
  
 Partner  
 Mani Chowla  
 CA Registration No. 7915125

M.K. Gupta  
 MIE No. 045780/3  
 MKG Consultants  
 A-8, Paryavaran Complex  
 IGNOU Road  
 New Delhi-110 030

## Sub-Work No. III

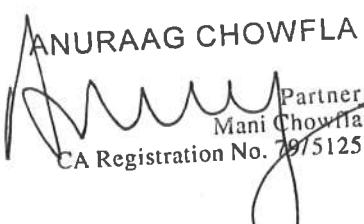
## STORM WATER SCHEME

Amount in Rs.

1. Providing and laying R.C.C. pipe drain class NP-3 With cement joint , manholes excavation etc complete in all respect.		
a) 400 mm dia. 1140m @ Rs. 1250/- m <sup>560</sup> 1750/- m.	RS. 1,425,000	980000/- + 19,95,000/-
2. Provision for Road gullies L.S	RS. 250,000	10,00,000/- 250000/-
3. Providing Rain Harvesting arrangements <sup>7 Nos @ Rs 100,000/-</sup> 1,50,000/- S	RS. 700,000 1.00	10,50,000/- 7.50 lacs
4. Provision for Shoring & Timbering (L.S.)	RS. 250,000	
5. Provision for Lighting, Watching & Temp. Drain Arrangements (L.S)	RS. 250,000 1.00	
6. Provision for Carriage of Material (L.S) <sup>7. Provis. for Connection with Huda line</sup> Total 8. prov for temporary arrangement till KunA Add 3% for contingencies and PH charges Services are provided Total Add 49% Departmental charges	RS. 250,000 RS. 3,125,000 RS. 93,750 RS. 3,218,750 RS. 1,577,188. RS. 4,795,938	1,00,000/- 25.00 lacs 48,95,000/- 50.30 lacs 1,40,850/- 1.30 lacs 50,41,850/- 24,70,50/- 51.80 lacs 75,12,357 25.38 lacs Say Rs. 75.00 lacs
<b>TOTAL</b> (Cost to Final abstract of cost)	<b>Say in lacs</b> <b>47.90</b>	<b>77.18 lacs</b>

For Pioneer Urban Land &amp; Infrastructure Limited

  
Authorised Signatory

  
ANURAAG CHOWFLA  
Partner  
Mani Chowdhury  
CA Registration No. 7975125

  
M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

## Sub-Work No. IV

## Road Work

ROAD AREA As Per Drawing Attached		LENGTH	BREADTH	AREA
ROAD NO.	ROAD AREA			
AREA CALCULATIONS FOR ROADS				
	A (M)	B (M)	Nos.	AREA (SqM) = $Z = A \times B$
A	67.500	6.000	1.000	405.000
B	1/2(3.75+7.5)X3.75		1.000	21.090
C	63.750	6.000	1.000	382.500
D	30.000	6.000	1.000	180.000
E	11.250	6.000	1.000	67.500
F	1/2X4.5X4.5		1.000	10.125
G	11.250	6.000	1.000	67.500
H	37.500	6.000	1.000	225.000
I	51.120	6.000	1.000	306.720
J	38.350	6.000	1.000	230.310
K	1/2(7.5+13.125)X13.5		1.000	139.220
L	11.250	6.000	1.000	135.000
M	3.750	6.000	1.000	14.060
N	1/2(9.375+6)X4.5		1.000	34.590
O	9.375	6.000	1.000	56.250
P	1/2(13.125+7.5)X6		1.000	61.875
Q	38.734	6.000	1.000	232.404
R	1/2(11.25+16.875)X4.5		1.000	63.280
S	1/2(7.5+15)X3.75		1.000	42.190
T	7.500	6.000	1.000	45.000
U	1/2(7.5+3.75)X6		1.000	33.750
V	1/2(9.375+5.625)X6		1.000	45.000
W	11.250	6.000	1.000	67.500
X	1/2(11.25+5.625)X6		1.000	50.625
Y	1/2(9.375+6)X6		1.000	46.125
Z	60.000	6.000	1.000	360.000
A'	1/2(9.375+3.75)X5.25		1.000	34.450
B'	2 X 1/2X11.25X6		2.000	67.500
C'	18.750	6.000	1.000	112.500
D'	1/2(13.5+9.375)X3		1.000	34.310
E'	1/2(15+9.375)X5.625		1.000	68.550
F'	30.000	6.000	1.000	180.000
G'	39.375	6.000	1.000	236.250
H'	15.000	9.375	1.000	140.625
I'	28.125	6.000	1.000	168.750
J'	39.375	6.000	1.000	236.250
K'	1/2(9.375+4.5)X6		1.000	41.625
L'	5.625	6.000	1.000	33.750
M'	51.811	6.000	1.000	310.866
N'	13.500	7.500	1.000	101.250
O'	35.625	6.000	1.000	213.750
P'	1/2(7.5+5.625)X3.75		1.000	24.610
Q'	15.000	6.000	1.000	90.000

5417-65

For Pioneer Urban Land &amp; Infrastructure Limited

Authorised Signatory

ANURAAG CHOWFLA  
  
 Partner  
 Mani Chowla  
 CA Registration No. 795125

M.R. Gupta  
 MIE No. 045780/3  
 MKG Consultants  
 A-8, Paryavaran Complex  
 IGNOU Road  
 New Delhi-110 030

**NOTE: Rates as per HUDA norms**

- |   |   |                                    |
|---|---|------------------------------------|
| 1. Provision for levelling & earth filling as per site conditions.  |   | Say 12200 Sqmtr                    |
| As per cut & fill plan  |   |                                    |
| 1.21 Acre @ Rs 1.00 Lacs per Acre)  |   | 824000.00                          |
| 2. i. Soling coat 100 mm thick (63-45) mm gauge<br>compacted to 75 mm thick WBM conforming to<br>MOT specification                    | 100mm GSB<br>250 mm Stone aggregate<br>50 nos. thick B.M<br>(Table 400-6, Grading No. 2). | 10,30,000/-                        |
| ii) Wearing coat (Top coat) 100mm thick<br>(53-22.4)mm gauge compacted to 75mm thick<br>conforming to MOT                             | 20 nos. thick MSS.  |                                    |
| over 50 mm thick B.M. and 20 mm thick M.S.S. Type A   | specifications (Table 400-6, Grading No. 3)   | 103.70                             |
| 7550 Sq. m. @ Rs. 850/- per Sq. m.  |   | 6808500.00 99,28,000/-             |
| +1600 12200 ✓   | 1:1½ : 3  |                                    |
| 3. Provision for kerbs & channels of CC 1:2<br>@ Rs. 500/- per Meter<br>(600) -   | 2500<br>4000 m  | 1500000/-<br>900000.00 12,50,000/- |
| 4. Provision for making approach and pavement to building (L.S.)<br>Prov. for Guide map and other unforeseen items like Boards (L.S.) |   | 300000. 5,00,000/-<br>2,00,000/-   |
| 5. Provision for parking arrangement  | 1080 Sqmtr L.S.   | 1080000                            |
| - Lump sum →  |   |                                    |

For Pioneer Urban Land & Infrastructure Limited

*[Signature]* Authorised Signatory


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 Partner  
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MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

#### **6. Provision for carriage of material (L.S)**

**TOTAL**  
Add 3% contingency & P.E. charges  
**TOTAL**

Add 49% deptt. Charges, price escalation  
unforeseen, Admin. charges.  
**Say (Rs. In Lacs)**  
(Cost to Final abstract of cost)

Rs. 137.00 lacs	100000 ✓
4.11 lacs	<del>130,08,000/-</del> <del>3,90,240/-</del>
Rs. 141.11 lacs	<del>123,98,240/-</del>
Rs. 69.14 lacs	<del>65,65,138/-</del>
Rs. 210.25 lacs	<del>199,62,378/-</del>
Say in lacs	<del>199.70</del>
	453.62

Pioneer Urban Land & Infrastructure Limited

  
Authorised Signatory

**ANURAAG CHOWFLA**  
  
 Partner  
 Mani Chowfla  
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MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
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**Sub Work No. V****Street Lighting****Amount in Rs.**

1) Providing lighting at surrounding Area as per standard specifications of

Total light poles = ~~8.21~~ @ Rs. 7500/- per Acre~~10.30 Ac 1,00,000/-~~~~10,30,000/-~~~~30,900/-~~

Add 3% contingencies &amp; P.E. charges

**TOTAL**~~10,60,900/-~~~~5,19,841/-~~~~15,80,741/-~~~~Rs. 615,750~~~~8,21,000/-~~~~Rs. 18,473~~~~24,630/-~~~~Rs. 634,223~~~~8,45,630/-~~~~Rs. 310,709~~~~4,14,359/-~~~~Rs. 944,992~~~~12,58,989/-~~~~Rs. 9.45~~~~Say Rs. 12.60 Lacs~~*Say 15.81 lacs***Say (Rs. In Lacs)**

(Cost to Final abstract of cost)

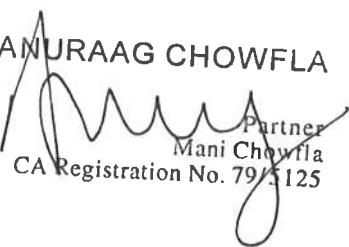
**Sub Work No. VI****Plantation & Road Side trees****Amount in Rs.****1. Development of Lawn Areas:**

- Trenching of ordinary soil upto depth of 60 cm i/c removal & stacking of
- Rough dressing of turfed area.
- Grassing with "DOOB GRASS" i/c watering and maintenance of lawns for 30 days till

~~8.21 Acre @ Rs. 7500/- Acre~~~~10.30 Ac 100000/-~~~~10,30,000/-~~~~615750.00~~~~8,21,000/-~~~~Contd. Page -II~~

For Pioneer Urban Land &amp; Infrastructure Limited

*Mani Chowla***Authorised Signatory**

**ANURAAG CHOWFLA**  
  
 Partner  
 Mani Chowla  
 CA Registration No. 79/5125

**M.K. Gupta**  
 MIE No. 045780/3  
 MKG Consultants  
 A-8, Parivarayan Complex  
 IGNOU Road  
 New Delhi-110 030

2. Providing and planting trees along boundary @ 12 m interval  
 Total Road length  $900 \text{ M} \times 2 = 1800 \text{ M.}$   
~~25' 150~~

~~75~~

**Cost Details:**

Excavation	25 30
Manure	25 30 60
Tree Plant	25 80 60
Tree Guard	50 600
<b>TOTAL</b>	<b>450 740 750</b>

~~75 Nos. @ Rs. 450 740 750~~  
~~150~~

**TOTAL**

Add 3% contingencies & P.E. charges  
**TOTAL**

Add 49% Departmental charges

**TOTAL**

Say (Rs. In Lacs)

(Cost to Final abstract of cost)

~~11,41,600/-~~ →  
 Rs. 11.43 lay 34,230/- →  
 Rs. 0.34 lay 11,75,230/- →  
 Rs. 11.77 lay 5,75,863/- →  
 Rs. 5.76 lay 17,51,093/- →  
 Rs. 17.53 lay, say Rs. 17.60 lacs →  
 Say Rs. 17.60 lacs

Rs. 33,750 →  
~~Rs. 649,500 9,32,000/-~~  
~~Rs. 10,485 27,960/-~~  
~~Rs. 668,985 9,59,960/-~~  
~~Rs. 327,803 4,76,380/-~~  
~~Rs. 996,788 14,30,340/-~~  
~~Rs. 9.97 14.30 lacs~~

## SUB WORK - VII - SERVICES & RESURFACING OF ROADS

### 1. Provision of MTC charges for W/s, SWD

(a) Complete in all aspect, including operational and establishment charges as per HUDA  
~~10.30 Acre - 21 Acres @ Rs. 3.475 lacs per acre.~~

2. Provision of resurfacing of roads after 5 years of MTC one layer of 100 mm thick WBM  
 (a) Resurfacing of road after 10 years of MTC ~~H680 Spm @ 600/- P/120m~~

Add 3% contingencies & P.E. charges

Add 49% Departmental charges

**TOTAL**

Say (Rs. In Lacs)

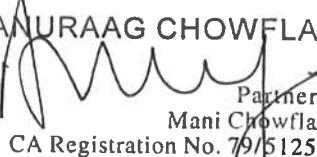
(Cost to Final abstract of cost)

~~11680 Spm @ 300/- P/120m~~ →  
 TOTAL →  
 Rs. 161.30 lay 4.84 lay →  
 143,74,500/- →  
 4,31,235/- →  
 148,05,735/- →  
 72,54,810/- →  
 Rs. 166.14 lay 81.40 lay →  
 220,60,545/- →  
 Say Rs. 220.61 lacs →  
 Rs. 247.54 lay

Amount in Rs.  
~~38,62,500/- 51.50~~  
~~3,078,750/- 73.20~~  
~~36.60~~  
 Rs. 4,536,000 70,08,000/-  
 Rs. 2,268,000 35,04,000/-  
~~Rs. 9,882,750 93,70,154/-~~  
 Rs. 296,483 6,07,123/-  
~~Rs. 10,179,233 139,78,423/-~~  
 Rs. 4,987,824 68,59,252/-  
~~268,57,724/-~~  
 Rs. 15,167,056 151.67  
~~Say Rs. 208.60 lacs~~

For Pioneer Urban Land & Infrastructure Limited

*Authorised Signatory*

**ANURAAG CHOWFLA**  
  
 Partner  
 Mani Chowla  
 CA Registration No. 79/5125

M.K. Gupta  
 MIE No. 045780/3  
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 A-8, Paryavaran Complex  
 IGNOU Road  
 New Delhi-110 030

ANNEXURE-1

S.S.No	SEWER LINE	Tower No.	Total Population	Total Water Requirement	Sewage Discharge (LPD)	Average Sewage Discharge	Peak Sewage Discharge	Size of Pipe	Velocity	Length of Line	Design Discharge	Ground level			Invert Level			Depth of Pipe at						
												metres	metres	metres	metres	metres	metres	metres	in mtrs.	in mtrs.	Average depth of pipe			
1	1	1-2	B	210	36225	28 980	0.335417	1.006	0.035	200	2.42	0.41	45	200	0.000	0.225	243.00	242.00	241.78	1.00	1.22	1.11		
2	2-3	D	200	34500	27 600	28 980	56 580	0.654861	1.965	0.069	200	2.42	0.41	84	200	0.000	0.420	243.00	243.00	241.78	1.22	1.64	1.43	
3	3-6	0			56 580	56 580	0.654861	1.965	0.069	200	2.42	0.41	40	200	0.000	0.290	243.00	243.00	241.36	241.16	1.64	1.84		
4	4-5	EWS	120	20700	16 560	0.191667	0.575	0.02	200	2.42	0.41	130	200	0.000	0.650	243.00	243.00	242.00	241.35	1.00	1.65	1.33		
5	5-6	0			16 560	16 560	0.191667	0.575	0.02	200	2.42	0.41	90	200	0.000	0.450	243.00	243.00	241.35	240.90	1.65	2.10	1.88	
6	6-7	E	260	44850	35 880	1.09020	1.44900	1.677083	5.031	0.176	200	2.42	0.41	90	200	0.000	0.450	243.00	243.00	240.90	240.45	2.10	2.55	2.32
7	7-11	0			1.44900	1.44900	1.44900	1.677083	5.031	0.176	200	2.42	0.41	13	200	0.000	0.065	243.00	243.00	240.45	240.39	2.55	2.61	2.58
8	8-9	A	316	54510	43 608	43 608	0.504722	1.514	0.053	200	2.42	0.41	64	200	0.000	0.320	243.00	243.00	242.00	241.68	1.00	1.32	1.16	
9	9-10	C	200	34500	27 600	71 208	98 808	1.143611	3.431	0.12	200	2.42	0.41	94	200	0.000	0.470	243.00	243.00	241.68	241.21	1.32	1.79	1.55
10	10-11	0			98 808	98 808	1.143611	3.431	0.12	200	2.42	0.41	48	200	0.000	0.240	243.00	243.00	241.21	240.97	1.79	2.03	1.91	
11	11-STP	0			243 708	243 708	2.820694	8.462	0.296	200	2.42	0.41	15	200	0.000	0.075	243.00	243.00	240.39	240.31	2.61	2.69	2.65	
12	STP-12																		20					
13	12-13																		90					
14	13-14																		140					
15	14-T0 HUDA																		50					

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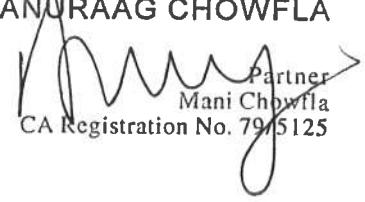
**Material Statement -Sewerage System****Annexure 2**

S.No	SEWER LINE	Size of Pipe mm	Length of Line Meters
1	1-2	200	45
2	2-3	200	85
3	3-6	200	40
4	4-5	200	130 → EWS line →
5	5-6	200	90
6	6-7	200	90
7	7-11	200	15
8	8-9	200	65
9	9-10	200	95
10	10-11	200	50
11	11-STP	200	15
12	STP-12	200	20
13	12-13	200	90
14	13-14	200	140
15	14-TO HUDA	200	50
<b>Total for 200 mm Dia</b>			1020 → 890 mtrs.

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S.No	Line No.	Self Area (m <sup>2</sup> )	Branch Area (Acre)	Total Area (Acre)	Rain Fall mm/hr	Discharge @17.36 lps/Hec	Length in mtr.	Pipe dia mm	Slope in 1 in	Velocity m/sec.	Cap of pipe fall in ips.	In line mfr.	Ground Level			Invert Level			Depth		
													Start	End	Start	End	Start	End	Average		
1	1-RW1	5600	1.40	0.00	1.400	0.57	6.25	9.83	75	400	600	0.59	73.71	0.13	243.00	243.00	242.40	242.28	0.60	0.72	0.66
2	RW1-RW6	3800	0.95	1.40	2.350	0.95	6.25	16.51	100	400	600	0.59	73.71	0.17	243.00	243.00	242.28	242.11	0.72	0.89	0.81
3	RW6-RW5	4100	1.03	2.35	3.375	1.37	6.25	23.71	140	400	600	0.59	73.71	0.23	243.00	243.00	242.11	241.88	0.89	1.12	1.01
4	RW5-FINAL	0	0.00	3.38	3.375	1.37	6.25	23.71	25	400	600	0.59	73.71	0.04	243.00	243.00	241.88	241.83			
5	DISPOSAL																				
5	2-RW3	1100	0.28	0.00	0.275	0.11	6.25	1.93	20	400	600	0.59	73.71	0.03	243.00	243.00	242.40	242.37	0.60	0.63	0.62
6	RW3-RW4	2500	0.63	0.28	0.900	0.36	6.25	6.32	70	400	600	0.59	73.71	0.12	243.00	243.00	242.37	242.25	0.63	0.75	0.69
7	RW4-RW5	4200	1.05	0.90	1.950	0.79	6.25	13.70	130	400	600	0.59	73.71	0.22	243.00	243.00	242.25	242.03	0.75	0.97	0.86
8	3-RW2	1350	0.34	0.00	0.338	0.14	6.25	2.37	55	400	600	0.59	73.71	0.09	243.00	243.00	242.40	242.31	0.60	0.68	0.65
9	4-RW2	3000	0.75	0.00	0.750	0.30	6.25	5.27	35	400	600	0.59	73.71	0.06	243.00	243.00	242.40	242.34	0.60	0.66	0.63
10	RW2-RW7	3300	0.83	1.09	1.913	0.77	6.25	13.43	140	400	600	0.59	73.71	0.23	243.00	243.00	242.31	242.08	0.69	0.92	0.81
11	RW7-5	0	0.00	1.91	1.913	0.77	6.25	13.43	300	400	600	0.59	73.71	0.50	243.00	243.00	242.08	241.58	0.92	1.42	1.17
12	5-FINAL	0	0.00	1.91	1.913	0.77	6.25	13.43	50	400	600	0.59	73.71	0.08	243.00	243.00	241.58	241.49	1.42	1.51	1.47

M.K. Gupta  
MIE N/045780/3  
MG Consultants  
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J.J. Road  
New Delhi-110 030

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Authorised Signatory

AURAAG CHOWFLA  
CA Registration No. 19/5125  
Partner  
Mani Chowla

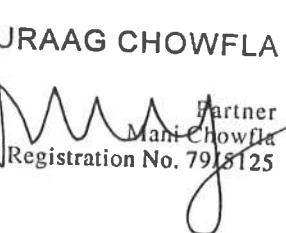
**Material Statement -Drainage System****Annexure 4**

S.No	Line No.	Length in mtr.	Pipe dia in mm
1	1-RW1	75	400
2	RW1-RW6	100	400
3	RW6-RW5	140	400
4	RW5- FINAL DISPOSAL	25	<del>400-500 dia</del>
5	2-RW3	20	400
6	RW3-RW4	70	400
7	RW4-RW5	130	400
8	3-RW2	55	400
9	4-RW2	35	400
10	RW2-RW7	140	400
11	RW7-5	300	400
12	5-FINAL DISPOSAL	50	400
<b>Total for 400 mm dia</b>		<u>1140</u>	
		<u>560</u>	

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi- 110 030

RBI Engineer Group Land &amp; Infrastructure Limited

  
Authrised Signatory

ANURAAG CHOWFLA  
Partner  
Mani Chowfla  
CA Registration No. 7918125  


## ANNEXURE-5

S.No.	Site Designation	Water Requirements (in LPD)	Water Requirements (in KLD)	Self Water requirement (in KLD)	Branch Water requirement (in KLD)	Add 10% Misc.	Total Water Requirements (In KLD)	Drainage per Hour considering 8 Hours Pumping Kahr	Size of Pipe Provided	Velocity in ft/sec.	Velocity in m/sec.	Head Loss per 100m	Loss of head as per pipe length	Length of pipe(meters)	Ground level Start in m	Ground level End in m	Hydraulic Level Start in m	Hydraulic Level End in m	Terminal Head in m
<b>PHASE-1</b>																			
1	UG-T-1	0	0	0	217	22	238	29789	100	3.46	1.06	21	0.365	17	243.00	243.00	433.000	432.635	189.64
2	1-2 TOWER D	0	0	0	71	71	71	6.841	50	4.11	1.25	66	5.838	88	243.00	243.00	432.635	426.797	183.80
3	2-1 TOWER D	35	35	0	36	35	4.313	40	3.14	0.96	52	0.521	10	243.00	243.00	426.797	426.276	183.28	
4	2-3 TOWER C	0	0	0	36	36	36	4.528	40	3.29	1.00	57	3.879	68	243.00	243.00	426.276	422.398	179.40
5	3-TOWER B	36225	36	0	36	36	36	4.528	40	3.29	1.00	57	0.570	10	243.00	243.00	422.398	421.827	178.83
6	1-7	0	0	0	146	146	18241	80	3.32	1.01	26	1.156	45	243.00	243.00	432.635	431.479	188.48	
7	7-4	0	0	0	126	126	15741	65	4.33	1.32	54	2.687	50	243.00	243.00	428.192	428.192	185.79	
8	4-1 TOWER E	44850	45	0	45	45	5.606	40	4.08	1.24	85	0.847	10	243.00	243.00	427.945	427.945	184.95	
9	4-5	0	0	0	81	81	10134	65	2.79	0.85	24	2.668	112	243.00	243.00	432.635	429.669	186.97	
10	5-TOWER C	35	35	0	35	35	4.313	40	3.14	0.96	52	0.521	10	243.00	243.00	429.969	428.448	186.45	
11	5-6	0	0	0	47	47	5.622	50	2.71	0.83	31	3.369	110	243.00	243.00	427.945	424.576	181.58	
12	6-TOWER A	48575	47	0	47	5.622	50	2.71	0.83	31	3.369	110	10	243.00	243.00	424.576	424.270	181.27	
13	7-8	0	0	0	20	20	2.500	32	2.84	0.87	56	7.043	125	243.00	243.00	424.436	424.436	181.44	
14	8-EWS	10000	10	0	10	10	1.250	25	2.33	0.71	52	0.520	10	243.00	243.00	424.436	423.916	180.92	
15	8-9	0	0	0	10	10	1.250	25	2.33	0.71	52	0.520	10	243.00	243.00	420.540	420.540	177.64	
16	9-EWS	10000	10	0	10	10	1.250	25	2.33	0.71	52	0.520	10	243.00	243.00	420.540	420.540	177.12	

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-2, Parivarayan Complex  
IGNOU Road  
New Delhi-110 030

For Pioneer Urban Land & Infrastructure Limited

  
Authorised Signatory

AURAAG CHOWFLA  
Partner  
Mani Chowfla  
CA Registration No. 795125

**Material Statement- Water Supply****Annexure 6**

S.No.	Line Designation	Size of Pipe Provided mm	Length of pipe(in metres)
1	8-EWS	25 100	10
2	8-9	25 100	75
3	9-EWS	25 100	10
	<b>Total for 25 mm dia</b>		<b>95</b>
4	7-8	32 100	125
	<b>Total for 32 mm dia</b>		<b>125</b>
5	2-TOWER D	40 100	10
6	2-3	40 100	70
7	3-TOWER B	40 100	10
8	4-TOWER E	40 100	10
9	5-TOWER C	40 100	10
	<b>Total for 40 mm dia</b>		<b>110</b>
10	1-2	50 100	90
11	5-6	50 100	110
12	6- TOWER A	50 100	10
	<b>Total for 50 mm dia</b>		<b>210</b>
13	7-4	65 100	50
14	4-5	65 100	110
	<b>Total for 65 mm dia</b>		<b>160</b>
15	1-7	80 100	45
	<b>Total for 80 mm dia</b>		<b>45</b>
16	UGT-1	100	20
	<b>Total for 100 mm dia</b>		<b>20</b>
17	TUBE WELL 1 - TUBEWELL 2	100	120
18	TUBE WELL 2 - PUMP ROOM	150	100
	<b>MUNICIPAL LINE</b>		
1	1-2	80	320
2	2-FUTURE CONNECTION	50	60
3	2-PUMP ROOM	40	40

M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030

ANURAAG CHOWFLA  
Partner  
Mani Chowla  
CA Registration No. 79/5125

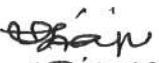


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MATERIAL OF FIRE FIGHTING ANNEXURE-7

S.no	Node NO	Dia of Pipe	Length	
<b>PHASE 1</b>				
1	Pump Room 1	1	150	35
2	1	2	150	70
3	2	3	150	90
4	3	4	150	145
5	1	5	150	90
6	5	6	150	130
7	6	7	150	55
8	2	8	150	90
9	8	9	150	45
10	9	10	150	50
11	10	11	150	85
12	7	11	150	40
<b>TOTAL</b>				<b>925</b>

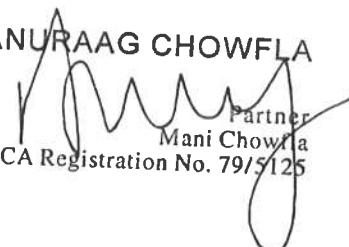
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Authorised Signatory



M.K. Gupta  
MIE No. 045780/3  
MKG Consultants  
A-8, Paryavaran Complex  
IGNOU Road  
New Delhi-110 030



ANURAAG CHOWFLA  
Partner  
Mani Chowla  
CA Registration No. 79/5125