LC-3565

PROPOSED RESIDENTIAL PLOTTED COLONY MEASURING 14.5625 ACRES (LC-3565) AT SECTOR-36, BAHADURGARH (HARYANA)

Sign-ff SE X

SERVICE PLAN ESTIMATE FOR PUBLIC HEALTH ENGINEERING SERVICES WORK

Client

GNEX REALTECH (P) LIMITED.
B-10, Lawrence Road, Industrial Area, Delhi-110035

Architect

DESIGN FORUM INTERNATIONAL
K-47, Kailash Colony, New Delhi - 110048

MEP Services Consultant

PARADISE CONSULTANTS
Plot No. 96, Pocket – 1, Jasola Vihar, New Delhi - 110025

PROJECT REPORT / ESTIMATES FOR PROVIDING INTERNAL SERVICES e.g. WATER SUPPLY, FIRE, SEWERAGE & STORM WATER DRAINAGE ETC. IN RESPECT OF RESIDENTIAL PLOTTED COLONY ON LAND MEASURING 14.5625 ACRES AT SECTOR - 36, BAHADURGARH, HARYANA.

Bahadurgarh is located at 28.68°N 76.92°E.[2] It has an average elevation of 206 metres (675 feet). Bahadurgarh was founded by Mughal Emperor Alamgir II (The Sultan of Delhi 1754-1759) gave the town in jagir to Bahadur Khan and Tej Khan, Baloch rulers of Farrukhnagar in 1754, who changed its name from Sharafabad to Bahadurgarh.A fort named Bahadurgarh Fort was constructed there by them. Bahadurgarh came into the hands of Sindhia in 1793. After his defeat in 1803 at the hands of the British, Lord Lake handed the town to the brother of the Nawab of Jhajjar. It was confiscated after the First War of Independence (1857) and became a division of the Rohtak district in 1860.In 1997, the town got attached with Jhajjar after Jhajjar become new district bifurcated from Rohtak. But Bahadurgarh is still larger to Jhajjar in every term; be it education, economy, population or administration.Bahadurgarh is the upcoming NCR of New Delhi, capital of India.Bahadurgarh is upcoming like Gurgaon and Faridabad It is well connected through rail and road network to the capital of nation.

PROPOSED RESIDENTIAL PLOTTED COLONY MEASURING 14.5625 ACRES is a residential proposed between **SECTOR - 36 AT BAHADURGARH, HARYANA** for development by **GNEX REALTECH (P) LIMITED.**

1 Water Supply

The source of water supply shall be HUDA water supply connection. It has been proposed to construct undergorund tanks of capacity as per attached detaileds for domestic and other purpose. The underground tanks will be filled up from the riser and then pumped to the overhead water tanks of each plot.

i.) Source

The source of water supply in this area is tubewells as the underground water is sweet and fit for human consumption, moreover, the water is available at reasonable depth.The average yield of tubewell with 60'–80' strainer will be about 36000 lph per hour. The recharging of under ground water table in this belt is stated to be good. However still we shall resort to rain water harvesting system to keep up the recharging system. The number of tubewells required for the above area has been worked out to 02 Nos and the tubewells will be bored in tune with growth of demand to avoid absolence of the tubewells.

ii.) Design

The scheme has been designed for population of 3362 persons in 14.5625 Acre. The rate of water supply per head per day has been taken assumed as 155.25 litres per head per day as per HUDA norms. In addition to above necessary provision of water for Community building, Commercial building, parks etc. have been taken into account for calculating the maximum number of tubewell water required.

iii.) 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. Generator will be provided separately or added to the capacity of main generator.

iv.) Under Ground Storage

Underground storage tank provision has been made, which caters for the present and a lot of future requirement as well as fire fighting requirement. The water for domestic water compartment shall over flow from the fire compartment so that the water in the fire compartment also remains fresh.

v.) Boosting Station

The boosting station is being planned near UGSR catering to the above requirement.

vi.) **Distribution System**

The distribution systems for this development are has been designed to supply @ 155.25 Litres per head per day @ 3 times the average rate of flow on 'Hazen Willima' formula with C-100. Necessary provision for laying D.I. pipes only conforming to relevant IS standards along with valves and specials has been made in this estimate. The minimum terminal head at any point in this system will be about 17.00 metres so that it can serve the 2.5 stories construction envisaged in the plan. Minimum pipe diameters for distribution are kept as 100 dia.

vii.) **Rising Mains**

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

2 **Sewerage**

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

The sewer lines have been designed for 3 times average DWR in relation to the water supply demand assuming that 80% fo the domestic water supply shall find its way into the proposed sewer SW pipe sewers have been proposed designed to run half full. The sewers have been designed on 0.75 mtr. per second velocity ie. Self cleansing velocity. Necessary provisions for laying SW pipes manholes etc. has been made in this estimate.

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

3 **Storm Water Drainage**

The storm water drain is being designed to carry 6.25 mm rain fall per hour. Also suitable provisions are contemplated in our scheme to ensure better recharging of under ground water table in the area.RCC NP_2 pipe drain with minimum 400 mm dia is proposed in this area.

4 **Roads**
Cost of road has been taken in the estimate.

5 **Street Lighting**

Provision for street lighting on surrounding area has been made.

5 **Horticulture**

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

7 **Specifications :**

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

8 **Rates**

Estimates for providing services in this site has been prepared on the recent HUDA rates.

9 Cost

The total cost of development in this Project including various PH & B & R services works out to **Rs. ~~1041.21~~ 1289.30 lacs** which includes 3% contingency and PE charges and 49% departmental charges also.

The cost per gross acre for this phase works out to **Rs. ~~71.50~~ 88.53 Lacs/acre** which covers the provision of services like water supply, sewerage, storm water drainage, roads, street lighting and plantations including plantations maintenance thereof as well as future expansion whatsoever indicated.

GNEX REALTECH (P) LIMITED.

GNEX REALTECH PRIVATE LIMITED BAHADURGARH

Authorised Signatory

RESIDENTIAL PLOTTED COLONY ON LAND MEASURING 14.5625 ACRES AT SECTOR - 36 BAHADURGARH, HARYANA.

DESIGN CALCULATION

	Total No. of Plots (General)			319 ~~249~~ Nos.	
	Total No. of Plots (EWS)			0 Nos.	
	Population per plot (general)			13.5 persons	
	Population per plot (EWS)			9 persons	
1	Therefore population (general)			4306.50 ~~3361.5~~ persons	
	Therefore population (EWS)			0 persons	
	Total Population			~~3361.5~~ 4306.50 persons	
			SAY	~~3362~~ 4307 **persons**	
	Water requirement for plots (General)		@	155.25 Lpd.	
				Domestic @ 65 %	**Flushing @ 35 %**
	Water requirement for plots (General)		@	100.91	54.34 Lpd.
				~~339268~~ 434619	~~182683~~ 234042 Lpd.
			or	~~339.27~~ 435	~~182.68~~ 234 **Kld.**
2	**No. of Community Center**		1.00		
	Daily water requirement	1.45975 @ 25000 l/. Acre	@	~~50000~~ 36494 ~~32500~~ 23721	12773 ~~17500.00~~ Lpd.
	Therefore daily water requirement			~~32500~~	~~17500~~ Lpd.
				~~32.50~~ 24.0	~~17.50~~ 13.0 **Kld.**
3	**No. of Commercial**		1.00		
	Daily water requirement	6.5791 acre @ 3200 Ltr/Acre	@	~~15000~~ 18531 ~~9750~~ 12045	6486 ~~5250.00~~ Lpd.
	Therefore daily water requirement			~~9750~~	~~5250~~ Lpd.
				~~9.75~~ 12.0	~~5.25~~ 6.50 **Kld.**
	Total Domestic Water Requirement (1+2+3)		**Total**	~~381.52~~ 471	~~205.43~~ 253.50 **Kld.**
4	**Area under Parks**		1.090		
	Daily water requirement		@	-	25000 Ltr./Acre
				-	27250 Lpd.
				0.00	**27.25 Kld.**
5	**Area under Roads**				
	Daily water requirement		Lumpsum	-	0 Lpd.
				0.00	**0.00 Kld.**
6	**Area under undetermined use**		0.00		
	Daily water requirement		@	-	0 Lpd.
				0.00	0 Lpd.
			Total	0.00	**0.00 Kld.**
		(4+5+6)	**Total**	0.00	**27.25 Kld.**

I	**Total daily requirement**		471.00	253.50
	a) For Domestic+Flushing use (1+2+3)		~~381.52~~	~~205.43~~ Kld.
	b) Under Road+ Parks (4+5+6)		0.00	27.25 Kld.
	Total Daily Requirement		471.0	280.75
			~~381.52~~	~~232.68~~ Kld.
		SAY	~~390.00~~	~~240.00~~ **Kld.**
			475	281.0
II	**Tubewell**			
	Assuming working hours of tubewells			8 Hours
	Assuming discharge/hour of each tubewell			36 Kl./Hours
	Total domestic demand			475 ~~381.52~~ **Kld.**
	No. of tubewells required	475 ~~381.52~~ /36/8		1.64 ~~1.32~~
		Say		2.00 Nos.
III	**Pumping machinery for tubewell**			
	Gross working load		=	45.00 Mtr.
	Average fall in SL		=	3.05 Mtr.
	Depression head		=	6.10 Mtr.
	Friction loss in main		=	2.50 Mtr.
			=	56.65 Mtr.
		Say	=	60.00 Mtr.
	BHP = 26000x60x1/60/60/75/0.6		=	13.33 ~~9.63~~ HP
	With 60% efficiency	Say		~~10.00~~ **HP**
				15.0
IV	**Underground Tank**			475.0
	Daily requirement for domestic use		=	~~381.52~~ Kld.
	Capacity of under ground tank	475		237.50
	12 hours storage	~~381.52~~ x 12 / 24		~~190.76~~ Kld.
		Say	=	~~200.00~~ **Kld.**
				240.0
	Fire Tank Capacity As/NBC Code 100 sqrt (P)= 100 sqrt (4.784)		=	183.36 KLD
		Say	=	**190.00 KLD**
				430.0
		TOTAL		~~390.00~~ **KLD**

430

It is proposed to provide under ground tank of capacity ~~390~~ **KL** which also includes **190 KL** capacity for fire fighting.

Both tanks will have Six compartments, two for fire, two for raw and the other two for domestic use. The water first enters the fire compartment, then over flows to the raw use compartment so that the water in the fire compartment shall remain fresh.

It is proposed to provide the under ground tank of following capacity :

Capacity of Fire Water Tank-01	**95.00 Kld.**
Capacity of Fire Water Tank-02	**95.00 Kld.**
Capacity of Raw Water Tank-01	**60.00 Kld.**
Capacity of Raw Water Tank-02	**60.00 Kld.**
Capacity of Domestic Water Tank-01	**60.00 Kld.**
Capacity of Domestic Water Tank-02	**60.00 Kld.**
	UGT

V BOOSTING MACHINERY (Domestic)

UG. Tank

Daily requirement for domestic use		=	475 ~~381.52~~ Kld.
Assuming 6 hours pumping	4 pumps (with one standby)		
Discharge/hour	~~381.52~~ 475 / 6 / 3	=	26.388 ~~21.20~~ KL/Hours
Head of pump			439.80 LPM say 450lpm
i) Suction lifts		=	0.0 Mtr.
ii) Friction loss in M<main & specials		=	4.0 ~~10.0~~ Mtr.
iii) Clear head		=	6.0 ~~15.0~~ Mtr.
iv) Residual head		=	30 ~~5.0~~ Mtr.
		=	40m ~~30.0~~ Mtr.

BHP of motor

$$\frac{450 \times 40}{60 \times 75 \times 0.60} = 6.67$$ ~~3.9~~ HP = ~~4.0~~ **HP**

7.50

Gen Set	Nos.	HP		
Pumps for UG. Tank (Dom + Flushing)	3+3~~+6~~	7.50 ~~4.0~~		37.5 ~~12~~ HP
Tubewell	2	~~10.0~~ 15		30 ~~20~~ HP
Lighting			=	12.50 ~~25~~ HP
				80 ~~57~~ HP
		80		
or		57 x0.746x1.5		89.52 ~~63.78~~ KVA
			Say	~~70.00~~ **KVA**

100

VI Sewage Treatment Plant Capacity (STP.)

Gross water requirment / day		475 ~~586.95~~ Kld.
Sewage flow ~~80~~ 75% of total load		543.75 ~~469.56~~ Kld.
Proposed STP. Capacity		550 ~~470.00~~ **Kld.** **STP**

Boosting machinery (Flushing water supply)

Daily req. for domestic flushing use = 253.50 KL

Hosp = 27.25 KL

280.75 KL

Assuming 6 hrs. running 3 Pumps with one standby 280.75/6x3 = 15.597 KLM or 259.95 LPM

HP of motor = $\frac{260 \times 40}{60 \times 75 \times 0.60}$ = 3.85 HP

Say 260 LPM

Say 5.0 HP

Estimate for Providing in Internal Development works for

GNEX REALTECH (P) LIMITED.

FINAL ABSTRACT OF COST.

Description	Amount (Lacs.)
Sub Work - I Water Supply	₹ 282.30 ~~279.64~~
Sub Work - II Sewerage	₹ 152.60 ~~138.46~~
Sub Work - III Storm Water Drainage	₹ 92.23 ~~88.89~~
Sub Work - IV Roads & Footpath	₹ 299.36 ~~190.14~~
Sub Work - V Street Lighting	₹ 55.86 ~~44.70~~
Sub Work - VI - Horticulture	₹ 12.48 ~~45.37~~
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)	₹ 394.47 ~~254.01~~
Total	₹ 1289.30 ~~1041.22~~ lacs

1289.30 lacs

Cost per Acre ~~1041.22~~/14.5625 = ~~71.50~~ lacs per Acre

(~~RUPEES TEN CRORE FORTY ONE LACS TWENTY TWO THOUSAND ONLY~~) 88.53 lacs

GNEX REALTECH (P) LIMITED.

GNEX REALTECH PRIVATE LIMITED BAHADURGARH

Authorized Signatory

Executive Engineer
HSVP, Division,
Bahadurgarh.

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

Superintending Engineer
HSVP Circle, Rohtak

Superintending Engineer (HQ)
for Chief Engineer HSVP
Panchkula

13/6

Director
Town & Country Planning
Haryana, Chandigarh

Estimate for Providing in Internal Development works for

GNEX REALTECH (P) LIMITED.

FINAL ABSTRACT OF COST

Description	Amount (Lacs.)
Sub Work - I Water Supply	382.30 ~~279.64~~
Sub Work - II Sewerage	152.60 ~~138.46~~
Sub Work - III Storm Water Drainage	98.23 ~~88.89~~
Sub Work - IV Roads & Footpath	299.36 ~~190.14~~
Sub Work - V Street Lighting	55.86 ~~44.70~~
Sub Work - VI - Horticulture	12.48 ~~45.37~~
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)	394.17 ~~254.01~~
Total	1289.30 ~~1041.22~~

1289.30 lacs

Cost per Acre ~~1041.22~~/14.5625 = ~~71.50~~ Lacs per Acre

88.53 lacs

(RUPEES TEN CRORE FORTY ONE LACS TWENTY TWO THOUSAND ONLY)

GNEX REALTECH PRIVATE LIMITED BAHADURGARH

GNEX REALTECH (P) LIMITED.

Authorized Signatory

Executive Engineer
HSVP, Division,
Bahadurgarh,

Superintending Engineer
HSVP Circle, Rohtak

FINAL ABSTRACT OF REVISED COST

	Description	Amount (Lacs.)
	Sub Head - (I) Head Works	₹ 58.55 ~~50.80~~
	Sub Head - (II) Pumping Machinery	₹ 32.75 ~~28.10~~
	Sub Head - (III) Distribution System Dom. & Plumbing and Fixing main	₹ 85.54 ~~65.11~~
	Sub Head - (IV) Irrigation Scheme	₹ 7.11 ~~8.21~~
	Total	183.95 ~~182.24~~
	Add 3% Contingencies & PE. charges	5.52 ~~5.47~~
	Total	189.47 ~~187.68~~
	Add 49% Departmental Charges, price escalation Unforseen, Admn.	92.83 ~~91.96~~
	Grand Total	282.30 ~~279.64~~
	(CO to final abstract of cost) **Say**	~~279.64~~

	Sub Work I				**Water Supply**
	Sub Head No. I				**Head Works**
S. No.	**Description**	**Unit**	**Qty**	**Rate**	**Amount**
					Rs. (lacs)
1	Boring and installing 510 mm i/d tubewells with reverse/direct rotary rig complete with pipe strainer to a depth of about 80 m. complete.	Nos.	2	600000.00	~~10.00~~ 20.-
2	Constructing pump chambers as per standard design of PWD PH/HUDA of size ~~2.50x2.50~~ m. 4.90 x 4.25 m	Nos.	2	~~100000.00~~ 2.50	~~2.00~~ 5.0
1	Construction of boosting chambers of suitable size along with under ground tank & pumping machinery and generating set etc. complete in all respects.				
	Details of boosting station				
i)	construction of boosting chambers	Nos.	1	750000.00	7.50
ii)	construction of UG tank 430KL including 190KL for fire reserve complete in all respect	KL	~~390~~ 430	~~7000.00~~ 3500/-KL	~~27.30~~ 15.05 lacs
4	Provision for carriage of material and other unforeseen items.	LS	-	-	~~1~~.00
5	Provision for facilites staff for Maintenance	LS	-	-	~~1~~.00
6	Prov for boundry wall around new footpath				5.0
	(C.O. to abstract of cost of Sub-work No.I)				~~50.80~~ Lacs
	boosting stn, Hedges lawn etc (LS)			Say	~~50.80~~ Lacs ~~58.50~~ lacs

	Sub Work I				Water Supply
	Sub Head No. II				Pumping Machinery
S. No.	Description	Unit	Qty	Rate	Amount (in Lakhs)
1 (i)	Providing and installing electricity driven electro or submersible pumping set capable of delivering about 36 KL water per hour against a total head of 60 M complete with motor and other accessories.	Nos.	2	2 Nos 160000.00	4 Nos 3.20
1 (ii)	Providing & installing electricity driven pumping set capable of delivering 450 ~~360~~ LPM of water against a total head of 40 m complete with motor and other accessories (For Domestic - 7.5 HP).	Nos.	(3+1) 4 Nos	1 Nos 115000.00	4.60
(iii)	—do- 260 LPM, 40 m head, 5 HP for Flushing Water Pump		3+1 4 Nos	0.75 Las	2.25 Las
2	Provision for diesel engine generator set each for standby Arrangements for booster pump complete with gear haed arrangements of following capacities.				
i)	100 KVA	Nos.	1	1050000.00	10.50
4	Provision for diesel engine genset stand bye arrangements for Tubewells.	Nos.	~~2~~	L.S. 550000.00	2 Nos 11.00
5	Provision for cheap pressure type chlorination plant complete.	Nos.	2	1 No las 15000.00	2 Nos 0.30
6	Provision for making foundations & erection of pumping machinery.	LS	-	-	3.00
7	Provision for pipes, valves & specials inside the pump chamber.	LS	-	-	2.00
8	Provision for electric services connection including electric fittings for tubewells chambers complete cum cost of Transformer	LS	-	-	3.50 2.00
9	Provision for carriage for materials and other unforeseen items.	LS	-	-	1.50
	(C.O. to abstract of cost of Sub-work No.I)			Total	38.10
				Say	32.75 Las 38.10

	Sub Work I				Water Supply
	Sub Head No. III				Distribution System/Rising Main
					(Dom. & Flushing)
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)
1	Providing, laying, jointing & testing D.I. K-7 pipes including cost of excavation complete as per ISI marked. (For Domestic & Tube Well water supply line)				68.06 Lacs
i)	100 mm dia	M	5445	1200.00	~~6534000.00~~
ii)	150 mm dia	M	121	1575.00	190575.00
2	Providing, fixing & Testing Sluice valves including cost of complete in all respects.				2.88 Lacs
i)	100 mm i/d	Nos.	24	10000.00	~~240000.00~~
ii)	150 mm i/d	Nos.	3	15000.00	45000.00
3	Providing, fixing & Testing Non Return valves (NRV) including cost of complete in all respects.				
i)	100 mm i/d	Nos.	2	10000.00	20000.00
5	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	4	10000.00	40000.00
7	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	33	1000.00	33000.00
8	Provision for carriage of material	LS	-	-	1.00 ~~250000.00~~
9	Provision for cutting the roads and making to its original conditions.	LS	-	-	100000.00
10	Making water supply connection. on master Road	LS	-	-	300000.00
11	Provision for rising main from HUDA water supply line to UG Tank.				7.81 Lacs
i)	100 mm i/d	M	625	1200.00	~~750000.00~~
12.	Prov. & Fixing Fire Hydrant Complete with masonry chamber	(LS)			0.50 Lacs
	(C.O. to abstract of cost of Sub-work No.I)			Total	~~8510575.00~~
				Say	~~85.11 Lacs~~ 85.54 Lacs

	Sub Work I				Water Supply	
	Sub Head No. IV				Irrigation	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Providing, laying, jointing & testing uPVC pipe line confirming to IS 4985 including cost of Excavation etc. complete in all respect.					
i)	90 OD	M	779	800.00	623200.00	
2	Providing and fixing 20mm dia Irrigation hydrant valve complete in all respect.	Nos.	13	3500 / ~~2400.00~~	0.46 lacs ~~31200.00~~	
3	Providing & fixing valve 25mm dia.	Nos.	13	400.00	5200.00	
4	Providing, fixing & Testing Sluice valves including cost of complete in all respects.					
i)	80 mm i/d	Nos.	1	4750.00	4750.00	
5	Providing and fixing air valves and scour valves including cost of complete in all respects.	Nos.	1	4500.00	4500.00	
6	Providing and fixing indicating plates for sluice valve, air valve etc.	Nos.	2	1000.00	2000.00	
7	Provision for carriage of materials etc. and other unforsean charges.	LS	-	-	0.10 ~~50000.00~~ lacs	
8	Provision for cutting of roads & making good to its in original condition.	LS	-	-	0.15 lacs ~~100000.00~~	
					Rs 7.11 lacs	
				Total	~~820850.00~~	
				Say	~~8.21 Lacs~~	

	Sub Work II			Sewerage Scheme		
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Providing, lowering, jointing, cutting SW/ RCC NP_3 pipes and specials into trenches including cost of excavation, bed concrete lot of manholes complete.					
i)	**200 mm i/d**					
a)	Average depth 0.0 m to 1.5 m	M	764	1250.00	955000.00	
b)	Average depth 1.5 m to 4.5 m	M	177	~~1350.00~~ 1500	~~238950.00~~ 2.66 lacs	
ii)	**250 mm i/d**				0.97 lacs	
a)	Average depth 0.0 m to 1.5 m	M	57	1400.00	~~79800.00~~	
b)	Average depth 1.5 m to 4.5 m	M	295	~~1500.00~~ 1800	~~442500.00~~ 5.31 lacs	
iii)	**300 mm i/d**					
a)	Average depth 1.5 m to 4.5 m	M	168	2250.00	378000.00	
iv)	**400 mm i/d**					
a)	Average depth 1.5 m to 4.5 m	M	25	2400.00	60000.00	
2	Provision for lighting, watching and temporary diversion of traffic	LS	-	-	200000.00	
3	Provision for cutting of roads and carriage of materials etc. and other unforsean charges.	LS	-	-	200000.00	
4	Provision for connection with HUDA. on master Road	LS	-	-	1.no ~~200000.00~~	
5	Cost of 470 Kld Sewerage Treatment Plant.	LS	-	-	59.no ~~5500000.00~~	
6	Provision for CI / DI pipe from STP. To Huda Main Line.			1575	7.56 lacs	
i)	150 mm dia pipe.	M	480	~~1600.00~~ (1575)	~~768000.00~~ 5.no lacs	
	Provision of Vent Pipe as P.H Norms				~~9022250.00~~ 99.43 lacs	
	Add 3% contingencies on PE Charges				~~270667.5~~ 9292917.50 2.99 lacs	
					102.42 lacs	
	Add 49% Deptt. Charges, price escalation, unforseen				~~4563529.575~~ 50.18 lacs	
				Total	**~~13846447.08~~** 152.6 lacs	
	(C.O. to abstract of cost of ~~Sub-work No. 1~~) final Astimate.			**Say**	**~~138.46~~ Lacs**	

	Sub Work - III			Storm Water Drain		
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Providing, lowering, jointing, cutting RCC NP_2 pipes and specials into trenches including cost of excavation cost of manholes, ventilating chambers etc. complete in all respects.					
i)	**400 mm i/d**			2500	25.36	
a)	Average depth upto 1.5 m	M	1015	~~1900.00~~	~~1928500.00~~	
b)	Average depth 1.5 m to 4.5 m	M	470	~~2250.00~~	~~1057600.00~~	
				2600	12.22	
2	Provision for Road Gully & Drain pipe 300mm	LS	-	-	~~1000000.00~~	
					5.0	
3	Provision for cutting of roads and carriage of materials etc. and other unforseen items	LS	-	-	250000.00	
4	Provision for disposal arrangements Recharge Pit. at selected places as approved	~~Nos~~	~~4~~ (4)	~~250000.00~~	1000000.00	
5	Provision for lighting, watching and temporary diversion of traffic	LS	-	-	500000.00	
6	Provision for connection with HUDA. on master Road (L-1)				NIL	
i)	~~400 mm i/d~~ Adjoining with ~~Nehru~~ ~~Mtbs~~ i.e 11.60 Area Scheme.			~~2250.00~~	~~56250.00~~	
					~~6792250.00~~	60.10
	Add 3% contingencies on PE Charges				~~173767.50~~	1.80
					~~5966017.50~~	61.90
	Add 49% Deptt. Charges, price escalation, unforseen Adum				2923348.58	30.33
				Total	~~8889366.08~~	92.23 lacs
				SAY	~~88.89~~ Lacs	
	(C.O. to abstract of cost of ~~Sub-work No. 1~~ final)					

	Sub Work IV				Road Work	
S. No.	Description	Unit	Qty	Rate	Amount (Rs.)	
1	Provision for leveling & earth filling as per site condition 14.5625 acre @ 100000/acre	Acres	14.5625	100000	~~1456250.00~~ 21.84	
2	Construction of road by:-					
	i) Providing GSB 300 mm thick.					
	ii) 250 mm thick W.M.M. stone aggregate.					
	iii) 50 mm thick B.M.		10930	1200	131.40	lacs
	iv) 20 mm thick M.S.S. complete in all respect.	Sq. mtr.	~~8427.0~~	~~850~~ Sqm	~~7162950.00~~	
3	Provision for making approach and pavement to building block by providing concrete pavement or tiles. Etc. 1033.2 sqm @ 500 / sqm.	Sq. mtr.	1033.2	500	516590.00	
4	Provision for ~~parking arrangement @ 500 /sqm~~ pavement in commercial area i.e. 50% of the area 0.5791 X 4047 = 1172 sqm / 2	Sq. mtr.		600 ~~500~~	7.03 ~~0.00~~	
5	Provision for kerb ~~stone~~ stamped with complete specification.	mtr.	~~3647.9~~ 3770	600 ~~700~~	22.62 ~~2553502.70~~	
6	Provision for Carriage of material ~~& other unforseen~~ items	LS.		~~500000.00~~	500000.00	
7	Provision for traffic lighting and guide map/ indicators	LS.		~~200000.00~~	200000.00	
				Total	~~12389292.70~~	195.06
	Add 3% contingencies ~~&~~ PE charges				~~371678.78~~	5.85
						200.91
					~~12760971.48~~	98.45
				Total	~~127.61~~ Lacs	
	Add 49 % department charges, price escalation, unforseen, Admn				~~62.53~~ Lacs	299.36 lacs
				SAY	~~190.14~~ Lacs	

	Sub Work V				**Street Lighting**	
S. No.	**Description**	**Unit**	**Qty**	**Rate**	**Amount (Rs.)**	
1	Providing street lighting on internal roads as per standard specifications of HVPNL with CFL	per acre	14.5625	200000.00	36.40 lacs ~~2912500.00~~	
	Add 3% contingencies Ch PE Charges				1.09 lacs ~~87375.00~~	
					37.49 lacs	
				Total	~~2999875.00~~	
					18.37 lacs	
	Add 49% Deptt. Charges, Unforseen, price escalation				~~1469938.75~~	
	Aelum.				Rs. 55.86 lacs	
				Total	~~4469814.00~~	
				SAY	~~44.70~~ **Lacs**	

	Sub Work VI				Horticulture	
S. No.	Description	Unit	Qty	Rate	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 prope level by filling with earth mixed with manure befor & after flodding 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 (as per HUDA Norms)					
	1.090		1.090	1.50 lacs	1.64 lacs	
	~~14.5625~~ acres @ Rs. ~~1.0 lacs.~~	per acre	~~14.5625~~	100000.00	~~14,56,250~~	
	2000 trees @ Rs. ~~750/-~~ each			Acre	~~15,00,000~~	6.50 lacs
	500 1300/				~~2956250.00~~	8.14 lacs
	Add 3% contingency charges				~~88687.50~~	0.24 lacs
				Total	~~3044937.50~~	
	Add 49% Deptt. Charges, price escalation				~~1492019.38~~	8.38 lacs
	Insurance, Admin.			Total	~~4536956.88~~	4.10 lacs
				Say	~~45.37~~ Lacs	
						12.48 lacs

Cost detail

(i) Excavation = ₹ 60/-

(ii) manure = ₹ 90/-

(iii) Tree plant = ₹ 150/-

(iv) Tree guard = ₹ 1000/-

₹ 1300/-

	Sub Work VII				Maintenance Charges & Resurfacing of Roads	
S. No.	Description	Unit	Qty	Rate	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.			7.50 lacs	109.22 lacs	
	~~14.5625 acres @ 5 lacs per acre~~	per acre	14.5625	~~500000.00~~	~~7281250~~	
2	Provision for resurfacing & strengthening of road after five years of Ist phase @ 400/- per sqm	Sq. mtr.	10950 ~~8427.0~~	600/ ~~400~~	65.70 ~~3370800.00~~	
3	Provision for resurfacing & strengthening of road after ten years of 2nd phase @ 600/- per sqm	Sq. mtr.	10950 ~~8427.0~~	750/ ~~700~~	82.12 lacs ~~5898900.00~~	
				Total	~~16550950.00~~	
					257.04 lacs	
	Add 3% contingency & PE charges				~~496528.50~~	
					7.71 lacs	
				Total	~~17047478.50~~	264.75
	Add 49% Departmetal charges, price escalation unforseen, &other				~~8353264.465~~	
				Total	~~25400742.97~~	129.72
			say		~~254.01~~ Lacs	
					394.47 lacs	

WATER SUPPLY QUANTITY SHEET FOR LC-3565 (14.5625 ACRE)

DOMESTIC WATER SUPPLY QUANTITY SHEET

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
1	***UGT-3***	D28	25.0	150
2.	D28	D28a	57.0	100
3.	D28	D29	8.0	150
4.	D29	D28a	62.0	100
5.	D29	D30	33.0	150
6.	D30	D31	61.0	100
7.	D31	D31a	228.0	100
8.	D31	D32	8.0	100
9.	D32	D47a	88.0	100
10.	D32	D33	57.0	100
11.	D33	D33a	64.0	100
12.	D33	D34	8.0	100
13.	D34	D33a	72.0	100
14.	D34	D34a	34.0	100
15.	D34a	D35a	64.0	100
16.	D34a	D35	3.0	100
17.	D35	D35a	72.0	100
18.	D35	D36	17.0	100
19.	D36	D37a	93.0	100
20.	D36	D37	35.0	100
21.	D37	D37a	57.0	100
22.	D37a	D31a	8.0	100
23.	D37	D38	8.0	100
24.	D38	D31a	105.0	100
25.	D38	D39	32.0	100
26.	D39	D39a	81.0	100

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
27.	D39	D40	8.0	100
28.	D40	D39a	89.0	100
29.	D40	D41	5.0	100
30.	D41	D42	96.0	100
31.	D42	D43	8.0	100
32.	D41	D43	104.0	100
33.	D43	D44	37.0	100
34.	D44	D45	26.0	100
35.	D45	D46	82.0	100
36.	D44	D46	56.0	100
37.	D30	D47	27.0	100
38.	D47	D47a	8.0	100
39.	D47a	D47b	64.0	100
40.	D47	D48	71.0	100
41.	D48	D48a	84.0	100
42.	D48a	D55	52.0	100
43.	D48	D49	8.0	100
44.	D49	D47b	164.0	100
45.	D49	D50	32.0	100
46.	D50	D50a	79.0	100
47.	D50	D51	8.0	100
48.	D51	D51a	35.0	100
49.	D51	D52	32.0	100
50.	D52	D52a	35.0	100
51.	D52	D53	8.0	100
52.	D53	D52a	43.0	100
53.	D53	D54	31.0	100
			2672	

150 mm ϕ = 66 m
100 mm ϕ = 2606 m

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
FLUSHING WATER SUPPLY QUANTITY SHEET				
1	*STP-3*	F29	40.0	100
2.	F29	F30	10.0	100
3.	F30	F30a	43.0	100
4.	F30	F31	8.0	100
5.	F31	F30a	35.0	100
6.	F31	F32	31.0	100
7.	F32	F32a	43.0	100
8.	F32	F33	8.0	100
9.	F33	F32a	35.0	100
10.	F33	F34	32.0	100
11.	F34	F34a	35.0	100
12.	F34	F35	8.0	100
13.	F35	F35a	79.0	100
14.	F35	F36	32.0	100
15.	F36	F38b	164.0	100
16.	F36	F37	8.0	100
17.	F37	F29	115.0	100
18.	F37	F38	71.0	100
19.	F38	F38a	8.0	100
20.	F38a	F38b	64.0	100
21.	F38a	F41	88.0	100
22.	F38	F39	27.0	100
23.	F39	F39a	33.0	100
24.	F39a	F39b	8.0	100
25.	F39b	F39c	57.0	100
26.	F39a	F39c	62.0	100
27.	F39	F40	61.0	100

1205 mtr

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
28.	F40	F44a	228.0	100
29.	F40	F41	8.0	100
30.	F41	F42	57.0	100
31.	F42	F42a	64.0	100
32.	F42	F43	8.0	100
33.	F43	F42a	72.0	100
34.	F43	F43a	34.0	100
35.	F43a	F44a	64.0	100
36.	F43a	F44	8.0	100
37.	F44	F44a	72.0	100
38.	F44	F45	17.0	100
39.	F45	F46a	93.0	100
40.	F45	F46	35.0	100
41.	F46	F46a	57.0	100
42.	F46a	F44a	8.0	100
43.	F46	F47	8.0	100
44.	F47	F44a	105.0	100
45.	F47	F48	32.0	100
46.	F48	F48a	81.0	100
47.	F48	F49	8.0	100
48.	F49	F48a	89.0	100
49.	F49	F50	5.0	100
50.	F50	F51	96.0	100
51.	F50	F52	104.0	100
52.	F51	F52	8.0	100
53.	F52	F53	37.0	100
54.	F53	F54	26.0	100

2629mt

S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	mtr.
55.	F54	F55	82.0	100
56.	F53	F55	56.0	100
			2767 mtr	
TUBE WELL WATER SUPPLY QUANTITY SHEET				
1	TW5	TTT1	66.0	100
2.	TW6	TTT1	6.0	100
3.	TTT1	***UGT-03***	55.0	150
HUDA WATER SUPPLY QUANTITY SHEET				
1	HUDA Water Supply	***UGT-03***	625.0	100

Description	**Length in (MTR)**	**Pipe Dia (MM)**
Domestic & Tube Well Water Supply line	5445.0	100
Domestic & Tube Well Water Supply line	121.0	150
Description	**Length in (MTR)**	**Pipe Dia (MM)**
HUDA Water Supply line	625.0	100
100 Dia Valve	24	Nos.
150 Dia Valve	3	Nos.
100 Dia Non Return Valve	2	Nos.
Air Valve	4	Nos.

IRRIGATION WATER SUPPLY QUANTITY SHEET FOR LC-3565 (14.5625 ACRE)				
S.No.	Line No		Length of Pipe	Dia of Pipe
	From	To	mtr.	OD
1	***STP-3***	G14	5.0	90
2.	G14	G15	103.0	90
3.	G15	G16	56.0	90
4.	G16a	G16	74.0	90
5.	G16	G17	21.0	90
6.	G15	G17	76.0	90
7.	G17	G18	290.0	90
8.	G18	G19	60.0	90
9.	G19	G20	17.0	90
10.	G20	G18	77.0	90
Irrigation Water Supply line			779.0	90
Garden Hydrant			13	Nos.
80 Dia Valve			1	Nos.
Air Valve			1	Nos.

TITLE - SEWERAGE QUANTITY SHEET FOR LC-3565 (14.5625 ACRE)

S.No.	Line No.		Length	Pipe Dia		Depth			EXCAVATION			
						Start	End	Avg.	0.0 - 1.5	1.5 - 3.0	3.0 - 4.5	4.5 - 6.0
-	From	To	(mtr.)	(mm)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)
1	S17a	S17	35.0	250	0.250	1.25	1.43	1.34	35.0	0.0	0.0	0.0
2.	S17b	S17	24.0	200	0.200	1.20	1.37	1.29	24.0	0.0	0.0	0.0
3.	S17	S18	22.0	250	0.250	1.43	1.55	1.49	22.0	0.0	0.0	0.0
4.	S18a	S18	20.0	200	0.200	1.20	1.34	1.27	20.0	0.0	0.0	0.0
5.	S18	S19	149.0	250	0.250	1.55	2.38	1.97	0.0	149.0	0.0	0.0
6.	S19a	S19	75.0	200	0.200	1.20	1.74	1.47	75.0	0.0	0.0	0.0
7.	S19	S20	39.0	250	0.250	2.38	2.64	2.51	0.0	39.0	0.0	0.0
8.	S20a	S20	75.0	200	0.200	1.20	1.74	1.47	75.0	0.0	0.0	0.0
9.	S20	S21	42.0	250	0.250	2.64	2.86	2.75	0.0	42.0	0.0	0.0
10.	S21a	S21	83.0	200	0.200	1.20	1.79	1.50	83.0	0.0	0.0	0.0
11.	S21	S22	24.0	250	0.250	2.86	2.99	2.92	0.0	24.0	0.0	0.0
12.	S22a	S22	61.0	200	0.200	1.20	1.64	1.42	61.0	0.0	0.0	0.0
13.	S22	S23	41.0	250	0.250	2.99	3.20	3.09	0.0	0.0	41.0	0.0
14.	S23a	S23	61.0	200	0.200	1.20	1.64	1.42	61.0	0.0	0.0	0.0
15.	S23	S24	69.0	300	0.300	3.25	3.53	3.39	0.0	0.0	69.0	0.0
16.	S24a	S24	55.0	200	0.200	1.20	1.59	1.40	55.0	0.0	0.0	0.0
17.	S24	S25	41.0	300	0.300	3.53	3.64	3.59	0.0	0.0	41.0	0.0
18.	S25a	S25	52.0	200	0.200	1.20	1.57	1.39	52.0	0.0	0.0	0.0
19.	S25	S26	58.0	300	0.300	3.64	3.87	3.76	0.0	0.0	58.0	0.0
20.	S27	S28	78.0	200	0.200	1.20	1.76	1.48	78.0	0.0	0.0	0.0
21.	S28a	S28	35.0	200	0.200	1.20	1.45	1.32	35.0	0.0	0.0	0.0
22.	S28	S29	39.0	200	0.200	1.76	2.04	1.90	0.0	39.0	0.0	0.0
23.	S29a	S29b	60.0	200	0.200	1.20	1.63	1.41	60.0	0.0	0.0	0.0
24.	S29c	S29b	13.0	200	0.200	1.20	1.29	1.25	13.0	0.0	0.0	0.0
25.	S29b	S29	78.0	200	0.200	1.63	2.19	1.91	0.0	78.0	0.0	0.0
26.	S29d	S29	35.0	200	0.200	1.20	1.45	1.32	35.0	0.0	0.0	0.0
27.	S29	S30	36.0	200	0.200	2.19	2.44	2.31	0.0	36.0	0.0	0.0
28.	S30a	S30	37.0	200	0.200	1.20	1.46	1.33	37.0	0.0	0.0	0.0

S.No.	Line No.		Length	Pipe Dia		Depth			EXCAVATION			
						Start	End	Avg.	0.0 - 1.5	1.5 - 3.0	3.0 - 4.5	4.5 - 6.0
-	From	To	(mtr.)	(mm)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)
29.	S30	S26	24.0	200	0.200	2.44	2.61	2.53	0.0	24.0	0.0	0.0
30.	S26	***STP-3***	25.0	400	0.400	3.97	4.04	4.01	0.0	0.0	25.0	0.0
Total			**1486.0**						**821.0**	**431.0**	**234.0**	**0.0**

Excavation Depth				
Description	(0.0 - 1.5)	(1.5 - 3.0)	(3.0 - 4.5)	(4.5 - 6.0)
200 mm Dia pipe	764.0	177.0	0.0	0.0
250 mm Dia pipe	57.0	254.0	41.0	0.0
300 mm Dia pipe	0.0	0.0	168.0	0.0
400 mm Dia pipe	0.0	0.0	25.0	0.0

TITLE : STORM WATER QUANTITY SHEET FOR LC-3565 (14.5625 ACRE)

S.No.	Line No.		Length	Size of Pipe		Depth			EXCAVATION		
						Start	End	Avg.	0.0 -1.5	1.5 - 3.0	3.0 - 4.5
-	From	To	(mtr.)	(mm)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)
1	A1	A2	81.0	400	0.400	1.40	1.54	1.47	81.0	0.0	0.0
2.	A2a	A2	29.0	400	0.400	1.40	1.45	1.43	29.0	0.0	0.0
3.	A2	A3	35.0	400	0.400	1.54	1.60	1.57	0.0	35.0	0.0
4.	A3a	A3	31.0	400	0.400	1.40	1.45	1.43	31.0	0.0	0.0
5.	A3	A4	39.0	400	0.400	1.60	1.67	1.64	0.0	39.0	0.0
6.	A4a	A4	31.0	400	0.400	1.40	1.45	1.43	31.0	0.0	0.0
7.	A4	A5	40.0	400	0.400	1.67	1.74	1.71	0.0	40.0	0.0
8.	A5	D.C.01	3.0	400	0.400	1.74	1.75	1.74	0.0	3.0	0.0
9.	D.C.01	R.P.01	3.0	400	0.400	1.75	1.75	1.75	0.0	3.0	0.0
10.	R.P.01	A6	6.0	400	0.400	1.40	1.41	1.41	6.0	0.0	0.0
11.	A6	A7	49.0	400	0.400	1.41	1.50	1.45	49.0	0.0	0.0
12.	A7a	A7	61.0	400	0.400	1.40	1.51	1.45	61.0	0.0	0.0
13.	A7	A8	34.0	400	0.400	1.51	1.62	1.56	0.0	34.0	0.0
14.	A18	A19	83.0	400	0.400	1.40	1.55	1.47	83.0	0.0	0.0
15.	A19a	A19	68.0	400	0.400	1.40	1.52	1.46	68.0	0.0	0.0
16.	A19	A20	15.0	400	0.400	1.55	1.57	1.56	0.0	15.0	0.0
17.	A20	D.C.02	7.0	400	0.400	1.57	1.58	1.58	0.0	7.0	0.0
18.	D.C.02	R.P.02	2.0	400	0.400	1.58	1.59	1.59	0.0	2.0	0.0
19.	R.P.02	A21	3.0	400	0.400	1.40	1.41	1.40	3.0	0.0	0.0
20.	A21	A8	71.0	400	0.400	1.41	1.58	1.49	71.0	0.0	0.0
21.	A8	A9	68.0	400	0.400	1.62	1.74	1.68	0.0	68.0	0.0
22.	A9a	A9	67.0	400	0.400	1.40	1.52	1.46	67.0	0.0	0.0
23.	A9	A10	37.0	400	0.400	1.74	1.80	1.77	0.0	37.0	0.0
24.	A10a	A10	67.0	400	0.400	1.40	1.52	1.46	67.0	0.0	0.0
25.	A10	A11	10.0	400	0.400	1.80	1.82	1.81	0.0	10.0	0.0
26.	A11a	A11	65.0	400	0.400	1.40	1.51	1.46	65.0	0.0	0.0
27.	A11	D.C.03	10.0	400	0.400	1.82	1.84	1.83	0.0	10.0	0.0
28.	D.C.03	R.P.03	5.0	400	0.400	1.84	1.84	1.84	0.0	5.0	0.0

S.No.	Line No.		Length	Size of Pipe		Depth			EXCAVATION		
						Start	End	Avg.	0.0 -1.5	1.5 - 3.0	3.0 - 4.5
-	From	To	(mtr.)	(mm)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)	(mtr.)
29.	R.P.03	A12	10.0	400	0.400	1.40	1.42	1.41	10.0	0.0	0.0
30.	A12	A13	32.0	400	0.400	1.42	1.47	1.45	32.0	0.0	0.0
31.	A22	A23	27.0	400	0.400	1.40	1.45	1.42	27.0	0.0	0.0
32.	A23a	A23	16.0	400	0.400	1.40	1.43	1.41	16.0	0.0	0.0
33.	A23	A13	58.0	400	0.400	1.45	1.55	1.50	58.0	0.0	0.0
34.	A13	A14	39.0	400	0.400	1.55	1.62	1.58	0.0	39.0	0.0
35.	A14a	A14	75.0	400	0.400	1.40	1.53	1.47	75.0	0.0	0.0
36.	A14	A15	75.0	400	0.400	1.62	1.70	1.66	0.0	75.0	0.0
37.	A15	D.C.04	4.0	400	0.400	1.70	1.71	1.70	0.0	4.0	0.0
38.	D.C.04	R.P.04	2.0	400	0.400	1.71	1.71	1.71	0.0	2.0	0.0
39.	R.P.04	A16	4.0	400	0.400	1.40	1.41	1.40	4.0	0.0	0.0
40.	A16	A17	65.0	400	0.400	1.41	1.47	1.44	65.0	0.0	0.0
41.	A17a	A17	16.0	400	0.400	1.40	1.43	1.41	16.0	0.0	0.0
42.	A17	**B6**	42.0	400	0.400	1.47	1.54	1.51	0.0	42.0	0.0
Total			**1485.0**						**1015.0**	**470.0**	**0.0**

Excavation Depth			
Description	(0.0 - 1.5)	(1.5 - 3.0)	(3.0 - 4.5)
400 mm Dia pipe	1015.0	470.0	0.0

TITLE : ROAD QUANTITY SHEET FOR LC-3565 (14.5625 ACRE)

AREA OF METALLED ROAD (A)

S.NO.	ROAD NO.	LENGTH (In Sq. Mt.)	WIDTH	-	TOTAL AREA (In Sq. Mt.)
1	Road No 1 ~~R13-R26~~	129.08 ~~133.59~~	5.50m ~~4.20~~		709.94 ~~561.06~~
2.	Road No 2 ~~R12-R27~~	129.08 ~~133.59~~	5.50 m ~~4.20~~		709.94 ~~561.06~~
3.	11 ~~R38-R39~~ 3	34.23 ~~93.32~~	5.50 ~~4.20~~		188.26 ~~391.92~~
4.	11 ~~R39-R40~~ 4	94.97 ~~2.28~~	5.50 ~~4.20~~		522.34 ~~9.58~~
5.	11 ~~R41-R42~~ 5	91.63 ~~79.32~~	5.50 ~~4.20~~		503.96 ~~333.14~~
6.	11 ~~R43-R45~~ 6	74.82 ~~79.32~~	5.50 ~~4.20~~		411.51 ~~333.14~~
7.	11 ~~R48-R46~~ 7	74.82 ~~63.71~~	5.50 ~~4.20~~		411.51 ~~267.56~~
8.	11 ~~R60-R49~~ 8	32.69 ~~65.91~~	5.50 ~~4.20~~		179.80 ~~276.82~~
9.	11 ~~R52-R51~~ 9	63.70 ~~102.79~~	5.50 ~~4.20~~		350.35 ~~431.72~~
10.	11 ~~R65-R66~~ 10	61.35 ~~30.42~~	5.50 ~~4.20~~		337.42 ~~127.74~~
11.	11 ~~R64-R65~~ 11	61.35 ~~40.20~~	5.50 ~~4.20~~		337.42 ~~43.22~~
12.	11 ~~R63-R53~~ 12	193.54 ~~92.82~~	5.50 ~~4.20~~		1064.47 ~~389.84~~
13.	11 ~~R62-R54~~ 13	83.82 ~~65.91~~	5.50 ~~4.20~~		461.01 ~~276.82~~
14.	11 ~~R58-R55~~ 14	56.38 ~~10.29~~	5.50 ~~4.20~~		310.09 ~~43.22~~
15.	11 ~~R61-R56~~ 15	131.82 ~~126.57~~	5.50 ~~4.20~~		725.01 ~~531.57~~
16.	11 ~~R64-R65~~ 16	108.0 ~~10.29~~	5.50 ~~4.20~~		594.0 ~~43.22~~
17.	11 ~~R58-R62~~ 17	41.47 ~~148.65~~	5.50 ~~4.20~~		228.08 ~~624.33~~
18.	11 ~~R65-R66~~ 18	33.70 ~~30.42~~	5.50 ~~4.20~~		185.35 ~~127.74~~
19.	11 ~~R60-R64~~ 19	33.70 ~~148.65~~	5.50 ~~4.20~~		185.35 ~~624.33~~
20.	11 ~~R68-R68~~ 20	120.70 ~~38.20~~	5.50 ~~4.20~~		663.85 ~~160.44~~
21.	Road ~~R56-R48~~ 21 (24m wide)	62.03 ~~186.99~~	14m (2x7m) ~~4.20~~		868.42 ~~785.36~~
~~22.~~	~~R48-R44~~	~~41.69~~	~~4.20~~		~~175.10~~
~~23.~~	~~R47-R40~~	~~90.06~~	~~4.20~~		~~378.25~~
~~24.~~	R38-R37	1712.86 ~~38.89~~	~~4.20~~		~~163.32~~
		~~1823.93~~	TOTAL		9948.09 ~~7660.51~~
		171.29	ADD 10% FOR CURVES		994.80 ~~766.051~~
		1884.17 m	TOTAL METALLED ROAD AREA (A)		10942.89 ~~8426.559~~
		Say 1885 Rmt	SAY		10950 Sq.m ~~8427.000~~
	TOTAL AREA OF ROADS = A				~~8427.000~~

S.NO.	ROAD NO.	LENGTH	WIDTH	-	TOTAL AREA
-	-	(In Sq. Mt.)	-	-	(In Sq. Mt.)
APPROCH PAVEMENT					
	1	PARK -01	259.29		
	2	PARK -02	216.79		
	3	PARK -03	67.92		
	4	PARK -04	169.77		
	5	PARK -05	197.08		
	6	PARK -06	122.33		
			1033.18		

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

TITLE : HYDRAULIC SEWAGE DESIGN CHART FOR LC-3565 (14.5625 ACRE)

S.No.	Line No.		Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line) LPD	Sewage Flow (Self Load on Line) KLD	Previous Load	Progressive Discharge	Progressive Discharge (Average)	Progressive Discharge (Peak)	Infilteration @ 25% Av. Discharge	Total Discharge	Length	Pipe Size	Slope (1 in)	Fall	Velocity	Capacity of Pipe	Levels at start (mtr)			Levels at End (mtr)			Manhole Start Depth	Manhole Start End	Average Depth
-	From	To	lpd.	80%	1000	kld.	kld.	lps.	lps.	lps.	lps	(mtr.)	(mm)	(mm)	(mtr.)	(m/s) (v)	lps	FRL	FSL	IL	FRL	FSL	IL	(mtr)	(mtr)	(mtr)
1.	S17a	S17	10479	8384	8.38	0.00	8.38	0.10	0.29	0.02	0.32	35.0	250	190	0.18	0.76	18.70	212.172	211.17	210.92	212.172	210.99	210.74	1.25	1.43	1.34
2.	S17b	S17	10479	8384	8.38	0.00	8.38	0.10	0.29	0.02	0.32	24.0	200	140	0.17	0.76	12.02	212.172	211.17	210.97	212.172	211.00	210.80	1.20	1.37	1.29
3.	S17	S18	0	0	0.00	16.77	16.77	0.19	0.58	0.05	0.63	22.0	250	190	0.12	0.76	18.70	212.172	210.99	210.74	212.172	210.87	210.62	1.43	1.55	1.49
4.	S18a	S18	6288	5030	5.03	0.00	5.03	0.06	0.17	0.01	0.19	20.0	200	140	0.14	0.76	12.02	212.172	211.17	210.97	212.172	211.03	210.83	1.20	1.34	1.27
5.	S18	S19	54822	43857	43.86	21.80	65.65	0.76	2.28	0.19	2.47	149.0	250	190	0.78	0.76	18.70	212.172	210.87	210.62	212.222	210.09	209.84	1.55	2.38	1.97
6.	S19a	S19	50301	40241	40.24	0.00	40.24	0.47	1.40	0.12	1.51	75.0	200	140	0.54	0.76	12.02	212.222	211.22	211.02	212.222	210.69	210.49	1.20	1.74	1.47
7.	S19	S20	0	0	0.00	105.90	105.90	1.23	3.68	0.31	3.98	39.0	250	190	0.21	0.76	18.70	212.222	210.09	209.84	212.272	209.88	209.63	2.38	2.64	2.51
8.	S20a	S20	41918	33534	33.53	0.00	33.53	0.39	1.16	0.10	1.26	75.0	200	140	0.54	0.76	12.02	212.272	211.27	211.07	212.272	210.74	210.54	1.20	1.74	1.47
9.	S20	S21	0	0	0.00	139.43	139.43	1.61	4.84	0.40	5.24	42.0	250	190	0.22	0.76	18.70	212.272	209.88	209.63	212.272	209.66	209.41	2.64	2.86	2.75
10.	S21a	S21	46109	36887	36.89	0.00	36.89	0.43	1.28	0.11	1.39	83.0	200	140	0.59	0.76	12.02	212.272	211.27	211.07	212.272	210.68	210.48	1.20	1.79	1.50
11.	S21	S22	0	0	0.00	176.32	176.32	2.04	6.12	0.51	6.63	24.0	250	190	0.13	0.76	18.70	212.272	209.66	209.41	212.272	209.54	209.29	2.86	2.99	2.92
12.	S22a	S22	39822	31857	31.86	0.00	31.86	0.37	1.11	0.09	1.20	61.0	200	140	0.44	0.76	12.02	212.272	211.27	211.07	212.272	210.84	210.64	1.20	1.64	1.42
13.	S22	S23	0	0	0.00	208.17	208.17	2.41	7.23	0.60	7.83	41.0	250	190	0.22	0.76	18.70	212.272	209.54	209.29	212.272	209.32	209.07	2.99	3.20	3.09
14.	S23a	S23	20959	16767	16.77	0.00	16.77	0.19	0.58	0.05	0.63	61.0	200	140	0.44	0.76	12.02	212.272	211.27	211.07	212.272	210.84	210.64	1.20	1.64	1.42
15.	S23	S24	35630	28504	28.50	224.94	253.44	2.93	8.80	0.73	9.53	69.0	300	250	0.28	0.75	26.51	212.272	209.32	209.02	212.272	209.04	208.74	3.25	3.53	3.39
16.	S24a	S24	23055	18444	18.44	0.00	18.44	0.21	0.64	0.05	0.69	55.0	200	140	0.39	0.76	12.02	212.272	211.27	211.07	212.272	210.88	210.68	1.20	1.59	1.40
17.	S24	S25	50000	40000	40.00	271.89	311.89	3.61	10.83	0.90	11.73	41.0	300	250	0.16	0.75	26.51	212.272	209.04	208.74	212.222	208.88	208.58	3.53	3.64	3.59
18.	S25a	S25	37726	30181	30.18	0.00	30.18	0.35	1.05	0.09	1.14	52.0	200	140	0.37	0.76	12.02	212.222	211.22	211.02	212.222	210.85	210.65	1.20	1.57	1.39
19.	S25	S26	6288	5030	5.03	342.07	347.10	4.02	12.05	1.00	13.06	58.0	300	250	0.23	0.75	26.51	212.222	208.88	208.58	212.222	208.65	208.35	3.64	3.87	3.76
20.	S27	S28	25151	20120	20.12	0.00	20.12	0.23	0.70	0.06	0.76	78.0	200	140	0.56	0.76	12.02	212.222	211.22	211.02	212.222	210.66	210.46	1.20	1.76	1.48
21.	S28a	S28	10479	8384	8.38	0.00	8.38	0.10	0.29	0.02	0.32	35.0	200	140	0.25	0.76	12.02	212.222	211.22	211.02	212.222	210.97	210.77	1.20	1.45	1.32
22.	S28	S29	0	0	0.00	28.50	28.50	0.33	0.99	0.08	1.07	39.0	200	140	0.28	0.76	12.02	212.222	210.66	210.46	212.222	210.39	210.19	1.76	2.04	1.90
23.	S29a	S29b	23055	18444	18.44	0.00	18.44	0.21	0.64	0.05	0.69	60.0	200	140	0.43	0.76	12.02	212.222	211.22	211.02	212.222	210.79	210.59	1.20	1.63	1.41
24.	S29c	S29b	6288	5030	5.03	0.00	5.03	0.06	0.17	0.01	0.19	13.0	200	140	0.09	0.76	12.02	212.222	211.22	211.02	212.222	211.13	210.93	1.20	1.29	1.25
25.	S29b	S29	25151	20120	20.12	23.47	43.59	0.50	1.51	0.13	1.64	78.0	200	140	0.56	0.76	12.02	212.222	210.79	210.59	212.222	210.24	210.04	1.63	2.19	1.91
26.	S29d	S29	20959	16767	16.77	0.00	16.77	0.19	0.58	0.05	0.63	35.0	200	140	0.25	0.76	12.02	212.222	211.22	211.02	212.222	210.97	210.77	1.20	1.45	1.32
27.	S29	S30	8384	6707	6.71	88.87	95.57	1.11	3.32	0.28	3.60	36.0	200	140	0.26	0.76	12.02	212.222	210.24	210.04	212.222	209.98	209.78	2.19	2.44	2.31

S.No.	Line No.		Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line) LPD	Sewage Flow (Self Load on Line) KLD	Previous Load	Progressive Discharge	Progressive Discharge (Average)	Progressive Discharge (Peak)	Infilteration @ 25% Av. Discharge	Total Discharge	Length	Pipe Size	Slope (1 in)	Fall	Velocity	Capacity of Pipe	Levels at start (mtr)			Levels at End (mtr)			Manhole Start Depth	Manhole Start End	Average Depth
-	From	To	lpd.	80%	1000	kld.	kld.	lps.	lps.	lps.	lps	(mtr.)	(mm)	(mm)	(mtr.)	(m/s) (v)	lps	FRL	FSL	IL	FRL	FSL	IL	(mtr)	(mtr)	(mtr)
28.	S30a	S30	20959	16767	16.77	0.00	16.77	0.19	0.58	0.05	0.63	37.0	200	140	0.26	0.76	12.02	212.222	211.22	211.02	212.222	210.96	210.76	1.20	1.46	1.33
29.	S30	S26	12575	10060	10.06	112.34	122.40	1.42	4.25	0.35	4.60	24.0	200	140	0.17	0.76	12.02	212.222	209.98	209.78	212.222	209.81	209.61	2.44	2.61	2.53
30.	S26	*STP-3*	0	0	0.00	469.50	469.50	5.43	16.30	1.36	17.66	25.0	400	370	0.07	0.75	46.93	212.222	208.65	208.25	212.222	208.58	208.18	3.97	4.04	4.01

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

LOAD ON SEWAGE LINES FOR LC-3565 (14.5625 ACRE)

			Residential Sewage Load						Non Residential Load		Residential + Non Residential Load		
S.No.	Name of Sewer Line		Plots	Population for apartment @ 13.5 persons / Unit	Water Reuirement @ 155.25 Ltr/ day /Person	EWS	Population @ 9 persons / Unit	Water Reuirement @ 155.25 Ltr/ day /Person	Amenity	Water Reuirement @ Lumsum/day	Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line)	Sewage Flow (Self Load on Line)
												lpd.	kld.
-	From	To	Unit	13.5	155.25	Unit	9	155.25	-	Lumpsum	lpd.	80%	1000
1.	S17a	S17	5	67.5	10479.375	0	0	0	-	0.00	10479	8384	8.38
2.	S17b	S17	5	67.5	10479.375	0	0	0	-	0.00	10479	8384	8.38
3.	S17	S18	0	0	0	0	0	0	-	0.00	0	0	0.00
4.	S18a	S18	3	40.5	6287.625	0	0	0	-	0.00	6288	5030	5.03
5.	S18	S19	19	256.5	39821.625	0	0	0	Commecrial (0.5791 Acre)	15000.00	54822	43857	43.86
6.	S19a	S19	24	324	50301	0	0	0	-	0.00	50301	40241	40.24
7.	S19	S20	0	0	0	0	0	0	-	0.00	0	0	0.00
8.	S20a	S20	20	270	41917.5	0	0	0	-	0.00	41918	33534	33.53
9.	S20	S21	0	0	0	0	0	0	-	0.00	0	0	0.00
10.	S21a	S21	22	297	46109.25	0	0	0	-	0.00	46109	36887	36.89
11.	S21	S22	0	0	0	0	0	0	-	0.00	0	0	0.00
12.	S22a	S22	19	256.5	39821.625	0	0	0	-	0.00	39822	31857	31.86
13.	S22	S23	0	0	0	0	0	0	-	0.00	0	0	0.00
14.	S23a	S23	10	135	20958.75	0	0	0	-	0.00	20959	16767	16.77
15.	S23	S24	17	229.5	35629.875	0	0	0	-	0.00	35630	28504	28.50
16.	S24a	S24	11	148.5	23054.625	0	0	0	-	0.00	23055	18444	18.44
17.	S24	S25	0	0	0	0	0	0	Community (1.459 Acre)	50000.00	50000	40000	40.00
18.	S25a	S25	18	243	37725.75	0	0	0	-	0.00	37726	30181	30.18
19.	S25	S26	3	40.5	6287.625	0	0	0	-	0.00	6288	5030	5.03
20.	S27	S28	12	162	25150.5	0	0	0	-	0.00	25151	20120	20.12
21.	S28a	S28	5	67.5	10479.375	0	0	0	-	0.00	10479	8384	8.38

			Residential Sewage Load						Non Residential Load		Residential + Non Residential Load		
S.No.	Name of Sewer Line		Plots	Population for apartment @ 13.5 persons / Unit	Water Reuirement @ 155.25 Ltr/ day /Person	EWS	Population @ 9 persons / Unit	Water Reuirement @ 155.25 Ltr/ day /Person	Amenity	Water Reuirement @ Lumsum/day	Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line)	Sewage Flow (Self Load on Line)
												lpd.	kld.
-	From	To	**Unit**	**13.5**	**155.25**	**Unit**	**9**	**155.25**	-	**Lumpsum**	**lpd.**	80%	1000
22.	S28	S29	0	0	0	0	0	0	-	0.00	0	0	0.00
23.	S29a	S29b	11	148.5	23054.625	0	0	0	-	0.00	23055	18444	18.44
24.	S29c	S29b	3	40.5	6287.625	0	0	0	-	0.00	6288	5030	5.03
25.	S29b	S29	12	162	25150.5	0	0	0	-	0.00	25151	20120	20.12
26.	S29d	S29	10	135	20958.75	0	0	0	-	0.00	20959	16767	16.77
27.	S29	S30	4	54	8383.5	0	0	0	-	0.00	8384	6707	6.71
28.	S30a	S30	10	135	20958.75	0	0	0	-	0.00	20959	16767	16.77
29.	S30	S26	6	81	12575.25	0	0	0	-	0.00	12575	10060	10.06
30.	S26	***STP-3***	0	0	0	0	0	0	-	0.00	0	0	0.00
			249	**3362**	**521873**	**0**	**0**	**0**	-	**65000.00**	**586872.88**	**469498.30**	**469.50**

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

TITLE : HYDRAULIC STORM WATER DESIGN CHART FOR LC-3565 (14.5625 ACRE)

S.No.	Line No.		Length	Catchment Area (Sqm.)			Discharge @ 6.25 mm/hr rainfall	Pipe dia	Slope 1 in	Velocity m/sec.	Capacity of pipe	Fall in line	Levels at start (mtr.)			Levels at End (mtr.)			Manhole Depth		
																			Depth (mtr.)		Avg.
	From	To	(mtr.)	Self	Progg.	Total	60% runoff (lps)	(mm)	(mm)	m/sec.	lps.	mtr.	FRL	FSL	IL	FRL	FSL	IL	Start	End	Depth
1.	A1	A2	81.0	1910.0	0.0	1910.0	1.99	400	570	0.60	75.63	0.14	212.222	211.22	210.82	212.222	211.08	210.68	1.40	1.54	1.47
2.	A2a	A2	29.0	690.0	0.0	690.0	0.72	400	570	0.60	75.63	0.05	212.222	211.22	210.82	212.222	211.17	210.77	1.40	1.45	1.43
3.	A2	A3	35.0	330.0	2600.0	2930.0	3.05	400	570	0.60	75.63	0.06	212.222	211.08	210.68	212.222	211.02	210.62	1.54	1.60	1.57
4.	A3a	A3	31.0	1350.0	0.0	1350.0	1.41	400	570	0.60	75.63	0.05	212.222	211.22	210.82	212.222	211.17	210.77	1.40	1.45	1.43
5.	A3	A4	39.0	920.0	4280.0	5200.0	5.42	400	570	0.60	75.63	0.07	212.222	211.02	210.62	212.222	210.95	210.55	1.60	1.67	1.64
6.	A4a	A4	31.0	1350.0	0.0	1350.0	1.41	400	570	0.60	75.63	0.05	212.222	211.22	210.82	212.222	211.17	210.77	1.40	1.45	1.43
7.	A4	A5	40.0	1800.0	6550.0	8350.0	8.70	400	570	0.60	75.63	0.07	212.222	210.95	210.55	212.222	210.88	210.48	1.67	1.74	1.71
8.	A5	***D.C.01***	3.0	0.0	8350.0	8350.0	8.70	400	570	0.60	75.63	0.01	212.222	210.88	210.48	212.222	210.87	210.47	1.74	1.75	1.74
9.	***D.C.01***	***R.P.01***	3.0	0.0	8350.0	8350.0	8.70	400	570	0.60	75.63	0.01	212.222	210.87	210.47	212.222	210.87	210.47	1.75	1.75	1.75
10.	***R.P.01***	A6	6.0	0.0	8350.0	8350.0	8.70	400	570	0.60	75.63	0.01	212.222	211.22	210.82	212.222	211.21	210.81	1.40	1.41	1.41
11.	A6	A7	49.0	6000.0	8350.0	14350.0	14.95	400	570	0.60	75.63	0.09	212.222	211.21	210.81	212.222	211.13	210.73	1.41	1.50	1.45
12.	A7a	A7	61.0	2950.0	0.0	2950.0	3.07	400	570	0.60	75.63	0.11	212.222	211.22	210.82	212.222	211.11	210.71	1.40	1.51	1.45
13.	A7	A8	34.0	600.0	17300.0	17900.0	18.65	400	570	0.60	75.63	0.06	212.222	211.11	210.71	212.272	211.06	210.66	1.51	1.62	1.56
14.	A18	A19	83.0	2500.0	0.0	2500.0	2.60	400	570	0.60	75.63	0.15	212.222	211.22	210.82	212.222	211.08	210.68	1.40	1.55	1.47
15.	A19a	A19	68.0	2600.0	0.0	2600.0	2.71	400	570	0.60	75.63	0.12	212.222	211.22	210.82	212.222	211.10	210.70	1.40	1.52	1.46
16.	A19	A20	15.0	260.0	5100.0	5360.0	5.58	400	570	0.60	75.63	0.03	212.222	211.08	210.68	212.222	211.05	210.65	1.55	1.57	1.56
17.	A20	***D.C.02***	7.0	400.0	5360.0	5760.0	6.00	400	570	0.60	75.63	0.01	212.222	211.05	210.65	212.222	211.04	210.64	1.57	1.58	1.58
18.	***D.C.02***	***R.P.02***	2.0	0.0	5760.0	5760.0	6.00	400	570	0.60	75.63	0.00	212.222	211.04	210.64	212.222	211.03	210.63	1.58	1.59	1.59
19.	***R.P.02***	A21	3.0	0.0	5760.0	5760.0	6.00	400	570	0.60	75.63	0.01	212.222	211.22	210.82	212.222	211.22	210.82	1.40	1.41	1.40
20.	A21	A8	71.0	1800.0	5760.0	7560.0	7.88	400	570	0.60	75.63	0.12	212.222	211.22	210.82	212.272	211.09	210.69	1.41	1.58	1.49
21.	A8	A9	68.0	2600.0	25460.0	28060.0	29.23	400	570	0.60	75.63	0.12	212.272	211.06	210.66	212.272	210.94	210.54	1.62	1.74	1.68
22.	A9a	A9	67.0	1900.0	0.0	1900.0	1.98	400	570	0.60	75.63	0.12	212.272	211.27	210.87	212.272	211.15	210.75	1.40	1.52	1.46
23.	A9	A10	37.0	370.0	29960.0	30330.0	31.59	400	570	0.60	75.63	0.06	212.272	210.94	210.54	212.272	210.87	210.47	1.74	1.80	1.77
24.	A10a	A10	67.0	2500.0	0.0	2500.0	2.60	400	570	0.60	75.63	0.12	212.272	211.27	210.87	212.272	211.15	210.75	1.40	1.52	1.46
25.	A10	A11	10.0	200.0	32830.0	33030.0	34.41	400	570	0.60	75.63	0.02	212.272	210.87	210.47	212.272	210.85	210.45	1.80	1.82	1.81
26.	A11a	A11	65.0	2600.0	0.0	2600.0	2.71	400	570	0.60	75.63	0.11	212.272	211.27	210.87	212.272	211.16	210.76	1.40	1.51	1.46
27.	A11	***D.C.03***	10.0	150.0	35630.0	35780.0	37.27	400	570	0.60	75.63	0.02	212.272	210.85	210.45	212.272	210.84	210.44	1.82	1.84	1.83

S.No.	Line No.		Length	Catchment Area (Sqm.)			Discharge @ 6.25 mm/hr rainfall	Pipe dia	Slope 1 in	Velocity m/sec.	Capacity of pipe	Fall in line	Levels at start (mtr.)			Levels at End (mtr.)			Manhole Depth		
																			Depth (mtr.)		Avg.
	From	To	(mtr.)	Self	Progg.	Total	60° runoff (lps)	(mm)	(mm)	m/sec.	lps.	mtr.	FRL	FSL	IL	FRL	FSL	IL	Start	End	Depth
28.	***D.C.03***	***R.P.03***	5.0	0.0	35780.0	35780.0	37.27	400	570	0.60	75.63	0.01	212.272	210.84	210.44	212.272	210.83	210.43	1.84	1.84	1.84
29.	***R.P.03***	A12	10.0	0.0	35780.0	35780.0	37.27	400	570	0.60	75.63	0.02	212.272	211.27	210.87	212.272	211.25	210.85	1.40	1.42	1.41
30.	A12	A13	32.0	410.0	35780.0	36190.0	37.70	400	570	0.60	75.63	0.06	212.272	211.25	210.85	212.272	211.20	210.80	1.42	1.47	1.45
31.	A22	A23	27.0	700.0	0.0	700.0	0.73	400	570	0.60	75.63	0.05	212.272	211.27	210.87	212.272	211.22	210.82	1.40	1.45	1.42
32.	A23a	A23	16.0	200.0	0.0	200.0	0.21	400	570	0.60	75.63	0.03	212.272	211.27	210.87	212.272	211.24	210.84	1.40	1.43	1.41
33.	A23	A13	58.0	1700.0	900.0	2600.0	2.71	400	570	0.60	75.63	0.10	212.272	211.22	210.82	212.272	211.12	210.72	1.45	1.55	1.50
34.	A13	A14	39.0	350.0	38790.0	39140.0	40.77	400	570	0.60	75.63	0.07	212.272	211.12	210.72	212.272	211.05	210.65	1.55	1.62	1.58
35.	A14a	A14	75.0	2900.0	0.0	2900.0	3.02	400	570	0.60	75.63	0.13	212.272	211.27	210.87	212.272	211.14	210.74	1.40	1.53	1.47
36.	A14	A15	75.0	2500.0	42040.0	44540.0	46.40	400	570	0.60	75.63	0.13	212.272	211.05	210.65	212.222	210.92	210.52	1.62	1.70	1.66
37.	A15	***D.C.04***	4.0	0.0	44540.0	44540.0	46.40	400	570	0.60	75.63	0.01	212.222	210.92	210.52	212.222	210.92	210.52	1.70	1.71	1.70
38.	***D.C.04***	***R.P.04***	2.0	0.0	44540.0	44540.0	46.40	400	570	0.60	75.63	0.00	212.222	210.92	210.52	212.222	210.91	210.51	1.71	1.71	1.71
39.	***R.P.04***	A16	4.0	0.0	44540.0	44540.0	46.40	400	570	0.60	75.63	0.01	212.222	211.22	210.82	212.222	211.21	210.81	1.40	1.41	1.40
40.	A16	A17	65.0	2000.0	44540.0	46540.0	48.48	400	570	0.60	75.63	0.11	212.222	211.21	210.81	212.172	211.10	210.70	1.41	1.47	1.44
41.	A17a	A17	16.0	600.0	0.0	600.0	0.63	400	570	0.60	75.63	0.03	212.172	211.17	210.77	212.172	211.14	210.74	1.40	1.43	1.41
42.	A17	B6	42.0	3000.0	47140.0	50140.0	52.23	400	570	0.60	75.63	0.07	212.172	211.10	210.70	212.172	211.03	210.63	1.47	1.54	1.51

Formula Used:

Velocity(m/s)=(1/n)x(A/P)^(2/3)*(1/slope)^.5

n=.015 for RCC pipe (Manning's Coefficient)

A=Area of x-section of pipe in sqm.

P =Wetted Perimeter in m

Capacity of pipe(lps) =Area of x-section of pipe in sqm x velocity in m/s x1000x1/2(Storm water are designed to run full flow)

Abbreviation Used:

IL=Invert level of pipe

FSL=Full supply level

FRL=Formation Road Level

CL=Connection Level

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

TITLE : WATER SUPPLY HYDRAULIC CHART FOR 11.60 ACRE

S.No.	Line No					Plots (EWS)			Water Req. for Non Resi. Plots.		Total water Requirement	Domestic Water Req. @ 65 %													
	From	To	Nos.	Population @ 13.5 persons / Plot.	Water Requirement /day/person @	Nos.	Pop. @ 9 persons / Plot	Water Req./day/ person @	Type of Building	Basis of Water Requirement	Residential & Non Residential Building	Residential & Non Residential Building	Average Demand	Peak Demand @ 3 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe	Ground Level at start	Hydraulic Level at start	Head at start	Ground level at End	Hydraulic level at End	Head at End
-	-	-	-	13.5	155.25	-	9	155.25	-	Lumpsum	lpd.	lpd.	kld.	kld.	lpm.	mtr.	mtr./mtr	mtr.	mtr./sec	mtr.	mtr.	mtr.	mtr.	mtr.	mtr.	mtr.
1	UGT-3	D28	249	3361.5	521873	0	0	0	-	65000	586873	381467	381.47	1144	795	25.0	0.005	0.13	0.749	150	212.222	233.22	21.00	212.222	233.09	20.87
2.	D28	D28a	9	121.5	18863	0	0	0	-	0	18863	12261	12.26	37	26	57.0	0.000	0.00	0.054	100	212.222	233.09	20.87	212.222	233.09	20.87
3.	D28	D29	240	3240	503010	0	0	0	-	65000	568010	369207	369.21	1108	769	8.0	0.005	0.04	0.725	150	212.222	233.09	20.87	212.222	233.05	20.83
4.	D29	D28a	9	121.5	18863	0	0	0	-	0	18863	12261	12.26	37	26	62.0	0.000	0.00	0.054	100	212.222	233.05	20.83	212.222	233.05	20.83
5.	D29	D30	231	3118.5	484147	0	0	0	-	65000	549147	356946	356.95	1071	744	33.0	0.005	0.15	0.701	150	212.222	233.05	20.83	212.222	232.90	20.68
6.	D30	D31	158	2133	331148	0	0	0	-	65000	396148	257496	257.50	772	536	61.0	0.018	1.10	1.138	100	212.222	232.90	20.68	212.272	231.81	19.54
7.	D31	D31a	23	310.5	48205	0	0	0	Community (1.459 Acre)	50000	98205	63833	63.83	191	133	228.0	0.001	0.31	0.282	100	212.272	231.81	19.54	212.272	231.50	19.23
8.	D31	D32	126	1701	264080	0	0	0	-	15000	279080	181402	181.40	544	378	8.0	0.009	0.08	0.802	100	212.272	231.81	19.54	212.272	231.73	19.46
9.	D32	D47a	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	88.0	0.000	0.00	0.030	100	212.272	231.73	19.46	212.272	231.73	19.46
10.	D32	D33	121	1633.5	253601	0	0	0	-	15000	268601	174591	174.59	524	364	57.0	0.009	0.50	0.771	100	212.272	231.73	19.46	212.272	231.24	18.96
11.	D33	D33a	0	0	0	0	0	0	-	0	0	0	0.00	0	0	64.0	0.000	0.00	0.000	100	212.272	231.24	18.96	212.272	231.24	18.96
12.	D33	D34	113	1525.5	236834	0	0	0	-	15000	251834	163692	163.69	491	341	8.0	0.008	0.06	0.723	100	212.272	231.24	18.96	212.272	231.17	18.90
13.	D34	D33a	10	135	20959	0	0	0	-	0	20959	13623	13.62	41	28	72.0	0.000	0.01	0.060	100	212.272	231.17	18.90	212.272	231.17	18.90
14.	D34	D34a	103	1390.5	215875	0	0	0	-	15000	230875	150069	150.07	450	313	34.0	0.007	0.22	0.663	100	212.272	231.17	18.90	212.272	230.95	18.68
15.	D34a	D35a	10	135	20959	0	0	0	-	0	20959	13623	13.62	41	28	64.0	0.000	0.00	0.060	100	212.272	230.95	18.68	212.272	230.94	18.67
16.	D34a	D35	93	1255.5	194916	0	0	0	-	15000	209916	136446	136.45	409	284	3.0	0.006	0.02	0.603	100	212.272	230.95	18.68	212.272	230.93	18.66
17.	D35	D35a	9	121.5	18863	0	0	0	-	0	18863	12261	12.26	37	26	72.0	0.000	0.00	0.054	100	212.272	230.93	18.66	212.272	230.93	18.66
18.	D35	D36	84	1134	176054	0	0	0	-	15000	191054	124185	124.18	373	259	17.0	0.005	0.08	0.549	100	212.272	230.93	18.66	212.272	230.85	18.58
19.	D36	D37a	8	108	16767	0	0	0	-	0	16767	10899	10.90	33	23	93.0	0.000	0.00	0.048	100	212.272	230.85	18.58	212.272	230.85	18.58
20.	D36	D37	76	1026	159287	0	0	0	-	15000	174287	113286	113.29	340	236	35.0	0.004	0.14	0.501	100	212.272	230.85	18.58	212.272	230.72	18.44
21.	D37	D37a	12	162	25151	0	0	0	-	0	25151	16348	16.35	49	34	57.0	0.000	0.01	0.072	100	212.272	230.72	18.44	212.272	230.71	18.44
22.	D37a	D31a	4	54	8384	0	0	0	-	0	8384	5449	5.45	16	11	8.0	0.000	0.00	0.024	100	212.272	230.71	18.44	212.272	230.71	18.44
23.	D37	D38	68	918	142520	0	0	0	-	15000	157520	102388	102.39	307	213	8.0	0.003	0.03	0.452	100	212.272	230.72	18.44	212.272	230.69	18.42
24.	D38	D31a	12	162	25151	0	0	0	-	0	25151	16348	16.35	49	34	105.0	0.000	0.01	0.072	100	212.272	230.69	18.42	212.272	230.68	18.41
25.	D38	D39	56	756	117369	0	0	0	-	15000	132369	86040	86.04	258	179	32.0	0.002	0.08	0.380	100	212.272	230.69	18.42	212.272	230.61	18.34
26.	D39	D39a	12	162	25151	0	0	0	-	0	25151	16348	16.35	49	34	81.0	0.000	0.01	0.072	100	212.272	230.61	18.34	212.272	230.61	18.33
27.	D39	D40	44	594	92219	0	0	0	-	15000	107219	69692	69.69	209	145	8.0	0.002	0.01	0.308	100	212.272	230.61	18.34	212.272	230.60	18.33
28.	D40	D39a	12	162	25151	0	0	0	-	0	25151	16348	16.35	49	34	89.0	0.000	0.01	0.072	100	212.272	230.60	18.33	212.272	230.59	18.32

S.No.	Line No					Plots (EWS)			Water Req. for Non Resi. Plots		Total water Requirement	Domestic Water Req. @ 65 %														
	From	To	Nos.	Population @ 13.5 persons / Plot.	Water Requirement /day/person @	Nos.	Pop. @ 9 persons / Plot	Water Req./day/ person @	Type of Building	Basis of Water Requirement	Residential & Non Residential Building	Residential & Non Residential Building	Average Demand	Peak Demand @ 3 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe	Ground Level at start	Hydraulic Level at start	Head at start	Ground level at End	Hydraulic level at End	Head at End
29.	D40	D41	32	432	67068	0	0	0	-	15000	82068	53344	53.34	160	111	5.0	0.001	0.00	0.236	100	212.272	230.60	18.33	212.272	230.60	18.32
30.	D41	D42	28	378	58685	0	0	0	-	15000	73685	47895	47.89	144	100	96.0	0.001	0.08	0.212	100	212.272	230.60	18.32	212.222	230.52	18.30
31.	D42	D43	13	175.5	27246	0	0	0	-	15000	42246	27460	27.46	82	57	8.0	0.000	0.00	0.121	100	212.222	230.52	18.30	212.222	230.52	18.30
32.	D41	D43	17	229.5	35630	0	0	0	-	0	35630	23159	23.16	69	48	104.0	0.000	0.02	0.102	100	212.272	230.60	18.32	212.222	230.57	18.35
33.	D43	D44	13	175.5	27246	0	0	0	Commecrial (0.5791 Acre)	15000	42246	27460	27.46	82	57	37.0	0.000	0.01	0.121	100	212.222	230.57	18.35	212.222	230.56	18.34
34.	D44	D45	13	175.5	27246	0	0	0	-	0	27246	17710	17.71	53	37	26.0	0.000	0.00	0.078	100	212.222	230.56	18.34	212.222	230.56	18.34
35.	D45	D46	10	135	20959	0	0	0	-	0	20959	13623	13.62	41	28	82.0	0.000	0.01	0.060	100	212.222	230.56	18.34	211.872	230.55	18.68
36.	D44	D46	10	135	20959	0	0	0	-	0	20959	13623	13.62	41	28	56.0	0.000	0.00	0.060	100	211.872	230.56	18.69	211.872	230.56	18.69
37.	D30	D47	73	985.5	152999	0	0	0	-	0	152999	99449	99.45	298	207	27.0	0.003	0.08	0.439	100	212.222	232.90	20.68	212.222	232.82	20.60
38.	D47	D47a	11	148.5	23055	0	0	0	-	0	23055	14986	14.99	45	31	8.0	0.000	0.00	0.066	100	212.222	232.82	20.60	212.222	232.82	20.60
39.	D47a	D47b	11	148.5	23055	0	0	0	-	0	23055	14986	14.99	45	31	64.0	0.000	0.01	0.066	100	212.222	232.82	20.60	212.222	232.81	20.59
40.	D47	D48	62	837	129944	0	0	0	-	0	129944	84464	84.46	253	176	71.0	0.002	0.16	0.373	100	212.222	232.82	20.60	212.222	232.66	20.44
41.	D48	D48a	13	175.5	27246	0	0	0	-	0	27246	17710	17.71	53	37	84.0	0.000	0.01	0.078	100	212.222	232.66	20.44	212.222	232.65	20.43
42.	D48a	D55	13	175.5	27246	0	0	0	-	0	27246	17710	17.71	53	37	52.0	0.000	0.01	0.078	100	212.222	232.65	20.43	212.222	232.64	20.42
43.	D48	D49	49	661.5	102698	0	0	0	-	0	102698	66754	66.75	200	139	8.0	0.001	0.01	0.295	100	212.222	232.66	20.44	212.222	232.65	20.42
44.	D49	D47b	12	162	25151	0	0	0	-	0	25151	16348	16.35	49	34	164.0	0.000	0.02	0.072	100	212.222	232.65	20.42	212.222	232.63	20.41
45.	D49	D50	37	499.5	77547	0	0	0	-	0	77547	50406	50.41	151	105	32.0	0.001	0.03	0.223	100	212.222	232.65	20.42	212.222	232.62	20.40
46.	D50	D50a	12	162	25151	0	0	0	-	0	25151	16348	16.35	49	34	79.0	0.000	0.01	0.072	100	212.222	232.62	20.40	212.222	232.61	20.39
47.	D50	D51	25	337.5	52397	0	0	0	-	0	52397	34058	34.06	102	71	8.0	0.000	0.00	0.150	100	212.222	232.62	20.40	212.222	232.62	20.39
48.	D51	D51a	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	35.0	0.000	0.00	0.030	100	212.222	232.62	20.39	212.222	232.61	20.39
49.	D51	D52	20	270	41918	0	0	0	-	0	41918	27246	27.25	82	57	32.0	0.000	0.01	0.120	100	212.222	232.62	20.39	212.222	232.61	20.38
50.	D52	D52a	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	35.0	0.000	0.00	0.030	100	212.222	232.61	20.38	212.222	232.61	20.38
51.	D52	D53	15	202.5	31438	0	0	0	-	0	31438	20435	20.43	61	43	8.0	0.000	0.00	0.090	100	212.222	232.61	20.38	212.222	232.61	20.38
52.	D53	D52a	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	43.0	0.000	0.00	0.030	100	212.222	232.61	20.38	212.222	232.60	20.38
53.	D53	D54	10	135	20959	0	0	0	-	0	20959	13623	13.62	41	28	31.0	0.000	0.00	0.060	100	212.222	232.61	20.38	212.222	232.60	20.38
54.	D54	D54a	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	35.0	0.000	0.00	0.030	100	212.222	232.60	20.38	212.222	232.60	20.38
55.	D54	D55	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	8.0	0.000	0.00	0.030	100	212.222	232.60	20.38	212.222	232.60	20.38
56.	D55	D54a	5	67.5	10479	0	0	0	-	0	10479	6812	6.81	20	14	43.0	0.000	0.00	0.030	100	212.222	232.60	20.38	212.222	232.60	20.38

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

EC-3565 (14.5625 Acre)

S.No	Line No.		Average Demand	Peak Demand @ 1.5 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe
	From	To	kl/hr.	lph.	lpm.	mtr.	mtr./ mtr.	mtr.	m/sec	mm
1	TW1	T1	36.0	54.0	900.0	66.0	0.066	4.33	1.909	100
2.	TW2	T1	36.0	54.0	900.0	6.0	0.066	0.39	1.909	100
3.	T1	***UGT-01***	72.0	108.0	1800.0	55.0	0.033	1.81	1.697	150

Fax : 2564655
Website : www.hsvp.org.in
Email : cencrhsvp@ gmail.com

हरियाणा शहरी विकास प्राधिकरण
HARYANA SHEHRI
VIKAS PRADHIKARAN

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

HSVP

C.E.I-No.
Dated:

Annexure-A

SUB:- **Approval of service plan estimates of Affordable Residential Plotted Colony (Under Deen Dyal Jan Awas Yojna-2016) measuring 14.5625 acres falling in the revenue estate of Village Nuna Majra Sec-36, Bahadurgarh Distt. Jhajjar being developed by Gnex Realtech Pvt. Ltd. (License No. 84 of 2017 dated 7.10.2017).**

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.

PROJECT : PROPOSED PLOTTED COLONY FALLING SECTOR-36, BAHADURGARH (HARYANA)

EC-3565 (14.5625 Acre)

S.No	Line No.		Average Demand		Peak Demand @ 1.5 Times	Flow Rate	Length of Pipe	Head Loss	Total Head Loss	Velocity	Dia of Pipe
-	From	To	kld.	kl/hr.	lph.	lpm.	mtr.	mtr./ mtr.	mtr.	m/sec	mm
1	HUDA	UGT-3	381.52	14.6	21.8	363.8	50.0	0.012	0.61	0.772	100

Note : HUDA supply line calculation has been done as / 22 hours.

SWD

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	8.225	Acres	.....A
AREA UNDER U.D	=	0.077	Acre	.....B
NET PLANNED AREA (A - B)	=	8.148	Acres	
AREA UNDER COMMERCIAL	=	0.26626	Acres	3.146
AREA UNDER PLOTS	=	3.77626	Acres	46.333
TOTAL SALEBLE AREA	=	4.03150	Acres	49.479

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	120	=	11043.000 Sq.Mt
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.Mt
C	6.135	x	18.356	112.577	24	=	2701.854 Sq.Mt
TOTAL					158	=	15277.854 Sq.Mt
					OR	=	3.77626 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	158	x	13.50	@ Person's per Plot
	=	2133	÷	8.14800	Acres
	=	261.782	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.611100	Acres	7.50% of Total area of the Scheme		
GREEN AREA PROPVIDED						
ORGANISED GREEN	=	GREEN-1	=	0.390	Acres	
	=	GREEN-2	=	0.273	Acres	
	=	GREEN-3	=	0.050	Acres	
TOTAL GREEN PROVIDED	=			0.623	Acres	7.66 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	0.8148000 Acres	10.00%
PROVIDED AREA	=	0.8190000 Acres	10.05%

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	14.56250	Acres	.....A
AREA FALLING UNDER GREEN BELT	=	0.16930	Acres	.....B
BALANCE (A - B)	=	14.393200	Acres	.....E
50% AREA OF GREEN BELT	=	0.084650	Acres	.....F
NET PLANNED AREA (E + F)	=	14.477850	Acres	
AREA UNDER COMMERCIAL	=	0.67910	Acres	4.690
AREA UNDER PLOTS	=	7.91698	Acres	54.693
TOTAL SALEBLE AREA	=	8.49608	Acres	58.683

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	160	=	13803.750 Sq.Mt
B	6.450	x	16.793	101.865	60	=	6111.891 Sq.Mt
C	6.300	x	16.651	97.395	20	=	1941.954 Sq.Mt
D	6.135	x	17.198	105.510	15	=	1582.264 Sq.Mt
D1	6.840	x	17.198	113.664	7	=	795.645 Sq.Mt
E	7.535	x	15.000	110.028	3	=	330.075 Sq.Mt
F	6.135	x	17.699	109.522	15	=	1733.362 Sq.Mt
G	7.312	x	17.884	128.335	2	=	256.669 Sq.Mt
H	6.139	x	17.350	106.526	10	=	1065.253 Sq.Mt
I	6.701	x	16.321	109.416	6	=	656.493 Sq.Mt
J	6.550	x	22.852	149.681	8	=	1197.445 Sq.Mt
K	6.892	x	16.764	115.570	4	=	461.479 Sq.Mt
L	7.527	x	15.000	118.905	2	=	237.810 Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
N	8.325	x	15.000	124.875	4	=	499.500 Sq.Mt
O	7.648	x	15.000	114.720	10	=	1147.200 Sq.Mt
TOTAL					319	=	32939.693 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	319	x	13.50	@ Person's per Plot
	=	4306.5	÷	14.47765	Acres
	=	297.464	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	1.08534	Acres	7.50% of Total area of the Scheme		
GREEN AREA PROPVIDED						
ORGANISED GREEN	=	GREEN-1	=	0.192	Acres	
	=	GREEN-2	=	0.297	Acres	
	=	GREEN-3	=	0.03	Acres	
	=	GREEN-4	=	0.079	Acres	
	=	GREEN-5	=	0.322	Acres	
	=	GREEN-6	=	0.170	Acres	
TOTAL GREEN PROVIDED	=			1.090	Acres	7.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.4477850 Acres	10.00%
PROVIDED AREA	=	1.4549750 Acres	10.05%

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	11.60000	Acres	.....A
AREA FALLING UNDER GREEN BELT	=	0.33298	Acres	.....B
BALANCE (A - B)	=	11.26702	Acres	.....E
50% AREA OF ROAD WIDENING AND GREEN BELT	=	0.16649	Acres	.....F
NET PLANNED AREA (E + F)	=	11.43351	Acres	
AREA UNDER COMMERCIAL	=	0.39040	Acres	3.414
AREA UNDER PLOTS	=	4.91687	Acres	43.064
TOTAL SALEBLE AREA	=	5.30727	Acres	46.478

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16288.425 Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
C	7.600	x	15.700	119.320	2	=	238.640 Sq.Mt
D	7.500	x	20.000	150.000	3	=	450.000 Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220 Sq.Mt
F	5.000	x	10.000	50.000	6	=	300.000 Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580 Sq.Mt
H	7.732	x	15.000	115.980	4	=	463.920 Sq.Mt
I	8.135	x	15.000	122.025	2	=	244.050 Sq.Mt
TOTAL					213	=	19897.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

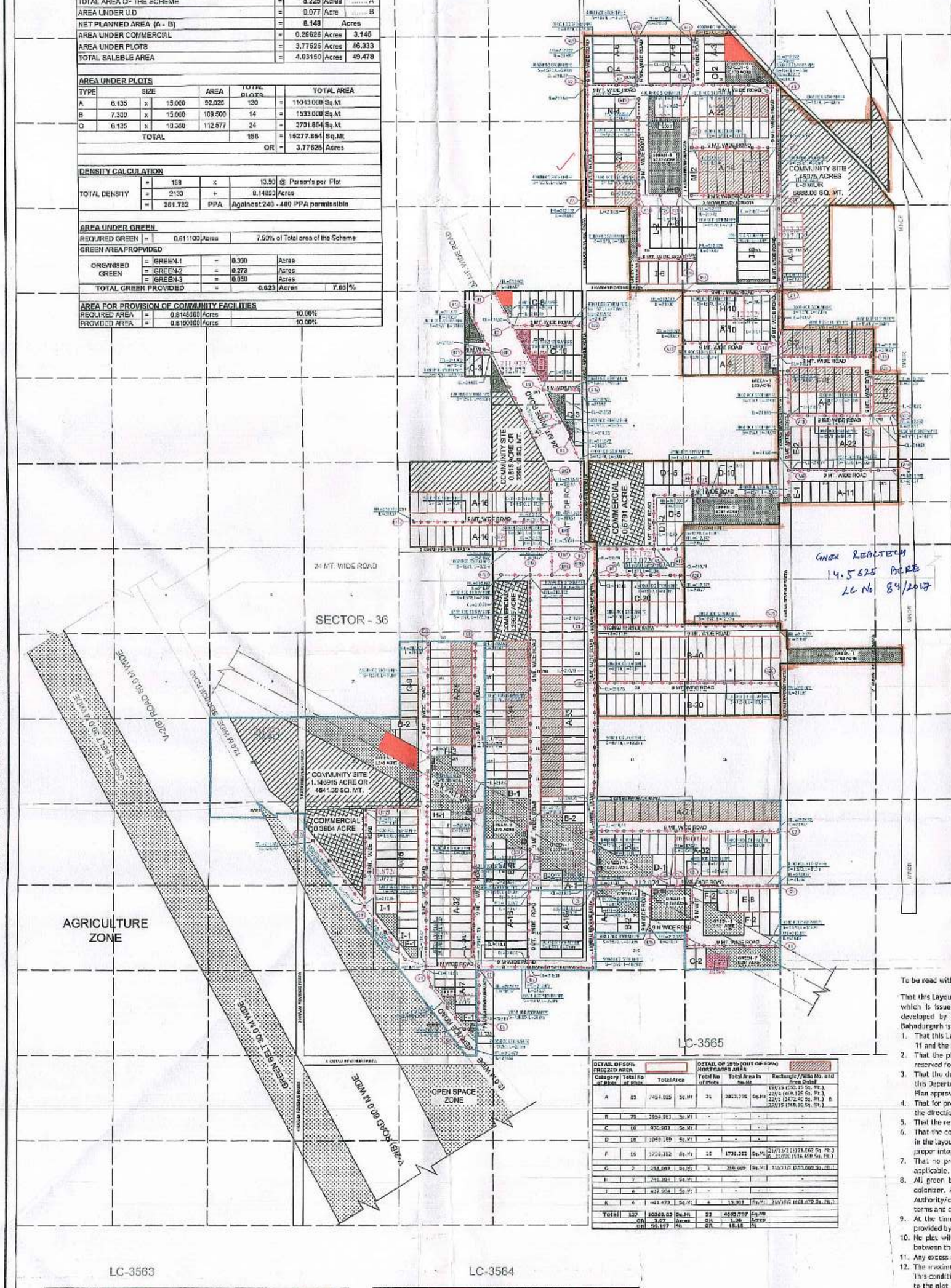
TOTAL DENSITY	=	213	x	13.50	@ Person's per Plot
	=	2875.5	÷	11.43351	Acres
	=	251.486	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.85751	Acres	7.50% of Total area of the Scheme		
GREEN AREA PROPVIDED						
ORGANISED GREEN	=	GREEN-1	=	0.645	Acres	
	=	GREEN-2	=	0.266	Acres	
	=	GREEN-3	=	0.180	Acres	
	=	GREEN-4	=	0.081	Acres	
		GREEN-5	=	0.149	Acres	
		GREEN-6	=	0.131	Acres	
	=	GREEN-7	=	0.201	Acres	
TOTAL GREEN PROVIDED	=			1.647	Acres	13.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.1433511 Acres	10.00%
PROVIDED AREA	=	1.1469151 Acres	10.03%



DETAIL OF 50% FREEZED AREA / DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA

Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kills No. and Area Detail
A	83	7484.025	Sq.Mt	31	2823.775	Sq.Mt	39//15 (1002.123 Sq. Mt.), 39//17 (930.402 Sq. Mt.), 39//5/2 (804.672 Sq. Mt.) 39//12/1 (289.628 Sq. Mt.)
B	79	3554.961	Sq.Mt	-	-	-	-
C	18	970.983	Sq.Mt	-	-	-	-
D	18	1949.749	Sq.Mt	-	-	-	-
F	15	1738.352	Sq.Mt	15	1738.352	Sq.Mt	39//12/2 (1321.682 Sq. Mt.) & 39/20 (416.670 Sq. Mt.)
G	2	358.669	Sq.Mt	2	358.669	Sq.Mt	39//12/2 (358.669 Sq. Mt.)
I	7	788.384	Sq.Mt	-	-	-	-
J	4	427.964	Sq.Mt	-	-	-	-
K	4	483.479	Sq.Mt	4	13.907	Sq.Mt	39//12/2 (483.479 Sq. Mt.)
Total	322	20269.03	Sq.Mt	53	4565.797	Sq.Mt	
	OR	5.01	Acres	OR	1.36	Acres	
	OR	50.157	%	OR	15.18	%	

DETAIL OF 50% FREEZED AREA / DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA

Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kills No. and Area Detail
A	94	8650.355	Sq.Mt	33	3035.825	Sq.Mt	39//15 (1002.123 Sq. Mt.), 39//17 (930.402 Sq. Mt.), 39//5/2 (804.672 Sq. Mt.) 39//12/1 (289.628 Sq. Mt.)
E	5	605.130	Sq.Mt	-	-	-	-
G	9	725.580	Sq.Mt	-	-	-	-
Total	108	9981.07	Sq.Mt	33	3036.825	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	50.162	%	OR	15.26	%	

DETAIL OF 50% FREEZED AREA / DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA

Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kills No. and Area Detail
A	70	6441.755	Sq.Mt	25	2303.625	Sq.Mt	39//5/2 (1342.533 Sq. Mt.), 39//12/1 (453.097 Sq. Mt.), 39//12/2 (176.022 Sq. Mt.), 39//12/1 (332.777 Sq. Mt.)
B	1	119.930	Sq.Mt	-	-	-	-
C	11	1125.773	Sq.Mt	-	-	-	-
Total	81	7677.03	Sq.Mt	25	2303.625	Sq.Mt	
	OR	1.89	Acres	OR	0.57	Acres	
	OR	50.246	%	OR	15.08	%	

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL – ARCHITECTURE URBAN DESIGN TOWN PLANNING – K-47, KAILASH COLONY, NEW DELHI -110048 PH. NO - 011-46556600, FAX:- 011-46556601	Ar. Amandeep Bassi CA/2015/72187	GNEX REALTECH PVT. LTD. PERMANENT ADD. :- B-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	
DATE 28.03.2017 / SCALE 1:1000 / NORTH / DRAWING TITLE:- LAYOUT PLAN				

To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. BTCP-8997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the plotted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer on the directions of the Director, Town and Country planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Developers Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(a)(ii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when consecutive.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode Lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/4/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

(BALWANT SINGH) SD (HQ) — (SANJAY KUMAR) DTP (HQ) — (DEVENDRA NIMBOKAR) STP (M) HQ — (KAMAL KUMAR) CTP (HR) — (T.L. SATYAPRAKASH, IAS) DTCP (HR)

(RAK AVTAR BASSI) AD (HQ)

Checked subject to comments in forwarding letter No. 12266 Dt. 13/8/17 and notes attached with the estimate

Executive Engineer, HSVP, Division, Bahadurgarh,

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning Haryana, Chandigarh

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ROADS

Checked subject to comments in forwarding letter No. 12566
Dt. 12.10.2017 and notes attached with the estimate

Superintending Engineer (HQ)
for Chief Engineer HSVP
Panchkula

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	8.225 Acres	..... A
AREA UNDER U/D	=	0.077 Acre	..... B
NET PLANNED AREA (A - B)	=	8.148 Acres	
AREA UNDER COMMERCIAL	=	0.25625 Acres	3.146
AREA UNDER PLOTS	=	3.77525 Acres	46.333
TOTAL SALEBLE AREA	=	4.03150 Acres	49.478

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	125	=	11503.000 Sq.Mt
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.Mt
C	6.135	x	16.350	112.977	21	=	2701.854 Sq.Mt
TOTAL					158	=	15277.854 Sq.Mt
					OR	=	3.77525 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	158	x	13.50	@ Persons per Plot
	=	2133	÷	8.14800	Acres
	=	261.782	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.611100	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.300	Acres
	=	GREEN-2	=	0.273	Acres
	=	GREEN-3	=	0.050	Acres
TOTAL GREEN PROVIDED	=			0.623 Acres	7.65 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	0.8148000 Acres	10.00%
PROVIDED AREA	=	0.8150000 Acres	10.00%

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	14.56250 Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.16930 Acres	..... B
BALANCE (A - B)	=	14.393200 Acres	..... E
50% AREA OF GREEN BELT	=	0.084650 Acres	..... F
NET PLANNED AREA (E + F)	=	14.477850	Acres
AREA UNDER COMMERCIAL	=	0.57910 Acres	4.000
AREA UNDER PLOTS	=	7.91698 Acres	54.683
TOTAL SALEBLE AREA	=	8.49608 Acres	58.683

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	150	=	13803.750 Sq.Mt
B	6.450	x	15.793	101.855	60	=	6111.991 Sq.Mt
C	6.200	x	15.651	97.006	20	=	1941.964 Sq.Mt
D	6.135	x	17.118	105.019	15	=	1575.284 Sq.Mt
D1	6.640	x	17.118	113.664	7	=	795.648 Sq.Mt
E	7.338	x	15.000	110.025	3	=	330.075 Sq.Mt
F	6.135	x	17.668	108.922	16	=	1726.352 Sq.Mt
G	7.312	x	17.668	129.335	2	=	258.669 Sq.Mt
H	6.135	x	17.380	106.626	10	=	1066.263 Sq.Mt
I	6.704	x	16.331	109.416	6	=	656.496 Sq.Mt
J	6.550	x	22.852	149.681	8	=	1197.445 Sq.Mt
K	6.682	x	16.764	115.370	4	=	461.479 Sq.Mt
L	7.927	x	15.000	118.905	2	=	237.810 Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
N	8.325	x	15.000	124.875	4	=	499.500 Sq.Mt
O	7.648	x	15.000	114.720	10	=	1147.200 Sq.Mt
TOTAL					319	=	32036.823 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	319	x	13.50	@ Persons per Plot
	=	4306.5	÷	14.47788	Acres
	=	297.454	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	1.09584	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.192	Acres
	=	GREEN-2	=	0.297	Acres
	=	GREEN-3	=	0.03	Acres
	=	GREEN-4	=	0.079	Acres
	=	GREEN-5	=	0.322	Acres
	=	GREEN-6	=	0.170	Acres
TOTAL GREEN PROVIDED	=			1.090 Acres	7.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.4477950 Acres	10.00%
PROVIDED AREA	=	1.4549750 Acres	10.05%

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	11.60000 Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.33288 Acres	..... B
BALANCE (A - B)	=	11.26702 Acres	..... E
50% AREA OF ROAD WIDENING AND GREEN BELT	=	0.16649 Acres	..... F
NET PLANNED AREA (E + F)	=	11.43351 Acres	
AREA UNDER COMMERCIAL	=	0.39049 Acres	3.414
AREA UNDER PLOTS	=	4.91687 Acres	43.004
TOTAL SALEBLE AREA	=	5.30737 Acres	46.418

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16289.425 Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
C	7.500	x	15.700	119.320	2	=	238.640 Sq.Mt
D	7.500	x	20.000	150.000	3	=	450.000 Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220 Sq.Mt
F	6.000	x	10.000	60.000	6	=	360.000 Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580 Sq.Mt
H	7.732	x	15.000	115.980	4	=	463.920 Sq.Mt
I	6.135	x	15.000	122.025	2	=	244.050 Sq.Mt
TOTAL					213	=	19997.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

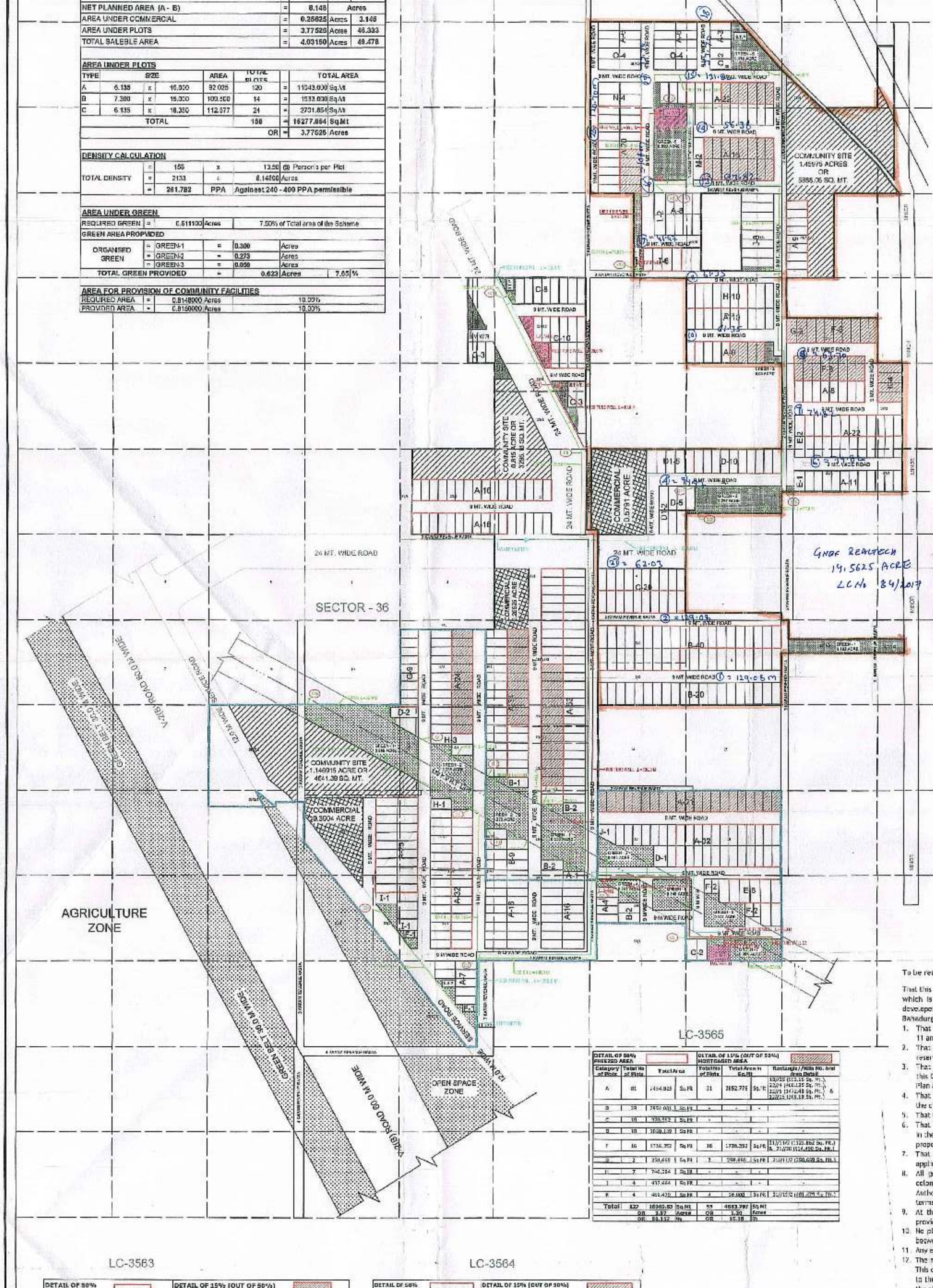
TOTAL DENSITY	=	213	x	13.50	@ Person's per Plot
	=	2875.5	÷	11.43351	Acres
	=	251.498	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.85751	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.645	Acres
	=	GREEN-2	=	0.295	Acres
	=	GREEN-3	=	0.158	Acres
	=	GREEN-4	=	0.081	Acres
	=	GREEN-5	=	0.146	Acres
	=	GREEN-6	=	0.131	Acres
	=	GREEN-7	=	0.291	Acres
TOTAL GREEN PROVIDED	=			1.547 Acres	13.33 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.1643351 Acres	10.03%
PROVIDED AREA	=	1.1646910 Acres	10.03%



DETAIL OF 50% FREEZED AREA / **DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA**

Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kite No. and Area Detail
A	81	7454.925	Sq.Mt	31	2852.775	Sq.Mt	13/15 (523.15 Sq. Mt.), 22/4 (440.135 Sq. Mt.), 22/5 (342.48 Sq. Mt.), 22/12 (243.19 Sq. Mt.) &
B	28	2450.001	Sq.Mt	-	-	-	
C	16	1535.616	Sq.Mt	-	-	-	
D	10	1040.139	Sq.Mt	-	-	-	
E	16	1726.352	Sq.Mt	16	1726.352	Sq.Mt	31/17/2 (532.862 Sq. Mt.) & 31/20 (1124.490 Sq. Mt.)
G	2	258.669	Sq.Mt	2	258.669	Sq.Mt	31/17/2 (258.669 Sq. Mt.)
H	7	742.284	Sq.Mt	-	-	-	
I	4	437.664	Sq.Mt	-	-	-	
K	4	461.479	Sq.Mt	4	461.479	Sq.Mt	31/17/2 (461.479 Sq. Mt.)
Total	327	16365.83	Sq.Mt	53	4863.797	Sq.Mt	
	OR	3.97	Acres	OR	1.20	Acres	
	OR	59.152	%	OR	15.18	%	

LC-3563

DETAIL OF 50% FREEZED AREA / **DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA**

Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kite No. and Area Detail
A	94	8559.350	Sq.Mt	33	3036.825	Sq.Mt	38/16 (1002.123 Sq. Mt.), 38/17 (930.402 Sq. Mt.), 38/8/2 (804.672 Sq. Mt.) 39/12/1 (299.628 Sq. Mt.)
E	5	605.136	Sq.Mt	-	-	-	-
G	9	725.580	Sq.Mt	-	-	-	-
Total	108	9931.07	Sq.Mt	33	3036.825	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	50.162	%	OR	15.26	%	

LC-3564

DETAIL OF 50% FREEZED AREA / **DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA**

Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kite No. and Area Detail
A	70	6161.750	Sq.Mt	25	2360.625	Sq.Mt	39/3/2 (1242.909 Sq. mt.), 39/13/1/1 (432.857 Sq. mt.), 39/13/2/1 (175.022 Sq. mt.), 39/13/2/1 (447.727 Sq. mt.)
B	1	119.936	Sq.Mt	-	-	-	-
C	10	1125.731	Sq.Mt	-	-	-	-
Total	81	7407.02	Sq.Mt	25	2360.625	Sq.Mt	
	OR	1.90	Acres	OR	0.57	Acres	
	OR	50.349	%	OR	15.05	%	

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS

To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions:

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the platted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as platted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer on the directions of the Director, Town and Country planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Development Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(a)(iii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when demarcated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/4/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

(BALWANT SINGH) SD (HQ) — (SANJAY KUMAR) DTP (HQ) — (DEVENDRA KUMBORAR) STP (A) HQ — (KAMAL KUMAR) CTP (HR) — (T.L. SATYAPRAKASH, IAS) DTCP (HR)

(RAM AVTAR BASSI) AD (HQ)

Executive Engineer, HSVP, Division, Bahadurgarh,

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL • ARCHITECTURE • URBAN DESIGN • TOWN PLANNING • C-47, KAILASH COLONY, NEW DELHI -110048 PH. NO:- 011-46566600, FAX:- 011-46566601	Ar. Amandeep Bansal CA/2015/72057	GNEX REALTECH PVT. LTD. PERMANENT ADD. :- B-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	

DATE: 28.06.2017 — NORTH — DRAWING TITLE:- LAYOUT PLAN

SCALE: 1:1000

Superintending Engineer
HSVP Circle, Rohtak

Director
Town & Country Planning
Haryana, Chandigarh

SEWERAGE

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	= 8.225 Acres	..... A	
AREA UNDER U/D	= 0.077 Acre	..... B	
NET PLANNED AREA (A - B)	= 8.148 Acres		
AREA UNDER COMMERCIAL	= 0.25825 Acres	3.145	
AREA UNDER PLOTS	= 3.77525 Acres	46.333	
TOTAL SALEBLE AREA	= 4.03150 Acres	49.478	

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	120	=	11043.000 Sq.M
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.M
C	6.135	x	18.350	112.577	24	=	2701.854 Sq.M
TOTAL					158	=	15277.854 Sq.Mt
					OR	=	3.77525 Acres

DENSITY CALCULATION

TOTAL DENSITY	= 158	x	13.50	@ Person's per Plot	
	= 2133	÷	8.14800	Acres	
	= 261.782	PPA	Against 240 - 400 PPA permissible		

AREA UNDER GREEN

REQUIRED GREEN	= 0.611100	Acres	7.50% of Total area of the Scheme		
GREEN AREA PROPVIDED					
ORGANISED GREEN	= GREEN-1	= 0.300	Acres		
	= GREEN-2	= 0.273	Acres		
	= GREEN-3	= 0.050	Acres		
TOTAL GREEN PROVIDED	=	0.623	Acres	7.65	%

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	= 0.8148000 Acres	10.00%	
PROVIDED AREA	= 0.8190000 Acres	10.05%	

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	= 14.58250	Acres	..... A	
AREA FALLING UNDER GREEN BELT	= 0.18850	Acres	..... B	
BALANCE (A - B)	= 14.393200	Acres	..... E	
50% AREA OF GREEN BELT	= 0.094650	Acres	..... F	
NET PLANNED AREA (E + F)	= 14.477850	Acres		
AREA UNDER COMMERCIAL	= 0.57910	Acres	4.000	
AREA UNDER PLOTS	= 7.91698	Acres	54.683	
TOTAL SALEBLE AREA	= 8.49608	Acres	58.683	

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	150	=	13803.750 Sq.M
B	6.450	x	15.793	101.855	60	=	6111.891 Sq.M
C	6.200	x	15.681	97.099	20	=	1941.964 Sq.M
D	6.135	x	17.118	105.019	15	=	1575.284 Sq.M
D1	6.610	x	17.118	113.664	7	=	795.649 Sq.M
E	7.335	x	15.000	110.025	3	=	330.075 Sq.M
F	6.135	x	17.089	108.522	18	=	9730.392 Sq.M
G	7.312	x	17.698	129.395	2	=	258.889 Sq.M
H	6.135	x	17.380	106.626	10	=	1066.263 Sq.M
I	6.794	x	16.321	109.416	6	=	656.468 Sq.M
J	6.659	x	22.662	149.891	8	=	1197.448 Sq.M
K	6.682	x	16.764	115.370	4	=	461.479 Sq.M
L	7.927	x	15.000	118.905	2	=	237.810 Sq.M
M	7.300	x	15.000	109.500	2	=	219.000 Sq.M
N	8.325	x	15.000	124.875	4	=	499.500 Sq.M
O	7.648	x	15.000	114.720	10	=	1147.200 Sq.M
TOTAL					319	=	32936.823 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	= 319	x	13.50	@ Person's per Plot	
	= 4306.5	÷	14.47785	Acres	
	= 297.464	PPA	Against 240 - 400 PPA permissible		

AREA UNDER GREEN

REQUIRED GREEN	= 1.08584	Acres	7.50% of Total area of the Scheme		
GREEN AREA PROPVIDED					
ORGANISED GREEN	= GREEN-1	= 0.192	Acres		
	= GREEN-2	= 0.297	Acres		
	= GREEN-3	= 0.00	Acres		
	= GREEN-4	= 0.079	Acres		
	= GREEN-5	= 0.322	Acres		
	= GREEN-6	= 0.170	Acres		
TOTAL GREEN PROVIDED	=	1.060	Acres	7.53	%

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	= 1.4477850 Acres	10.00%	
PROVIDED AREA	= 1.4549750 Acres	10.05%	

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	= 11.60000	Acres	..... A	
AREA FALLING UNDER GREEN BELT	= 0.33266	Acres	..... B	
BALANCE (A - B)	= 11.26702	Acres	..... E	
50% AREA OF ROAD WIDENING AND GREEN BELT	= 0.18649	Acres	..... F	
NET PLANNED AREA (E + F)	= 11.43351	Acres		
AREA UNDER COMMERCIAL	= 0.39040	Acres	3.414	
AREA UNDER PLOTS	= 4.91687	Acres	43.004	
TOTAL SALEBLE AREA	= 5.30727	Acres	46.418	

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16289.425 Sq.M
B	7.300	x	15.000	109.500	2	=	219.000 Sq.M
C	7.600	x	15.700	119.320	2	=	238.640 Sq.M
D	7.600	x	20.000	150.000	3	=	450.000 Sq.M
E	7.335	x	16.500	121.028	8	=	968.220 Sq.M
F	5.000	x	10.000	50.000	6	=	300.000 Sq.M
G	6.130	x	13.141	80.620	9	=	725.580 Sq.M
H	7.730	x	15.000	115.980	4	=	463.920 Sq.M
I	8.136	x	15.000	122.025	2	=	244.050 Sq.M
TOTAL					213	=	19897.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

TOTAL DENSITY	= 213	x	13.50	@ Person's per Plot	
	= 2875.5	÷	11.43351	Acres	
	= 251.488	PPA	Against 240 - 400 PPA permissible		

AREA UNDER GREEN

REQUIRED GREEN	= 0.85751	Acres	7.50% of Total area of the Scheme		
GREEN AREA PROPVIDED					
ORGANISED GREEN	= GREEN-1	= 0.648	Acres		
	= GREEN-2	= 0.285	Acres		
	= GREEN-3	= 0.150	Acres		
	= GREEN-4	= 0.091	Acres		
	GREEN-5	= 0.148	Acres		
	GREEN-6	= 0.131	Acres		
	= GREEN-7	= 0.291	Acres		
TOTAL GREEN PROVIDED	=	1.547	Acres	13.53	%

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	= 1.143351 Acres	10.00%	
PROVIDED AREA	= 1.146915 Acres	10.03%	

LC-3565

DETAIL OF 50% FREEZED AREA / **DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA**

Category of Plots	Total No of Plots	Total Area	Total No of Plots	Total Area in Sq.Mt	Rectangle//Kite No. and Area Detail
A	91	7451.025 Sq.Mt	31	2852.775 Sq.Mt	39/15 (251.16 Sq. Mt.), 39/24 (463.125 Sq. Mt.), 39/16 (1472.48 Sq. Mt.) & 39/15 (1352.10 Sq. Mt.)
B	24	2981.981 Sq.Mt	-	-	-
C	26	870.693 Sq.Mt	-	-	-
D	26	1333.169 Sq.Mt	-	-	-
F	26	1736.352 Sq.Mt	15	1736.352 Sq.Mt	39/13/2 (1121.092 Sq. Mt.) & 39/20 (616.260 Sq. Mt.)
G	2	258.889 Sq.Mt	2	258.889 Sq.Mt	39/13/1 (258.889 Sq. Mt.)
H	2	266.324 Sq.Mt	-	-	-
I	4	492.444 Sq.Mt	-	-	-
N	4	961.439 Sq.Mt	4	15.886 Sq.Mt	39/13/1 (961.439 Sq. Mt.)
Total	129	16693.83 Sq.Mt	53	4868.702 Sq.Mt	
	OR	3.97 Acres	OR	1.20 Acres	
	OR	50.167 %	OR	15.06 %	

LC-3564

DETAIL OF 50% FREEZED AREA / **DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA**

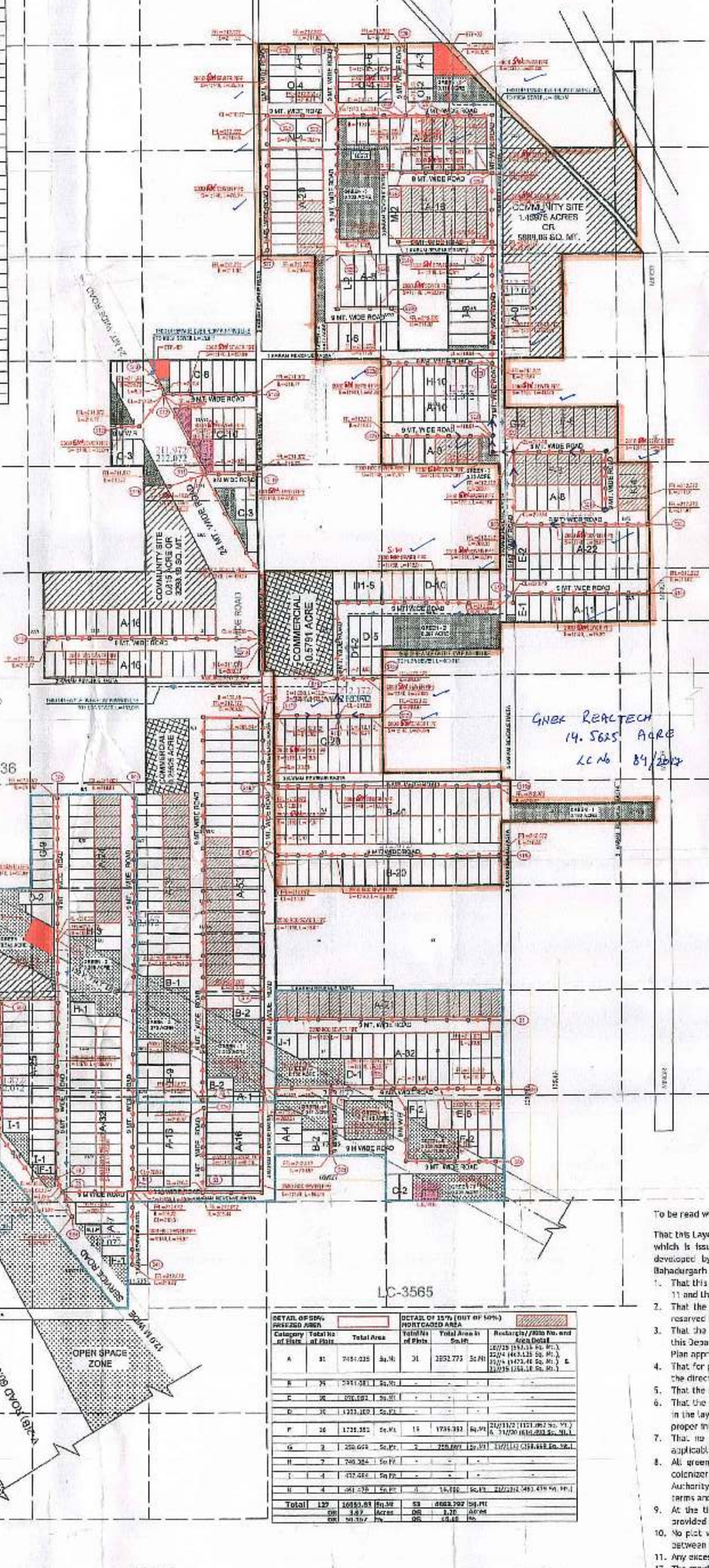
Category of Plots	Total No of Plots	Total Area	Total No of Plots	Total Area in Sq.Mt	Rectangle//Kite No. and Area Detail
A	79	6441.350 Sq.Mt	25	2306.625 Sq.Mt	39/8/2 (1342.350 Sq. mt.), 39/13/1/1 (403.917 Sq. m.), 39/13/2/1 (176.022 Sq. m.), 39/13/3/1 (444.227 Sq. m.)
B	1	139.961 Sq.Mt	-	-	-
C	10	1123.773 Sq.Mt	-	-	-
Total	81	7677.03 Sq.Mt	25	2306.625 Sq.Mt	
	OR	1.88 Acres	OR	0.47 Acres	
	OR	50.249 %	OR	15.06 %	

LC-3563

DETAIL OF 50% FREEZED AREA / **DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA**

Category of Plots	Total No of Plots	Total Area	Total No of Plots	Total Area in Sq.Mt	Rectangle//Kite No. and Area Detail
A	84	9658.350 Sq.Mt	33	3036.825 Sq.Mt	39/16 (1002.123 Sq. Mt.), 39/17 (930.402 Sq. Mt.), 39/9/2 (804.672 Sq. Mt.) 39/13/1 (299.628 Sq. Mt.)
E	5	635.136 Sq.Mt	-	-	-
G	9	735.580 Sq.Mt	-	-	-
Total	108	9981.07 Sq.Mt	33	3036.825 Sq.Mt	
	OR	2.47 Acres	OR	0.75 Acres	
	OR	80.162 %	OR	18.26 %	

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS



To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the plotted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/ movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer on the directions of the Director, Town and Country planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Development Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(a)(iii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when demarcated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/4/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2025 5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 21.01.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

(BALWANT SINGH) SD (HQ) | (SANJAY KUMAR) DTP (HQ) | (DEVENDRA HUMEDKAR) STP (M) HQ | (KAMAL KUMAR) CTP (HR) | (T.L. SATYAPRAKASH, IAS) DTCP (HR)

(RAM AVTAR BASSI) AD (HQ)

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL – ARCHITECTURE CONSULTANTS & TOWN PLANNERS – K-47, KAILASH COLONY, NEW DELHI -110048 PH. NO:- 011-46556500, FAX:- 011-46556631	Ar. Amandeep Bansal CA/2015/72167	GNEX REALTECH PVT. LTD. PERMAMENT ADD. :- B-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	

DATE 26.08.2017 | SCALE 1:1000 | NORTH | DRAWING TITLE:- LAYOUT PLAN

Checked subject to comments in forwarding letter No. 12006 Dt. 17.11.17 and notes attached with the estimate

Executive Engineer HSVP, Division, Bahadurgarh,

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning Haryana, Chandigarh

WATER SUPPLY Dom. & Recycle

LC-3564

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	9.225	Acres	..... A
AREA UNDER UD	=	0.077	Acre	..... B
NET PLANNED AREA (A - B)	=	9.148	Acres	
AREA UNDER COMMERCIAL	=	0.25626	Acres	3.145
AREA UNDER PLOTS	=	3.77626	Acres	46.333
TOTAL SALEBLE AREA	=	4.03169	Acres	49.478

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	120	=	11043.000 Sq.M
B	7.300	x	15.000	109.500	14	=	1533.000 Sq.M
C	6.135	x	18.350	112.577	24	=	2701.854 Sq.M
TOTAL					158	=	16277.854 Sq.Mt
					OR	=	3.77626 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	158	x	13.50	@ Person's per Plot
	=	2133	÷	8.14800	Acres
	=	261.782	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.811100	Acres	7.50% of Total area of the Scheme

GREEN AREA PROPVIDED

ORGANISED GREEN	=	GREEN-1	=	0.390	Acres
	=	GREEN-2	=	0.273	Acres
	=	GREEN-3	=	0.050	Acres
TOTAL GREEN PROVIDED			=	0.823	Acres 7.55 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	0.8148000 Acres	10.00%
PROVIDED AREA	=	0.8150000 Acres	10.00%

LC-3565

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	14.56250	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.16930	Acres	..... B
BALANCE (A - B)	=	14.393200	Acres	..... E
50% AREA OF GREEN BELT	=	0.084650	Acres	..... F
NET PLANNED AREA (E+ F)	=	14.477850	Acres	
AREA UNDER COMMERCIAL	=	0.07910	Acres	4.000
AREA UNDER PLOTS	=	7.91698	Acres	54.683
TOTAL SALEBLE AREA	=	8.49808	Acres	58.683

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL		TOTAL AREA
A	6.135	x	15.000	92.025	150	=	13803.750 Sq.Mt
B	6.400	x	15.793	101.955	50	=	5111.851 Sq.Mt
C	6.200	x	15.991	97.095	20	=	1941.954 Sq.Mt
D	6.135	x	17.115	105.019	15	=	1575.284 Sq.Mt
D1	6.840	x	17.119	113.664	7	=	795.645 Sq.Mt
E	7.335	x	15.000	110.025	3	=	330.075 Sq.Mt
F	6.135	x	17.668	108.522	16	=	1736.352 Sq.Mt
G	7.312	x	17.658	129.336	2	=	258.669 Sq.Mt
H	6.135	x	17.360	106.526	10	=	1065.263 Sq.Mt
I	6.704	x	16.321	109.416	6	=	656.496 Sq.Mt
J	8.560	x	22.852	149.681	8	=	1197.445 Sq.Mt
K	6.862	x	16.784	115.170	4	=	461.479 Sq.Mt
L	7.927	x	15.000	118.905	2	=	237.810 Sq.Mt
M	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
N	8.325	x	15.000	124.875	4	=	499.500 Sq.Mt
O	7.649	x	15.000	114.720	10	=	1147.200 Sq.Mt
TOTAL					310	=	32038.823 Sq.Mt
					OR	=	7.91698 Acres

DENSITY CALCULATION

TOTAL DENSITY	=	319	x	13.50	@ Person's per Plot
	=	4306.5	÷	14.47785	Acres
	=	297.454	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	1.08564	Acres	7.50% of Total area of the Scheme	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.192	Acres
	=	GREEN-2	=	0.297	Acres
	=	GREEN-3	=	0.03	Acres
	=	GREEN-4	=	0.079	Acres
	=	GREEN-5	=	0.322	Acres
	=	GREEN-6	=	0.170	Acres
TOTAL GREEN PROVIDED			=	1.090	Acres 7.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.4477850 Acres	10.00%
PROVIDED AREA	=	1.4549750 Acres	10.05%

LC-3563

AREA STATEMENT

TOTAL AREA OF THE SCHEME	=	11.60000	Acres	..... A
AREA FALLING UNDER GREEN BELT	=	0.33298	Acres	..... B
BALANCE (A - B)	=	11.26702	Acres	..... E
50% AREA OF ROAD WIDENING AND GREEN BELT	=	0.16849	Acres	..... F
NET PLANNED AREA (E + F)	=	11.43351	Acres	
AREA UNDER COMMERCIAL	=	0.39040	Acres	3.414
AREA UNDER PLOTS	=	4.91687	Acres	43.004
TOTAL SALEBLE AREA	=	5.30727	Acres	46.418

AREA UNDER PLOTS

TYPE	SIZE			AREA	TOTAL PLOTS		TOTAL AREA
A	6.135	x	15.000	92.025	177	=	16288.425 Sq.Mt
B	7.300	x	15.000	109.500	2	=	219.000 Sq.Mt
C	7.600	x	15.700	119.320	2	=	238.640 Sq.Mt
D	7.600	x	20.000	150.000	3	=	450.000 Sq.Mt
E	7.335	x	16.500	121.028	8	=	968.220 Sq.Mt
F	5.000	x	10.000	50.000	6	=	300.000 Sq.Mt
G	6.135	x	13.141	80.620	9	=	725.580 Sq.Mt
H	7.732	x	15.000	115.990	4	=	463.920 Sq.Mt
I	8.135	x	15.000	122.025	2	=	244.050 Sq.Mt
TOTAL					213	=	19897.835 Sq.Mt
					OR	=	4.91687 Acres

DENSITY CALCULATION

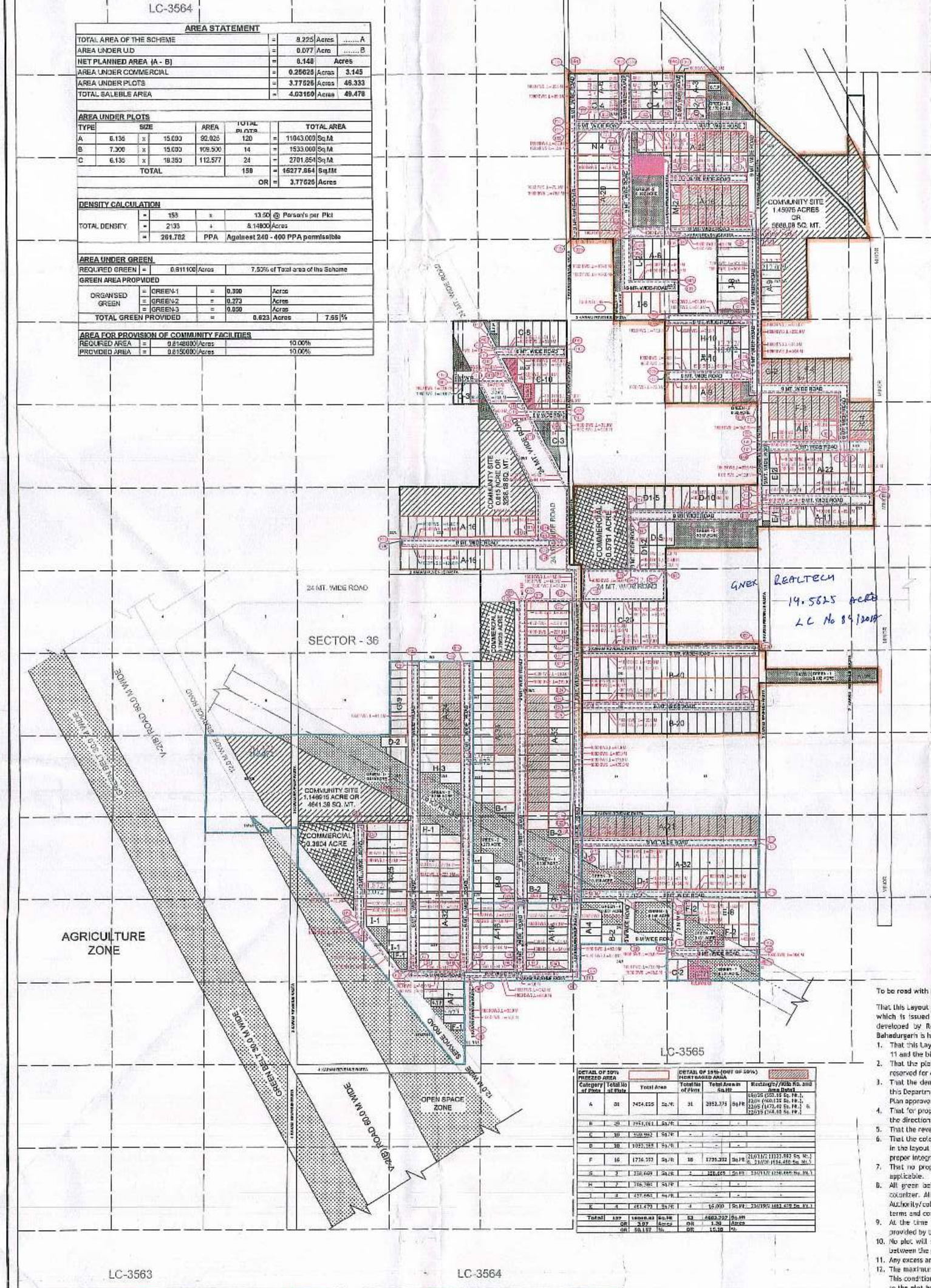
TOTAL DENSITY	=	213	x	13.50	@ Person's per Plot
	=	2875.5	÷	11.43351	Acres
	=	251.498	PPA	Against 240 - 400 PPA permissible	

AREA UNDER GREEN

REQUIRED GREEN	=	0.85751	Acres	7.50% of Total area of the Schema	
GREEN AREA PROPVIDED					
ORGANISED GREEN	=	GREEN-1	=	0.548	Acres
	=	GREEN-2	=	0.235	Acres
	=	GREEN-3	=	0.158	Acres
	=	GREEN-4	=	0.061	Acres
	=	GREEN-5	=	0.146	Acres
	=	GREEN-6	=	0.131	Acres
	=	GREEN-7	=	0.201	Acres
TOTAL GREEN PROVIDED			=	1.547	Acres 13.53 %

AREA FOR PROVISION OF COMMUNITY FACILITIES

REQUIRED AREA	=	1.143351 Acres	10.00%
PROVIDED AREA	=	1.146815 Acres	10.03%



LC-3563

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kila No. and Area Detail
A	94	6030.350	Sq.Mt	33	3036.625	Sq.Mt	39//16 (1002.123 Sq. Mt.), 39//17 (930.402 Sq. Mt.), 39//9/2 (804.672 Sq. Mt.) 39//12/1 (299.628 Sq. Mt.)
E	5	605.139	Sq.Mt	-	-	-	-
G	9	725.580	Sq.Mt	-	-	-	-
Total	108	9661.07	Sq.Mt	33	3036.625	Sq.Mt	
	OR	2.47	Acres	OR	0.75	Acres	
	OR	50.152	%	OR	15.26	%	

LC-3564

DETAIL OF 50% FREEZED AREA				DETAIL OF 15% (OUT OF 50%) MORTGAGED AREA			
Category of Plots	Total No of Plots	Total Area		Total No of Plots	Total Area in Sq.Mt		Rectangle//Kila No. and Area Detail
A	70	6441.759	Sq.Mt	25	2300.625	Sq.Mt	39//6/2 (1242.939 Sq. mt.), 39//13/1/1 (433.917 Sq. mt.), 39//13/2/1 (376.823 Sq. mt.), 39//12/21 (247.377 Sq. mt.)
B	1	109.500	Sq.Mt	-	-	-	-
C	10	1125.723	Sq.Mt	-	-	-	-
Total	81	7677.01	Sq.Mt	25	2300.625	Sq.Mt	
	OR	1.90	Acres	OR	0.57	Acres	
	OR	50.249	%	OR	15.06	%	

APPLIED LAND 11.60 ACRES UNDER MIGRATION (DDJAY) SHOWN THUS

TUBEWELL STATIONS
OVERHEAD WATER SUPPLY LINE
UNDERGROUND WATER SUPPLY LINE

To be read with LOI No. 17019 Dated 17-07-2017

That this Layout plan for an area measuring 11.60 acres (Drawing no. DTCP-5997 dated 17.07.2017) comprised of LOI which is issued in respect of Affordable Residential Plotted Colony (Under Deen Dayal Jan Awas Yojna) being developed by Renu Realtech Pvt. Ltd. and others collaboration with Gnex Realtech Pvt. Ltd. in Sector-36, Bahadurgarh is hereby approved subject to the following conditions

1. That this Layout Plan shall be read in conjunction with the clauses appearing on the agreement executed under Rule 11 and the bilateral agreement.
2. That the platted area of the colony shall not exceed 65% of the net planned area of the colony. The entire area reserved for commercial purposes shall be taken as plotted for calculation of the area under plots.
3. That the demarcation plans as per site of all the Residential Plots and Commercial site shall be got approved from this Department and construction on these sites shall be governed by the Haryana Building Code, 2017 and the Zoning Plan approved by the Director, Town & Country Planning, Haryana.
4. That for proper planning and integration of services in the area adjacent to the colony, the colonizer shall abide by the directions of the DTCP for the modification of layout plans of the colony.
5. That the revenue rasta falling in the colony shall be kept free for circulation/movement as shown in the layout plan.
6. That the colonizer shall abide by the directions of the DTCP, Haryana and accordingly shall make necessary changes in the layout plan for making any adjustment in the alignment of the peripheral roads, internal road circulation or for proper integration of the planning proposals of the adjoining areas.
7. That no property/plot shall derive access directly from the carriage way of 30 metres or wider sector road if applicable.
8. All green belts provided in the layout plan within the licenced areas of the colony shall be developed by the colonizer. All other green belts outside the licenced area shall be developed by the Haryana Urban Development Authority/colonizer on the directions of the Director, Town and Country planning, Haryana or in accordance with terms and conditions of the agreements of the licence.
9. At the time of demarcation plan, if required percentage of organized open space is reduced, the same will be provided by the colonizer in the licenced area.
10. No plot will derive an access from less than 9 metres wide road would mean a minimum clear width of 9 metres between the plots.
11. Any excess area over and above the permissible 4% under commercial use shall be deemed to be open space.
12. The maximum number of dwelling units in a plot shall be as per the provisions of the Haryana Building Code, 2017. This condition shall also be incorporated in the zoning plan and in the allotment letters being issued by the colonizer to the plot holders. The stipulation shall also be incorporated in the agreement to be executed by the colonizer with the plot buyers.
13. The portion of the sector/development plan roads /green belts as provided in the Development Plan if applicable, which form part of the licenced area shall be transferred free of cost to the government on the lines of Section 3(3)(a)(iii) of the Act No.8 of 1975.
14. That the odd size plots are being approved subject to the conditions that these plots should not have a frontage of less than 75% of the standard frontage when demarcated.
15. That you will have no objection to the regularization of the boundaries of the licence through give and take with the land that HUDA is finally able to acquire in the interest of planned development and integration of services. The decision of the competent authority shall be binding in this regard.
16. That the rain water harvesting system shall be provided as per Central Ground Water Authority norms/Haryana Govt. notification as applicable.
17. That the colonizer/owner shall use only Light-Emitting Diode lamps (LED) fitting for internal lighting as well as Campus lighting.
18. That the colonizer/owner shall ensure the installation of Solar Power Plant as per provisions of Haryana Solar Power Policy, 2016 issued by Haryana Government Renewable Energy Department vide Notification No. 19/42/2016-5 Power dated 14.03.2016.
19. That the colonizer/owner shall ensure the installation of Solar Photovoltaic Power Plant as per the provisions of order No.22/52/2005-5Power dated 21.03.2016 issued by Haryana Government Renewable Energy Department.
20. That the colonizer/owner shall strictly comply with the directions issued vide Notification No. 19/6/2016-5P dated 31.03.2016 issued by Haryana Government Renewable Energy Department for enforcement of the Energy Conservation Building Codes.

(BALWANT SINGH) SD (HQ) | (SANJAY KUMAR) DTP (HQ) | (DEVENDRA NIMBOKAR) STP (M) HQ | (KAMAL KUMAR) CTP (HR) | (T.L. SATYAPRAKASH, IAS) DTCP (HR) | (RAM AVTAR BASSI) AD (HQ)

PROJECT	ARCHITECT:	ARCHITECT SIGNATURE	COMPANY:	OWNER SIGNATURE
PROPOSED LAYOUT PLAN OF AFFORDABLE PLOTTED COLONY ON AN AREA MEASURING 14.5625 ACRES FALLING SECTOR-36, BAHADURGARH, HARYANA.	DESIGN FORUM INTERNATIONAL — ARCHITECTURE • URBAN DESIGN • TOWN PLANNING — K-47, KAILASH COLONY, NEW DELHI -110048 PH. NO:- 011-46556600, FAX:- 011-46556601	Ar. Amandeep Bassi CA/2010/72167	GNEX REALTECH PVT. LTD. PERMANENT ADD. :- B-10, LAWRENCE ROAD, INDUSTRIAL AREA, DELHI - 110035 CORRESPONDENCE ADD. :- BUNGALOW NO. -11, BARAKHAMBA ROAD, NEW DELHI - 110001	

DATE 28.06.2017 | SCALE 1:1000 | NORTH | DRAWING TITLE:- LAYOUT PLAN

Checked subject to comments in forwarding letter No. 12066 Dt. 17.10.18.... and notes attached with the estimate

Executive Engineer, HSVP, Division, Bahadurgarh,

Superintending Engineer (HQ) for Chief Engineer HSVP Panchkula

Superintending Engineer HSVP Circle, Rohtak

Director Town & Country Planning Haryana, Chandigarh

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हरियाणा शहरी विकास प्राधिकरण
HARYANA SHEHRI
VIKAS PRADHIKARAN

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

C.E.I-No.
Dated:

Annexure-A

SUB:- Approval of service plan estimates of Affordable Residential Plotted Colony (Under Deen Dyal Jan Awas Yojna-2016) measuring 14.5625 acres falling in the revenue estate of Village Nuna Majra Sec-36, Bahadurgarh Distt. Jhajjar being developed by Gnex Realtech Pvt. Ltd. (License No. 84 of 2017 dated 7.10.2017).

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.

हरियाणा शहरी विकास प्राधिकरण
HARYANA SHEHRI
VIKAS PRADHIKARAN

Fax : 2564655
Website : www.hsvp.org.in
Email : cencrhsvp@ gmail.com
Address: C-3, HSVP , HQ Sector-6
Panchkula

C.E. No:
Dated:

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.

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.

11. 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.

12. The specifications for various roads will be followed as per IRC/MORTH specifications.

13. The wiring system of street lighting and specifications of street lighting fixture will be as per relevant standards.

14. This shall confirm to such other conditions as are incorporated in the approved estimate and the letter of approval.

Superintending Engineer (HQ),
For Chief Engineer-I, HSVP,
Panchkula.

Directorate of Town & Country Planning, Haryana

SCO-71 75, 2nd Floor, Sector-17-C, Chandigarh. Phone: 0172-2549349
Web site tcpharyana.gov.in - e-mail: tcpharyana@gmail.com

Regd.

To

Gnex Infrabuid Pvt. Ltd., Gnex Realtech Pvt. Ltd.,
CFG International Pvt. Ltd., Sh. Satpal S/o Sh. Mahtab Singh,
Renu Realtech Pvt. Ltd., Gnex Buildtech Pvt. Ltd,
ASL Projects Pvt. Ltd., C/o Gnex Realtech Pvt. Ltd
Bungalow no 11, Barakhamba road,
New Delhi - 110001, Email id- suresh.bhandari@gnexgroup.com

Memo No. LC-3565-PA (SS)-2018/ 24675 Dated: 23-08-2018

Subject: **Approval of service plan/estimate of licence no 84 of 2017 dated 07.10.2017 granted for setting up of Plotted colony under Affordable Plotted Housing Policy 2016 Deen Dayal Jan Awas Yojna over an area measuring 14.5625 acres in the revenue estate of village-Nuna Majra, Sector-36, Bahadurgarh, District-Jhajjar - Gnex Infrabuid Pvt. Ltd.**

The service plan/estimates of licence no 84 of 2017 dated 07.10.2017 granted to Gnex Infrabuid Pvt. Ltd and others for setting up of Plotted colony under Affordable Plotted Housing Policy 2016 Deen Dayal Jan Awas Yojna over an area measuring **14.5625 acres** Sector 36, Bahadurgarh and Distt. Jhajjar has been checked and corrected, wherever necessary by the Chief Administrator, HSVP and are hereby approved by the DTCP Haryana subject to the following terms and conditions: -

1. You will have to pay the proportionate cost of external development charges for setting up of residential colony for the services like water supply, sewerage, storm water drainage, roads, bridges, community buildings, street lighting, horticulture etc. on gross acreage basis as and when determined by HSVP/Director. These charges are modifiable and modified charges will be binding upon you.
2. The maintenance charges for various services like water supply, sewerage, storm water drainage, Horticulture, roads, street lighting and resurfacing of roads etc. have been included in the estimate as per detail given in it and the total cost of maintenance charges are works out to **Rs.394.47** lac as you are liable to maintain the estate developed by yourself as per norms as determined by the Govt./Govt. agency.
3. The category wise area shown on the plans and proposed density of population thereof has been treated to be correct for the purpose of services only.
4. All technical notes and comments incorporated in the estimates in two sheets will also apply. A copy of these is also appended as **Annexure-A**, alongwith recommendation of HSVP dated 13.06.2018 **Annexure-B**.
5. The wiring system of street lighting will be under ground and the specifications of the street lighting, fixture etc. will be as per relevant standard of HVPNL.
6. The appropriate provision for firefighting arrangement as required in the NBC/ISI should also be provided by you and fire safety certificate should also be obtained by you from the Competent Authority before undertaking any construction. You will be responsible for fire safety arrangement.
7. You shall be fully responsible for making arrangement of disposal of sewerage and storm water drainage till such time these are made available by HSVP/State Govt. and all link connections with the external system shall be made by you at your own cost. The owner will have to ensure that sewer/storm water drainage to be laid by you will be connected

by gravity with the master services to be laid/laid by HSVP/State Govt. in this area as per scheme.

8. The correctness of the levels of the colony will be sole responsibility of the owner for integrating the internal sewer/storm water drainage of the colony by gravity with the maser services. In case pumping is required the same will be provided by you.

9. Roof top rain harvesting system shall be provided by you as per norms and the same shall be kept operational/maintained all the time. Arrangement for seggration of first rain not to be entered into the system shall also be made by you.

10. The estimates do not include the provision of electrification of the colony. However, it is clear that the supervision charges and O&M charges shall be paid by you directly to the HVPN.

11. You shall be sole responsible for the construction of various structures such as RCC underground tank etc. according to the standard specification good quality and its workmanship. The structural responsibility will entirely rest upon you.

12. In case some additional structures are required to be constructed and decided by HSVP at a later stage, the same will be binding upon you.

13. You will not make the connection with the master services i.e. water supply, sewerage and storm water drainage without getting its approval from the competent authority.

14. This estimate does not include the common services like water supply, storage tank on the top of the building blocks, lifts, ramps, fire fighting arrangements, plumbing etc. and will for part of the building works.

15. In case some additional structures are required to be constructed and decided by the Competent Authority at a later stage, the same will be binding upon you. Flow control valves will be installed preferably automatic type, on water supply connection with external water supply line.

16. You shall get the electrical service plan estimates approved from the concerned authority regarding power utility within a period of 60 days and submit the same in this office for approval.

17. You shall get the permission of competent Authority, before laying services through Panchayat/Government land.

A copy of the approved service plan/estimates is enclosed herewith. You are requested to supply four additional copies of the approved service plan/estimates to the Chief Administrator, HSVP, Panchkula under intimation to this office.

DA/as above.

(Lalit Kumar)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana, Chandigarh

Endst No. LC-3565-PA (SS)-2018/ Dated:

A copy is forwarded to the Chief Administrator, HSVP, Panchkula with reference to his letter No. 120066 dated 13.06.2018 for information and necessary action.

(Lalit Kumar)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana, Chandigarh