

Directorate of Town & Country Planning, Haryana

Aayojna Bhawan, Plot No. 3, Block-A, Madhya Marg, Sector 18A, Chandigarh.

Phone : 0172-2549349 Email: tcpharyana7@gmail.com

Website: <http://tcpharyana.gov.in>

Regd.

To

✓ Global Horizon Holdings Pvt. Ltd.
P-903-905, C-Wing, 9th Floor,
JMD Megapolis, Sector-48, Sohna Road,
Gurugram.

Memo No. LC-3972-B/JE (DS)/2023/ 1711

Dated: 18/01/23

Subject: Approval of Service Plan/Estimates for Affordable Residential Plotted Colony under DDJAY-2016 colony over an area measuring 8.15 acres (Licence No. 58 of 2019 dated 08.03.2019 & Licence No. 88 of 2022 dated 06.07.2022) in the revenue estate of village Bhunela, Sector-33, Sohna, District Gurugram-M/s Global Horizon Holdings Pvt. Ltd.

Ref: Chief Engineer, HSVP, Panchkula vide memo No. CE-I/SE(HQ)/SDE(W)/HDM(G)/2022/167831 dated 28.09.2022.

The Service Plan/Estimates for Affordable Residential Plotted Colony under DDJAY-2016 colony over an area measuring 8.15 acres (Licence No. 58 of 2019 dated 08.03.2019 & Licence No. 88 of 2022 dated 06.07.2022) in the revenue estate of village Bhunela, Sector-33, Sohna, District Gurugram being developed by you, has been checked and corrected wherever necessary by Chief Engineer, HSVP, Panchkula and are hereby approved subject to the following terms & conditions:

1. That you will abide by all the conditions and notes mentioned in the Service Plan Estimates of the subject cited colony contained in the Chief Engineer-I HSVP, Panchkula office memo dated 28.09.2022.
2. That you will have to pay the proportionate cost to the External Development Charges for setting up Affordable Plotted Colony for the services like water supply, sewerage, storm water drainage, roads, bridges, community building, street lighting, horticulture and maintenance thereof etc. on gross acreage basis as and when determined by HSVP. These charges will be modifiable as and when approved by the authority/State Govt. and will be binding upon the colonizer.
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. That you shall be responsible for maintenance and upkeep of all roads, open spaces, public parks and public health services for a period of five years from the date of issue of the completion certificate under rule 16 unless earlier relieved of this responsibility and there upon to transfer all such roads, open spaces, public parks and public health services free of cost to the Government or the local authority, as the case may be.
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.

LED lamps shall be provided to meet the requirement of HVPNL and as well environment.

6. It is made clear that appropriate provision for fire-fighting arrangement as required in the NBC/ISI should also be provided by you and fire safety certificate should also be obtained from the competent authority before undertaking any construction. You shall be sole responsible for fire safety arrangement.
7. All technical notes and comments incorporated in the estimates in two sets will also be applicable. A copy of these is also appended as Annexure-A.

Note (1):-

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

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

(R.S. Batth)
District Town Planner (HQ)
For Director General, Town & Country Planning,
Haryana, Chandigarh

Endst. No. LC-3972-B/JE (DS)-2023/

Dated:

A copy is forwarded to the CE-I/SE(HQ)/SDE(W)/HDM(G)/2022/167831 dated 28.09.2022 for information and necessary action please.

(R.S. Batth)
District Town Planner (HQ)
For Director General, Town & Country Planning,
Haryana, Chandigarh

PROPOSED 8.15 ACRES AFFORDABLE RESIDENTIAL PLOTTED
COLONY UNDER DDJAY AT SECTOR-33, VILLAGE-DHUNELA,
TEHSIL-SOHNA DISTRICT, GURUGRAM HARYANA

SERVICE PLAN ESTIMATE

DEVELOPERS :

M/S GLOBAL HORIZON HOLDING PVT. LTD.

ARCHITECT :

DESIGN FORUM INTERNATIONAL
K-47, KAILASH COLONY, NEW DELHI 110048

M/E/P CONSULTANT:

BEHERA ASSOCIATES PVT LTD
F623A, Lado Sarai, Behind CNG Pump
New Delhi 110030

FORM LC -V
(See Rule 12)
HARYANA GOVERNMENT
TOWN AND COUNTRY PLANNING DEPARTMENT

Licence No. 58. of 2019

This Licence has been granted under the Haryana Development and Regulation of Urban Areas Act, 1975 & the Rule 1976, made there under to Global Horizon Holdings Pvt. Ltd., B-2/201, Basement, Safdarjang Enclave, New Delhi-110029 for setting up of Affordable Residential Plotted Colony (under Deen Dayal Jan Awas Yojna-2016) over an area measuring 7.89375 acres in the revenue estate of village Dhunela, Sector-33, Sohna, Distt, Gurugram.

1. The particulars of the land, wherein the aforesaid Affordable Residential Plotted Colony is to be set up, are given in the Schedule annexed hereto and duly signed by the Director, Town & Country Planning, Haryana.
2. The Licence is granted subject to the following conditions:
 - (i) That the affordable residential plotted colony will be laid out in confirmation to the approved layout/building plan and development works will be executed in accordance to the designs and specifications shown in the approved plans.
 - (ii) That the conditions of the agreements already executed are duly fulfilled and the provisions of Haryana Development and Regulation of Urban Areas Act, 1975 and the Rules 1976 made thereunder are duly complied with.
 - (iii) That you will pay the Infrastructure Development Charges amounting to Rs. 97,03,599/- (Rs. Ninety seven Lacs three Thousand five Hundred ninety nine Only) in two equal installments. First Instalment will be due within 60 days of grant of license and second installment within six months of grant of license failing which 18% PA interest will be liable for the delayed period.
 - (iv) That you will pay balance 75% EDC in six half yearly installments each with normal interest of 12% per annum and penal interest of 3% for the delay period in favour of Director, Town and Country Planning, Haryana.
 - (v) That you shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.
 - (vi) That you shall integrate the services with Haryana Urban Development Authority services as and when made available.
 - (vii) That you have not submitted any other application for grant of license for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Scheduled Roads and Controlled Area Restrictions of Unregulated Development Act, 1963.


D.T.C.P. (Hr.)
He

- (viii) The you will transfer 10% area of the licenced colony free of cost to the Government for provision of community facilities. This will give flexibility to the Director to workout the requirement of community infrastructure at sector level and accordingly make provisions. The said area will be earmarked on the layout plan to be approved alongwith the license.
- (ix) That you understand that the development/ construction cost of 24 m/18 m major internal roads is not included in the EDC rates and they shall pay the proportionate cost for acquisition of land, if any, alongwith the construction cost of 24 m/18 m wide major internal roads as and when finalized and demanded by the Department.
- (x) That you shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006 issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.
- (xi) That you shall make arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available from External Infrastructure to be laid by Haryana Urban Development Authority or any other agency and provisions of EDC facilities may take long time and you shall not claim any damages against the Department for loss occurred if any.
- (xii) That you shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.
- (xiii) That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.
- (xiv) That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.
- (xv) That you shall use only LED fitting for internal lighting as well as campus lighting.
- (xvi) That you shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two months period from the date of grant of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.
- (xvii) That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of non inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. you shall also provide detail of calculation of EDC per sqm/per sft to the allottees while raising such demand from the plot owners.
- (xviii) That you shall keep pace of development atleast in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.
- (xix) That you shall arrange power connection from UHBVNL/DHBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which licensee shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric

services i.e. UHBVNL/DHBVNL and complete the same before obtaining completion certificate for the colony.

- (xx) That you shall complete the project within seven years (5+2 years) from date of grant of license as per clause 1(ii) of the policy notified on 01.04.2016.
 - (xxi) That no clubbing of residential plots for approval of integrated zoning plan of two adjoining plots under same ownership shall be permitted.
 - (xxii) That you will pay the labour cess as per policy instructions issued by Haryana Government vide Memo No. Misc. 2057-5/25/2008/2TCP dated 25.02.2010.
 - (xxiii) That you shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and shall inform account number and full particulars of the scheduled bank wherein you have to deposit thirty percentum of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.
 - (xxiv) That no further sale has taken place after submitting application for grant of licence.
 - (xxv) That you shall not give any advertisement for sale of plots/ commercial area before the approval of layout plan.
 - (xxvi) That no provision of the Haryana Ceiling on Land Holding Act, 1972 has been violated due to purchase of applied land.
 - (xxvii) That you shall abide by the terms and conditions of the policy notified on 01.04.2016.
 - (xxviii) That you shall submit the necessary access permission from the competent authority before approval of zoning plan or start the development works at site whichever is earlier.
 - (xxix) That you shall remove the temporary structure / labour hut within one month from the issuance of licence.
 - (xxx) That you shall obtain the necessary permission from the competent authority before construction of road over the gas pipeline passing through the site.
 - (xxxi) That the provisions of the Real Estate (Regulation and Development) Act, 2016 and rules framed thereunder shall be followed by the applicant in letter and spirit.
3. That the 50% saleable area in the layout plan, to be issued alongwith the license alongwith revenue detail, which is to be freezed as per clause 5(i) of the policy dated 01.04.2016. The area so freezed shall be allowed to sell only after completion of all Internal Development Works in the colony.
4. The licence is valid up to 07/03/2024.

Dated: The 08/03/2019.
Chandigarh


(K. Makrand Pandurang, I.A.S.)
Director, Town & Country Planning
Haryana, Chandigarh/12
Email: tcp_haryana7@gmail.com

Endst. No. LC-3972-Asstt.(AK)/2019/ 7202

Dated: 09-03-2019

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

1. Global Horizon Holdings Pvt. Ltd., B-2/201, Basement, Safdarjang Enclave, New Delhi-110029 alongwith a copy of agreement, LC-IV B, Bilateral agreement & layout plan.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Chief Administrator, Housing Board, Panchkula alongwith copy of agreement.
5. Managing Director, HVPN, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
6. Deputy Secretary/Project Director, Ministry of Road Transport and Highway, G-5&6, Dwarka Sector-10, Delhi alongwith copy of land schedule with a request not to release the compensation / award announced vide notification dated 27.12.2018 for the land falling under khasra nos. 20/19/2 in the revenue estate of village Dhunela to the land owner company i.e. Signature Global Homes Pvt. Ltd.
7. Joint Director, Environment Haryana-Cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
8. Addl. Director Urban Estates, Haryana, Panchkula.
9. Administrator, HSVP, Gurugram.
10. Chief Engineer, HSVP, Panchkula.
11. Superintending Engineer, HSVP, Gurugram along with a copy of agreement.
12. Land Acquisition Officer, Gurugram.
13. Senior Town Planner, Gurugram alongwith layout plan.
14. Senior Town Planner (E&V), Haryana, Chandigarh.
15. District Town Planner, Gurugram along with a copy of agreement and layout plan.
16. Chief Accounts Officer O/o DTCP, Haryana, Chandigarh along with a copy of agreement.
17. Nodal Officer (Website) to update the status on the website.



(Rajesh Kaushik)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana Chandigarh

To be read with License...58.....dated 8/3/..of 2019

Detail of land owned by Global Horizon Holding Pvt.Ltd.

Village	Rect No	Killa No	Area (K-M)
Dhunela	35	1/2	2-7
		2/2	2-0
		3/2	2-7
		4/2	2-7
		7	8-0
		8/1	2-2
		9 min	6-8
		26 min	0-16
		10	8-0
		11/1min	3-4
		14/1/1	0-3
		14/1/2min	0-19
		14/2min	4-8
	36	12min	6-8
		4/2min	0-12
		7/1min	2-15
		5/2	2-7
		6	8-0
		Total	63-3

OR 7.89375 Acres


Director,
Town & Country Planning
Haryana



Directorate of Town & Country Planning, Haryana

Nagar Yojana Bhavan, Plot No.3, Sector-18A, Madhya Marg, Chandigarh, Phone: 0172-2519349

Web site tcpharyana.gov.in - e-mail: tcpharyana7@gmail.com

FORM LC - V

(See Rule 12)

License No. 88 of 2022

This license has been granted under the Haryana Development and Regulation of Urban Areas Act 1975 & the Rules 1976 made thereunder to Global Horizon Holdings Pvt. Ltd., P-903-905, C-Wing, 9th Floor, JMD Megapolis, Sector- 48, Sohna Road- Gurugram for setting up of Affordable Residential Plotted Colony under Deen Dayal Jan Awas Yojna - Affordable Plotted Housing Policy-2016 over an additional area measuring 0.25625 acres in addition to licence no. 58 of 2019 in the revenue estate of Dhumela, Sector-33, Sohna District Gurugram.

1. The particulars of the land, wherein the aforesaid affordable plotted colony is to be set up, are given in the schedule of land annexed herein and duly signed by the Director, Town & Country Planning, Haryana.
2. The Licence is granted subject to the following conditions:-
 - a) That the affordable residential plotted colony under Deen Dayal Jan Awas Yojna will be laid out in confirmation to the approved layout/building plan and development works will be executed in accordance to the designs and specifications shown in the approved plans.
 - b) That the conditions of the agreements already executed are duly fulfilled and the provisions of Haryana Development and Regulation of Urban Areas Act, 1975 and the Rules 1976 made thereunder are duly complied with.
 - c) That applicant shall maintain and upkeep of all roads, open spaces, public park and public health services for a period of five years from the date of issue of the completion certificate unless earlier relieved of this responsibility and thereupon to transfer all such roads, open spaces, public parks and public health services free of cost to the Govt. or the local authority, as the case may be, in accordance with the provisions of Section 3(3)(a)(iii) of the Haryana Development and Regulation of Urban Areas Act, 1975.
 - d) That applicant shall integrate the services with Haryana Shehri Vikas Pradhikaran services as and when made available.
 - e) That you have not submitted any other application for grant of license for development of the said land or part thereof for any purpose under the provisions of the Haryana Development and Regulation of Urban Areas Act, 1975 or any application seeking permission for change of land use under the provision of the Punjab Scheduled Roads and Controlled Areas Restriction of Unregulated Development Act, 1963.
 - f) That applicant will transfer 10% area of the licenced colony free of cost to the Government for provision of community facilities. This will give flexibility to the Director to work out the requirement of community infrastructure at sector level and accordingly make provisions. The said area will be earmarked on the layout plan to be approved alongwith the license.
 - g) That applicant understand that the development/construction cost of 24 m/18 m major internal roads is not included in the EIDC rates and they shall pay the

Director
Town & Country Planning
Haryana, Chandigarh

proportionate cost for acquisition of land, if any, alongwith the construction cost of 24 m/18 m wide major internal roads as and when finalized and demanded by the Department.

- h) That applicant shall obtain NOC/Clearance as per provisions of notification dated 14.09.2006 issued by Ministry of Environment & Forest, Govt. of India, if applicable before execution of development works at site.
- i) That applicant shall make his own arrangements for water supply, sewerage, drainage etc. to the satisfaction of DTCP till these services are made available and the same is made functional from External Infrastructure to be laid by Haryana Shehri Vikas Pradhikaran or any other execution agency.
- j) That applicant shall obtain clearance from competent authority, if required under Punjab Land Preservation Land Act, 1900 and any other clearance required under any other law.
- k) That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. notification as applicable.
- l) That the provision of solar water heating system shall be as per guidelines of Haryana Renewable Energy Development Agency and shall be made operational where applicable before applying for an Occupation Certificate.
- m) That applicant shall use only LED fitting for internal lighting as well as campus lighting.
- n) That applicant shall convey the 'Ultimate Power Load Requirement' of the project to the concerned power utility, with a copy to the Director, within two months period from the date of grant of license to enable provision of site in licensed land for Transformers/Switching Stations/Electric Sub Stations as per the norms prescribed by the power utility in the zoning plan of the project.
- o) That it will be made clear at the time of booking of plots/commercial space that specified rates include or do not include EDC. In case of not inclusion of EDC in the booking rates, then it may be specified that same are to be charged separately as per rate fixed by the Govt. You shall also provide detail of calculation of EDC per Sqm./per sft. to the Allottees while raising such demand from the plot owners.
- p) That applicant shall keep pace of development atleast in accordance with sale agreement executed with the buyers of the plots as and when scheme is launched.
- q) That applicant shall arrange power connection from UHBVNL/DHBVNL for electrification of the colony and shall install the electricity distribution infrastructure as per the peak load requirement of the colony for which licensee shall get the electrical (distribution) service plan/estimates approved from the agency responsible for installation of external electric services i.e. UHBVNL/DHBVNL and complete the same before obtaining completion certificate for the colony.
- r) That applicant shall complete the project within seven years (5+2 years) from date of grant of license as per clause 1(ii) of the policy notified on 01.04.2016.
- s) That no clubbing of residential plots for approval of integrated zoning plan of two adjoining plots under same ownership shall be permitted.
- t) That applicant will pay the labour cess as per policy instructions issued by Haryana Government vide Memo No. Misc. 2057-5/25/2008/2TCP dated 25.02.2010.
- u) That applicant shall submit compliance of Rule 24, 26, 27 & 28 of Rules 1976 & Section 5 of Haryana Development and Regulation of Urban Areas Act, 1975, and

shall inform account number and full particulars of the scheduled bank wherein you have to deposit thirty percentum of the amount received from the plot holders for meeting the cost of Internal Development Works in the colony.

- v) That no further sale has taken place after submitting application for grant of license..
- w) That the licensee shall permit the Director or any other officer authorized by him to inspect the execution of the layout and the development in the works in the colony and to carry out all directions issued by him for ensuring due compliance of the execution of the layout and development works in accordance with the license granted.
- x) That applicant shall not give any advertisement for sale of plots/commercial area before the approval of layout plan.
- y) That the licensee shall follow the provisions of the Real Estate (Regulations and Development) Act, 2016 and Rules framed thereunder shall be followed by the applicant in letter and spirit.
- z) That no provision of the Haryana Ceiling on Land Holding Act, 1972 has been violated due to purchase of applied land.
- aa) That the revenue rasta passing through the site shall not be encroached upon and shall be kept free from all hindrances for easy movement of general public.
- bb) That applicant shall abide by the terms and conditions of policy dated 08.02.2016(DDJAY) and other direction given by the Director time to time to execute the project.
- cc) That the owner/developer shall integrate the bank account in which 70 percent allottee receipts are credited under Section-4(2)(I)(D) of the Real Estate Regulation and Development Act, 2016 with the online application/payment gateway of the Department, in such manner, so as to ensure that 10% of the total receipt from each payment made by an allottee is automatically deducted and gets credited to the EDC head in the State treasury.
- dd) That such 10% of the total receipt from each payment made by the allottee, which is received by the Department shall get automatically credited, on the date of receipt in the Government treasury against EDC dues.
- ee) That such 10% deduction shall continue to operate till the total EDC dues get recovered from the owner/developer.
- ff) The implementation of such mechanism shall, however, have no bearing on EDC installment schedule conveyed to the owner/developer. The owner/developer shall continue to supplement such automatic EDC deductions with payments from its own funds to ensure that by the EDC installments that are due for payment that paid as per the prescribed schedule.
- gg) That you shall execute the development works as per Environmental Clearance and comply with the provisions of Environment Protection Act, 1986, Air (Prevention and Control of Pollution of Act 1981) and Water (Prevention and Control of Pollution of 1974). In case of any violation of the provisions of said statutes, you shall be liable for penal action by Haryana State Pollution Controlled Board or any other Authority Administering the said Acts.
- hh) That you shall maintain the ROW of gas pipe line passes through the site and also comply the terms and conditions of permission issued by GAIL India Limited.

3. That the 50% saleable area, earmarked in the approved layout plan and freed as per clause 5(i) of DDJAY policy shall be allowed to sell only after completion of all Internal Development Works in the colony.
4. That licensee company will abide by with the Act/ Rules and the policies notified by the Department for development of affordable plotted colony and other instructions issued by the Director under section 9A of the Haryana Development and Regulations of Urban Areas Act, 1975.
5. The licence is valid up to 05/07/2027.


 (K. Makrand Pandurang, IAS)
 Director, Town & Country Planning
 Haryana, Chandigarh

Dated: 06/07/2022.

Place: Chandigarh

Encl. No. LC-3972-B- JE (MK)-2022/ 19979

Dated: 07-07-2022

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

1. Global Horizon Holdings Pvt. Ltd., P-903-905, C-Wing, 9th Floor, JMD Megapolis, Sector- 48, Sohna Road- Gurugram, alongwith a copy of agreement, LC-IV B & Bilateral Agreement.
2. Chairman, Pollution Control Board, Haryana, Sector-6, Panchkula.
3. Chief Administrator, HSVP, Panchkula.
4. Managing Director, HVPN, Planning Directorate, Shakti Bhawan, Sector-6, Panchkula.
5. Joint Director, Environment Haryana-cum-Secretary, SEAC, Paryavaran Bhawan, Sector -2, Panchkula.
6. Addl. Director Urban Estates, Haryana, Panchkula.
7. Administrator, HSVP, Gurugram.
8. Superintending Engineer, HSVP, Gurugram along with a copy of agreement.
9. Land Acquisition Officer, Gurugram.
10. Senior Town Planner, Gurugram.
11. District Revenue Officer, Gurugram.
12. District Town Planner, Gurugram along with a copy of agreement.
13. Chief Accounts Officer of this Directorate.
14. Project Manager (IT) of this Directorate with the request to host the orders on Departmental website for information of general public/developers.

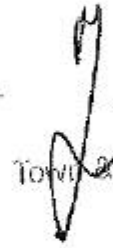

 (Babita Gupta)
 District Town Planner (HQ)
 For: Director, Town & Country Planning
 Haryana Chandigarh

To be read with License No...⁸⁸.....dated 06/07 of 2022

Detail of land owned by Global Horizon Holdings Pvt. Ltd.

Village	Rect. No.	Killa No.	Area (K-M)
Dhunela	35	9min	1-1
		26min	0-2
		14/1/2min	0-1
		14/2min	0 17
		Total	2-1

Or 0.25625 acre

 Director,
Town & Country Planning
Haryana
Jasvir Singh

8.15 ACRES AFFORDABLE RESIDENTIAL PLOTTED COLONY UNDER DDJAY AT SECTOR 33, VILLAGE- DHUNELA, TEHSIL- SOHNA DISTRICT- GURUGRAM, HARYANA

DEVELOPED BY M/S GLOBAL HORIZON HOLDING PVT. LTD.

ESTIMATE FOR PROVIDING WATER SUPPLY,SEWERAGE, STORM WATER DRAINAGE, ROADS,STREET LIGHTING AND HORTICULTURE IN RESPECT OF 8.15 ACRES AFFORDABLE RESIDENTIAL PLOTTED COLONY UNDER DDJAY AT SECTOR 33, VILLAGE- DHUNELA, TEHSIL- SOHNA DISTRICT- GURUGRAM, HARYANA

Sohna is a town and municipal corporation in the Gurgaon district of the state of Haryana, India. It is a part of the National Capital Region (NCR) of Delhi. Its proximity to the burgeoning city of Gurgaon has in recent years caused its character and demographics to change dramatically. It has many factories, offices, hotels, IT parks and educational institutes. There are several sightseeing spots around the area, some overlapping with Gurgaon. Sohna is 41 kilometres from Indira Gandhi International Airport and is located on National Highway 48, making it well connected with Delhi, Gurgaon, Rewari, Dharuhera, Jaipur, Ahmedabad and Mumbai.

PROJECT REPORT/ESTIMATE FOR PROVIDING WATER SUPPLY, SEWERAGE, STORM WATER DRAINAGE, ROADS, STREET LIGHTING AND HORTICULTURE IN RESPECT OF 8.15 ACRES AFFORDABLE RESIDENTIAL PLOTTED COLONY UNDER DDJAY AT SECTOR 33, VILLAGE- DHUNELA, TEHSIL- SOHNA DISTRICT- GURUGRAM, HARYANA

The Haryana Government has prepared a master plan for development of Residential/Industrial/ Commercial urban estate Gurugram. Project is developed by M/S Global Horizon Holding Pvt Ltd. They have decided to develop the area in this master plan as a plotted residential colony and has named this part as Proposed Affordable residential plotted Colony for an area measuring 8.15 Acres at Sector 33 Village- Dhunela, Tehsil- Sohna, District- Gurugram, Haryana.

Water Supply

1

Source

The source of water supply in this area is from **HSVP** how ever tubewells shall be proposed for Emergency if permission will get from CGWA. At present,water supply is from HSVP municipal supply and tanker supply is sweet and fit for human consumption. However in borewell water is available at reasonable depth. The average yield of tubewell with 40-45 ft strainers will be about 20,000 litre per hour. The recharging of underground 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 and the tubewells will be bored after the permission from CGWA in tune with growth of demand. The ultimate requirement of tubewells includes provisions of 10% stand by. Ultimately, water shall be supplied to the Project by **HARYANA SHAHARI VIKAS PRADHIKARAN, GURUGRAM, HARYANA.**

Anjana Nandlal
Anjana Nandlal
Architect
CA/2022222-10

F6234, 2nd Floor, L100
Saket, New Delhi 110033
011-46555555

The scheme has been designed for approved population of **2286 persons in 8.15 acres**. The rate of water supply per head per day has been taken as 155.25 litres (135+15%) as per NBC 2016 / HSP norms. In addition to above necessary provision of water for community area, commercial area, parks etc. have been taken into account for calculating the maximum quantity of water requirement.

3 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.

4 Under Ground Storage

Underground storage tank provision has been made for ²⁵⁰~~240~~KL capacity. in 4 compartments, which caters for the raw, domestic as well as for firefighting requirement. The water from fire compartment shall overflow to the raw water compartment so that the water in the fire compartment always remain fresh.

5 Boosting Station

A boosting station having monoblock centrifugal pump set is planned near under ground reservoir to pump water from domestic/ treated under ground water tank to over head water tank provided at individual plot terrace.

6 Distribution System

The distribution system for this development has been designed to supply @ 172.50 litre per head per day @ 2.5 times the average rate of flow on 'Hazen William' formula with C-140. Necessary provision for laying D.I. pipe K-7 conforming to relevant IS standards along with valves and specials has been made in the project. The minimum terminal head at any point will be more than 27.00 meters so that it can serve the stilt and four floors stories construction envisaged in the plan. Minimum pipe dia for distribution is kept as 100 mm dia for domestic water supply.

7 Rising Mains

Rising mains from HSP water main or sector road to water works have also been designed and provision for 100 mm dia D.I. pipe line (dia as/ design) has been made in this estimate.

8 Sewerage

This scheme is designed for sewer connecting to the proposed sewage treatment plant. The sewage system has been marked on the respective plans. The sewer lines have been designed for 3 times average DWF in relation to the water supply demand assuming that 80% of water supply shall find its way into the proposed sewer. ²⁵⁰~~240~~mm pipe sewers have been proposed and designed to run half full. The sewers have been designed on 0.75 M per second minimum velocity i.e. self cleansing velocity Necessary provision for laying DWC pipes and manholes etc. has been made in this estimate.

Arjuna Nandlal
Architect
C/A2011/1522210



Size/ Shape of Manholes

As per IS 4111:1986 "Circular type of manholes are much stronger than rectangular and arch type manholes thus these type of manholes are preferred over rectangular as well as arch type manholes. However both rectangular and circular type of manholes are proposed to be provided. The brick masonry rectangular manhole is proposed to be provided for depth upto 0.9m.

The brick masonry/ concrete circular manholes are proposed to be provided for all depth exceeding 0.9 m upwards. Circular manholes are strsaight down in lower portion and slanting on top portion so as to narrow down the top opening equal to internal dia of manhole cover.

Depending on the depth of manhole, brick circular manhole of dia 910, 1220, 1520, 1820 mm dia are proposed to be provided.

9 Storm Water Drainage

The storm water is designed to carry 6.25 mm rainfall per hour or 0.123 cusecs per acre as discharge. Also suitable provisions are contemplated in our scheme to ensure better recarging of underground water table in the area. Underground R.C.C. pipe drain with minimum 400 mm dia are proposed to be provided in this area with circular manhole.

Necessary design statement for entire storm water system has been prepared and attached with estiamte.

10 Rain Water Harvesting

The main emphasis on recharging the underground aquifers and safe disposal of storm water with flooding the site has been laid in designing/ planning of storm water drainage system. Modular Type rain water harvesting are proposed to be provided.

11 Roads

The roads are proposed to be provided in the plotted development in such a way that main 9 m wide colony road connects with 24 m sector road. Internal service of the roads of the colony 9m wide provide approach for construction of roads to the plots. Detailed calculation of the various item of works have been made on the basis of the detail design of the roads as approved by Chief Engineer HSVP, Gurugram.

12 Street Lighting

Street lighting system has been designed to provide illumination of 15 to 20 lux on roads. Street lights are provided on 6 m high steel tubular poles are located on one side of 9.0 m wide road. Luminaries with 65 watts LED lights are proposed to be provided for achieving the desired illumination.

13 Horticulture

Provision of road side plantation of trees with tree guards has been made for all roads. The parks shall be developed by providing lawns & ornamental trees with tree guards.

Anjana Nandlal
Architect
CA/2011/52210



14 Specifications :

The work will be carried out in accordance with the standard specification of P.H. Department as laid down by H.S.V.P. & Haryana Government.

15 Rates

Estimate for providing services in this pocket has been prepared on the recent HSVP rates.

16 Cost

The total cost of development in this project including various P.H. and B & R services works out to **Rs. 695.91 Lacs** which includes 3% contingency and PE charges and 49% departmental charges also.

98.68

804.25

The cost per gross acre for this phase works out to App. **Rs. 85.39 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.

DESIGN CALCULATION

Daily water requirement

Total No. of Plots (General)

Total No. of Plots (EWS)

For 8.15 Acres

Acres

127

0

Unit

Nos

Nos

Population per plot (General)

Population per plot (EWS)

18

9

Person/Plot

Person/Plot

1 Therefore population (General)

Therefore population(EWS)

Total Population

2286

0

2286

2286

Persons

Persons

Persons

Persons

SAY

135

155.25

472.50

LPCD

Total daily Water requirement for plots (150 LPCD + 15%)

@

Domestic @ 65%

Flushing @ 35%

230686

256317.75

124216

438017.25

LPD

230.70

124.30

438.40

Or Say

KLD (1)

Arjuna Mendal
Architect
CA/2011/1352210



20 KL/hours

Assuming discharge/hour of each tubewell
Total domestic water requirement
No. of tubewells required
Add 10% standby

275-250	KLD	Nos.
1.38		
0.14		
4.51		
2.00		

Total
Proposed

So It is proposed 2 nos of tubewell, if permission will get from CGWA. The provision of 2 no of tubewell has been made in the estimate because the water demand for flushing, horticulture and the road washing purpose is to be met from re circulated after treatment at STP and ultimate water supply is to be provided by HSVP.

III Pumping machinery for tubewell

a) Gross working load	=	45.00	m
b) Average Fall in S.L	=	3.05	m
c) Depression head	=	6.10	m
d) Friction loss	=	2.50	m
	=	56.65	m
Say	=	60.00	m
	=	7.41	HP
Proposed	=	7.50	HP

$$BHP = (20 \text{ KL} \times 1000 \times 60) / (60 \times 60 \times 75 \times 0.6)$$

With 60% efficiency

It is proposed to install 2 no. Submersible pumping set with a discharge of 20000 ltr./hour (335 lpm) driven with 7.5 HP electric motor.

Anilana Mandal
Architect
CA/2011/52210
F522A, 522A, 1479
SUGAR, KAPILASHI, HOSUR

IV Underground Tank

Daily requirement for domestic use and other except fire fighting
Capacity of under ground tank 12 hr storage except fire fighting **e 60%**

=	230.33 274.74	KLD
=	150.43 137.37	KLD
=	150.43 140.00	KLD
Say	2286	Person
=	435	Person
=	1088	Person
		18 Person/plot 3 sqm/ Person 3 sqm/ Person

Fire Tank Capacity as $100 \times [\text{sqrt}(3809) / 1000] \times 1/3$

=	65.05	KLD
Say	100.00	KLD
Total	230 240.00	KLD

It is proposed to provide 1 no. under ground tank of capacity **240 KL** which also includes **100 KL** capacity for fire fighting. Tank will have two compartments, one for fire, one for domestic use. The water first enters the fire compartment, then over flows to the domestic water use compartment so that the water in the fire compartment shall remain fresh.

It is proposed to provide under ground tank of following capacity

- Capacity of Fire tank-1
- Capacity of Fire tank-2
- Capacity of Raw tank
- Capacity of Domestic tank

50.00	KLD
50.00	KLD
70.00 75	KLD
70.00 75	KLD

Anjana Nandani
Architect
CA2011/352210



V BOOSTING MACHINERY (Drinking water)

UG. Tank

Daily requirement for domestic use

Assuming 8 hours running 1 pumps (with one standby)

Discharge/hour

Head of pump

i) Suction lifts

ii) Friction loss in M<main & specials

iii) Clear head

Say

BHP of motor $(530 \times 35) / (60 \times 75 \times 0.6)$

=	250.00	KLD
=	274.74	
Or Say	31.25	KL/HR
	34.34	LPM
	572.38	LPM
	580.00	
	530.00	
=	4.0	m
=	3.0	m
=	27.0	m
=	34.0	m
=	35.0	m
=	6.87	HP
Or Say	7.52	HP
	7.5	

VI

Gen Set

Pumps for UG. Tank

Pumps for STP. Tank

Sewage pumping Pump-1

Sewage pumping Pump-2

Storm Water pumping Pump

Tubewell

Lighting

Nos.	HP
1	7.5
1	5.0
1	2.5
1	2.5
2	10.0
2	7.5

or $67.5 \times 0.746 \times 1.50$

Say

7.5	HP
5	HP
2.5	HP
2.5	HP
20	HP
15	HP
15	HP
67.5	HP
75.5	KVA
80	KVA



5 Sewage Treatment Plant capacity

Gross domestic + Flushing water requirement/day

Sewage flow will be 80% of total load

Add 5% marginal factor.

STP Capacity (Or Say)

VII STP Treated Tank

Daily requirement for flushing, horticulture, road washing

Capacity of under ground tank 12 hr storage

260%

Say

VIII BOOSTING MACHINERY (Flushing water) + 180% above.

STP

Daily requirement for Flushing use + 110% for hoses.

Assuming 8 hours running 1 pumps (with one standby)

Discharge/hour

Head of pump

i) Suction lifts

ii) Friction loss in M < main & specials

iii) Clear head

Say

BHP of motor $(280 \times 35) / (60 \times 75 \times 0.6)$

$$\frac{350 \times 35}{60 \times 75 \times 0.60}$$

383.22	KLD
422.7	
306.58	KLD
338.2	
15.33	
340.00	KLD
321.91	
Say 325.00 KLD	
177.84	KLD
164.05	
88.92	KLD
918.43	
90.00	KLD
10	
164.05	KLD
447.98	
20.51	KL/HR
18.50	
308.29	LPM
341.77	
310.00	LPM
350.00	
4.0	m
3.0	m
27.0	m
34.0	m
35.0	m
4.54	HP
4.02	
5.0	HP
Or Say	

FINAL ABSTRACT OF COST

Amount (Lacs.)

For 8.15 Ac

~~134.00~~ 175.91

Sub Work 1- Water Supply

Sub Work 2- Sewerage

~~143.38~~ 115.01

Sub Work 3- S.W. Drainage

~~70.73~~ 99.85

Sub Work 4- Roads

164.65 167.04

Sub Work 5- Street Lighting

31.27

Sub Work 6- Horticulture

~~4.48~~ 5.81

Sub Work 7- Maintenance of services for 10 years including resurfacing of roads after 1st 5 years & II. Phase i.e. 10 years maintenance (as per HSVP norms)

~~485.77~~ 209.35

TOTAL
COST / ACRE

~~704.27~~ 804.24

~~86.41~~ 898.68 Lakh,

say Rs 804.24 Lakh

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

Executive Engineer
HSVP Division No.V,
Gurugram

Superintending Engineer (HQ)

for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP Circle, Gurugram

21.9.2022

SD/- 27/9/22

C/S

Director General
Town & Country Planning
Haryana, Chandigarh

Arjuna Mandal
Architect
CA2011/G52210



WATER SUPPLY HEAD

Sub Head 1- Head Works

Sub Head 2- Pumping Machinery

Sub Head 3- Distribution System

Sub Head 4- Irrigation scheme

Total

Add 3% Contingencies & PE Charge

Add 49% Departmental Charges

(CO to final abstract of cost)

Amount (Lacs.)

For 8.15 Ac

39.80 59.75

22.50 27.60

24.47 26.74

0.53

87.30 114.62

2.62 3.44

89.92 118.06

44.06 57.85

133.98 175.91

TOTAL

SAY

434.00 Rs 175.91 Lakh

(Dam. + Flushing)

Anjana Nandal

Architect

CA/2011/52210



6223A, GATE NO. 1002, LADO

SARAI, KUNWAR, 110030

011-45053533

Sub Head I

Water Supply
Head Works
Rs. (lakhs)

S. No.	Description	Unit Nos.	Qty	Rate	Amount
1	Boring and installing 510 mm i/d tubewells with reverse/direct rotary rig complete with pipe strainer to a depth of about 80m. complete.	Nos.	2	1000000.00 15,00,000/-	20.00 30.00
2	Constructing pump chambers as per standard design of PWD PH/HSVP of size 1.50x1.50 m.	Nos.	2	1000000.00	2.00
3	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 chamber	LS	250	L.S.	5.00
ii)	construction of UG Tank (Dam + Aze) soft water Tank	KL	240	4500.00 4500/-	3.00 11.20
4	Provision for carriage of material and other unforeseen items.	LS	100	100000.00 L.S.	4.00
5	Provision for facilities staff for Maintenance.	LS		300000.00 L.S.	3.00
6.	Provision for const. of boundary wall around boost station / T.W.'s (C.O. to abstract of cost of Sub-work No.1)			L.S.	3.00
				TOTAL	39.80
				SAY	39.80

Amranta Mondal
Architect
CA/2011/522210
F6234, GROUND FLOOR, LADDA
SHALL, NEW DELHI 110030
011-40333330

Sub Work I
Sub Head No. II

Water Supply
Pumping Machinery
Amount (Rs.)
(in Lakhs)

S. No.	Description	Unit	Qty	Rate	
1	Providing and installing electricity driven electro or submersible pumping set capable of delivering about 20 KL water per hour against a total head of 60 M complete with motor and other accessories.	Nos.	2	200000.00	4.00
2	Provision for cheap pressure type chlorination plant complete.	LS	2	100000.00	2.00 -1.00
3	Provision for making foundations & erection of pumping machinery.	LS		100000.00	1.00
4	Provision for pipes, valves & specials inside the pump chamber.	LS		100000.00	1.00
5	Provision for electric services connection including electric fittings for tubewells chambers complete. Including cost of transformer.	LS		200000.00	2.00
6	Providing and installing electricity driven domestic pumping set, capable of delivering 580 LPM of water at 35M head complete in all respects. (7.5 HP)	Nos.	2	2,00,000/- 140000.00	4.00 -2.00
7	Providing and installing electricity driven flushing pumping set, capable of delivering 340 LPM of water at 35M head complete in all respects. (5HP)	Nos.	2	150,000/- 110000.00	3.00 -2.20
8	Provision of diesel generator set of each for standby arrangements for booster pump complete with gear head arrangements of following capacities 80 KVA.	Nos.	1	L.S 800000.00 500000.00 L.S	9.60 -8.00 -0.50 1.10 27.60 -22.50 -22.50
9	Provision for carriage of materials and other unforeseen items.	LS			
(C.O. to abstract of cost of Sub-work No.I)					
TOTAL				SAY -	

Anjana Mandal
Architect
CA/201/1522/10



Sub Work I Sub Head No. III			Water Supply Distribution System/Rising Main IN LACS		
S. No.	Description	Unit	Qty	Rate	
1	Providing, laying, jointing & testing D.I. K-7 pipes including cost of excavation complete as per ISI marked. (For Domestic water supply line)				
i)	100 mm dia	M	661	1460/- 1250.00	9.65 8.26
2	Providing, laying, jointing & testing D.I. K-7 pipes including cost of excavation complete as per ISI marked. (For Borewell water supply line)				
i)	100 mm dia	M	80	1460/- 1250.00	1.17 1.00
3	Providing, laying, jointing & testing HDPE PE-80 pipes including cost of excavation complete as per ISI marked. (For Flushing water supply line)				
i)	80 mm dia	M	685	800.00	5.48
4	Providing and fixing sluice valves including cost brick masonry chambers complete in all respects.				
i)	100 mm i/d	Nos.	6	12000.00	0.72
5	Providing, fixing and testing butterfly valves including cost of valve chambers complete in all respects.				
i)	80 mm i/d	Nos.	5	10000.00	0.50
6	Providing and fixing 100 mm dia NRV including cost of valve chambers complete in all respects.				
i)	100 mm dia	Nos.	1	14000.00	0.14
ii)	80 mm dia	Nos.	1	10000.00	0.10
7	Providing and fixing air valves and scour valves including cost of valve chambers complete in all respects.				
		Nos.	4	10000.00	0.40
8	Providing and fixing indicating plates for sluice valve, air valve etc.				
		Nos.	17	2000/- 1000.00	0.34 0.17
8	Provision for carriage of material	LS		100000.00	1.00

Anjana Nardel
Architect
CA/2011/52210



9	Provision for cutting the roads and making to its original condition	LS		100000.00	1.00
10	Providing and fixing fire hydrants complete with masonry chambers.	Nos.	10	15000.00	1.50
11	Making water supply connection	LS		100000.00	1.00
12	Provision for rising main from HSVP water supply line to UG Tank				
i)	100 mm dia	M	256	1460/- 1250.00	3.74 3.20
(C.O. to abstract of cost of Sub-work No.I)				TOTAL	26.74 24.47
				SAY	RS 26.74 Lakh. 24.47

Anjana Nandal
Architect
CA/2011/52210



Sub Work I
Sub Head No. IV

Water Supply
Irrigation

S. No.	Description	Unit	Qty	Rate	IN LACS
1	Providing, laying, jointing & testing HDPE PE-80 pipes including cost of excavation complete as per ISI marked.				
i)	25 mm dia	M	50	300.00	0.150
2	Providing & fixing 20 mm PVC Irrigation hydrant valve with PVC lid complete in all respect including cost of PVC keys	Nos.	8	3500.00	0.28
3	Provision for carriage of material	LS		10000.00	0.10

(C.O. to abstract of cost of Sub-work No.I)

TOTAL
SAY

0.53
0.53

Anilima Nandani
Architect
CA/2011/52210
Rohini Associates Pvt Ltd
Consultants
F6234, GROUND FLOOR, LIDO
SARAI, NEW DELHI 110030
011-40533586

Sub Work II

Sewerage Scheme

S. No.

Description

Unit

Qty

Rate

in Lacs

1 Providing, lowering, jointing, cutting DWG-HDPE-SN8 pipes and specials into trenches including cost of excavation, bed concrete lot of manholes complete.

i) 200 mm i/d

M

333

1250.00

1700/-

5.66

M

303

1500.00

2040/-

4.16

4.53

6.18

2 Provision for lighting, watching and temporary diversion traffic

LS

100000

100000

1.00

3 Provision for cutting of roads and carriage of materials etc. and other unforeseen charges

LS

100000

100000

1.00

4 Provision for connection with HSP

LS

100000

100000

1.00

5 Providing and installing electricity driven Sewage pumping set, capable of delivering 200 LPM of sewer at 12M head complete in all respects. (2.5HP) (1 working + 1 standby)

Nos.

2

150000.00

3.00

6 Providing and installing electricity driven Sewage pumping set, capable of delivering 150 LPM of sewer at 12M head complete in all respects. (2.5HP) (1 working + 1 standby)

Nos.

2

140000.00

2.80

7 Construction of Sewage pumping station chamber complete in all respects.

Details of boosting station

i) construction of Sump Tank-1

i) construction of Sump Tank-2

KL.

8

4500.00

0.36

KL.

6

4500.00

0.27

8 Providing and installation of STP 340 KL including civil tanks and all electro mechanical works. It also includes flushing tank.

KL

340

16000.00

1.05

9 Provision for DI K-7 pipe for Pumping station to next manhole

M

72

4250.00

0.90

1460/-

0.90

Anilana Nandani
Architect
CA/2011/52210

REGISTERED ARCHITECT
F673A, GROUND FLOOR, LADO
SARAI, NEW DELHI 110030

01-405050-110

Sub Work III

S. No.	Description	Unit	Qty	Rate	Storm water drainage In Lacs
1	Providing, lowering, jointing, cutting RCC NP3 pipes and specials into trenches including cost of excavation cost of manholes, ventilating chambers etc. complete in all respects.				
i)	400 mm i/d	M	610	2500.00	15.25
a)	Average depth upto 1.5 m	M	54	2600.00	1.40
b)	Average depth 1.5 m to 4.5 m				
2	Provision for road gully and drain, <i>including pipe connection</i>	LS		500000	5.00
3	Provision for lighting, watching and temporary diversion of traffic.	LS		100000	1.00
4	Provision for cutting of roads and carriage of materials etc. and other unforeseen items.	LS		100000	1.00
5	Construction of rain water harvesting pit as per details and specification given below and as per attached drawing including, cost of excavation of all ind soil foundation trenches of drain including dressing of sides of ramming and getting out excavation of soil.	Nos	5	350,000/- 250000.00	28.50 12.50
6	Providing and installing electricity driven Sewage pumping set, capable of delivering 1700 LPM of sewer at 15M head complete in all respects. (10HP) (2 working + 1 standby)	Nos.	3	250,000/- 190000.00	7.50 5.70
7	Construction of Storm Water pumping station chamber complete in all respects. Details of boosting station construction of Tank				
i)					
8	Provision for DI K-7 pipe for Pumping station to next manhole	KL.	28	4500.00	1.26
i)	300 mm dia pipe	M	78	4340/- 2200.00	3.39 1.72
9	Provision for connection with HSVP.				

Anjana Nandal
Architect
CA/2011/52210



911-4050000-110

10 400 mm i/d (Average depth 1.5 m to 4.5 m) **Rice pipe** M
 Provision for connection with HSVP line LS

2600.00 0.26
 100000 1.00

Total 65,06 46.09
 1,95 1.38
 67,01 47.47
 32,84 23.26

Add 49% Deptt. Charges

TOTAL 99,85 70.73
SAY Rs 99,85 Lakh, 70.73

(C.O. TO FINAL ABSTRACT OF COST SUB WORK - III)

Anilima Nalpal
 Architect
 CA/201/1522/10



Sub Work IV

Road Work

S. No.	Description	Unit	Qty	Rate	In Lacs
1	Provision for levelling and earth filling as per site conditions.	Acre	8.15	175000.00	14.26
2	Construction of road by- i) 150 mm thick W.B.M. stone aggregate layer w m m p ii) 100 mm thick P.C.C. iii) 50 mm thick sand bed iv) 80 mm thick conc. pavers Total	Sq. M	4795 4439	1500/- 1200.00	71.93 53.26
3	Miscellaneous items (a) Providing for Kerbs & Channels for 8.15 ACRES 9M & 15M wide road 807 x 2 = 1614 RM	RMT	1732 1614	700/- 600.00	12.13 9.68
(b)	Provision of foot-path of precast conc. for 8.15 acres (9m)	Sq. M	2824.5	750.00	21.18
4	9 wide road 807 x 1.75 x 2 = 2824.5 SQM arrangement	LS		100000.00	1.00
5	Provision for traffic lighting and guide map etc	LS		100000.00	1.00
6	Provision for carriage of material	LS		100000.00	1.00
7	Provision for plot indicator	LS		100000.00	1.00
8	Provision for demarkation & unforeseen items	LS		100000.00	1.00
	Provision for parking & pavement for commercial area @ 50% 4304 = 652 sqm 80 mm thick paver block over 100 mm C.C.	sqm	652	750.00 1000/-	4.89 6.52
	Add 3% contingencies				107.28
	Add 49% Deptt. Charges				3.22
					110.50
					54.145
					164.65
					464.65

(C.O. TO FINAL ABSTRACT OF COST SUB WORK - IV)

Anilima Nandak
Architect
CA/2011/52210
6023A, PLOT NO. 10, LADU
SAGAR, NEW DELHI 110030
011-46588888

Sub Work V				Street Lighting	
S. No.	Description	Unit	Qty	Rate	In Lacs
1	Providing street lighting on internal roads as per standard specification of HVPNL and CFL complete in all respect				
	Provision made on L.S. cost @ Rs.2,50,000.00 per acre	L.S.	8.15	250000.00	20.38
Add 3% contingencies					
					20.38
					0.61
Add 49% Deptt. Charges					
					20.99
					10.28
TOTAL					31.27
SAY					31.27
(C.O. TO FINAL ABSTRACT OF COST SUB WORK - V)					


 Anjana Nandal
 Architect
 CA/2011/52210


Sub Work VI

Horticulture

S. No.	Description	Unit	Qty	Rate	Amount In Lacs
1	Development of lawn area				
a)	Trenching the ordinary soil upto depth of 60 cm. including removal and packing of servicable material and disposing at the lead of 50m and making upto the tranched area to prope level by filling with earth mixed with manure before and after flooding trenches with water including cost of imported earth and manure.				
b)	Rough dressing of trenched area.				
c)	Grassing with including watering and maintenance of Per acre lawns free from weeds and fit for moving in rows including for hedges, shrubs and green belt (as per HSVP Norms)		0.78542	150000.00	1.18
2	Planting of trees with tree guards on roads at 12 m total length of roads = 807 mtr No of trees @ 20m c/c = $807 \times 2 / 12 = 134$ nos say = 134 nos Cost of the tree @ 1300/- each	Nos.	134	1800/- 1300.00	2.41 1.74
	TOTAL				2.92 3.79 0.09 0.11
	Add 3% contingencies				3.01 3.90
	Add 49% Deptt. Charges				1.47 1.91
				TOTAL	4.48 5.81
	(C.O. TO FINAL ABSTRACT OF COST SUB WORK - VI)			SAY	R 55.81 Lakh, 4.48-


 Anjananand Lal
 Architect
 CA/2011/52210

Sub Work VII

Maintenance

S. No.

Description

Unit

Qty

Rate

In Lacs

1 Provision for maintenance charges for water supply, sewerage, storm water drainage, roads, street light, horticulture etc. complete including operation and establishment charges as per HSVP norms after completion and resurfacing of roads after 10 years or 1st phase

2 Provision for resurfacing and strengthening of roads after 1st five years of 1st phase with 80 mm thick concrete pavers @ 600 / sqm

3 Provision for resurfacing and strengthening of road after 10 years of 2nd phase with 80 mm thick concrete pavers @ 600 / sqm

Add 3% contingencies

Add 49% Deptt. Charges

TOTAL

(C.O. TO FINAL ABSTRACT OF COST SUB WORK - VII)

SAY

750000.00
8,00,000/-

4795 660/-
4439 600.00

4795 825/-
4439 750.00

Total 136.41
121.04

3.63
4.09

140.50
124.68

61.09
68.88

185.77
209.35

185.77

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SECTOR, NEW DELHI 110030
011-40555555

PROJECT :- RESIDENTIAL PLOTTED COLONY GLOBAL HORIZON (8.15 ACRE)						
TITLE :- WATER SUPPLY QTY DOMESTIC WATER LINE						
S.NO	Line No		Length of Pipe MTR.	Dia of Pipe MM	Sluice valve Each	PIPE MATERIAL
	From	To				
1	UGT	D-01	2.0	100	1	DI K-7
2	D-01	D-02	68.0	100	1	DI K-7
3	D-01	D-03	106	100	1	DI K-7
4	D-03	D-04	70	100	0	DI K-7
5	D-03	D-05	51.0	100	0	DI K-7
6	D-05	D-10	29	100	1	DI K-7
7	D-05	D-06	31	100	0	DI K-7
8	D-06	D-07	87	100	1	DI K-7
9	D-07	D-08	170	100	0	DI K-7
10	D-08	D-09	48	100	1	DI K-7
TOTAL			661		6	


Anjana Nandal
 Architect
 CA/2011/52210



PROJECT :- RESIDENTIAL PLOTTED COLONY GLOBAL HORIZON (8.15 ACRE)

TITLE :- DOMESTIC WATER SUPPLY HYDRAULIC CHART FOR RING LINES.

S.NO	Line No		PLOTS (GENERAL)		Water Requirement for Non Residential Plots.				Gross Water Requirement (Load on Line)	Average Demand	Peak Demand @ 2.5 Times	Flow Rate	Length of Pipe	Head Loss Mtr	Total Head Loss	Velocity	Dia of Pipe	Ground LVL at start	Hydraulic LVL at start	Head at start	Ground LVL at End	Hydraulic LVL at End	Head at End
	From	To	Nos.	Population @ 18 persons / Plot.	Water Requirement @ 155.25 Ltr/head / day	Commercial Area in Acre	TYPE OF BUILDING	Basis of Water Requirement in commercial LPD	OCF	Total Water Requirement in LPD	LPD	KLD	KLD	LPM	MTR	MTR	MSEC	MTR	MTR	MTR	MTR	MTR	MTR
				18	100.91																		
1	UGT	D-01	127	2285	230686	0.322	COMMERCIAL	6706	13499	20205	250691	231	627	436	2.0	0.0092	0.02	98.60	133.60	55.00	98.60	133.58	34.88
2	D-01	D-02	18	324	32668	0.000	PLOTS	0	0	0	32668	33	82	57	68.0	0.0002	0.01	98.60	133.59	34.96	98.60	133.57	34.97
3	D-01	D-03	108	1982	167980	0.322	COMMERCIAL	6706	13499	20205	218185	218	545	376	106	0.0071	0.75	98.60	133.58	34.98	98.60	132.83	34.23
4	D-03	D-04	12	215	21797	0.000	PLOTS	0	0	0	21797	22	54	38	70	0.0001	0.01	98.60	132.83	34.23	98.60	132.82	34.22
5	D-03	D-05	74	1332	134415	0.322	COMMERCIAL	6706	13499	20205	154620	155	387	258	51.0	0.0007	0.19	98.60	132.83	34.23	98.60	132.84	34.04
6	D-05	D-10	5	90	9062	0.268	COMMERCIAL	5578	0	5578	14660	15	37	25	25	0.0000	0.00	98.60	132.64	34.04	98.60	132.84	34.04
7	D-06	D-06	59	1052	107189	0.054	COMMERCIAL	1129	13499	14027	121787	122	304	211	31	0.0024	0.07	98.60	132.64	34.04	98.60	132.57	33.97
8	D-06	D-07	52	935	94454	0.054	COMMERCIAL	1129	13499	14527	103082	105	273	189	87	0.0020	0.17	98.60	132.57	33.97	98.60	132.40	33.00
9	D-07	D-08	32	575	59125	0.054	COMMERCIAL	1129	13499	14527	72753	73	182	126	170	0.0009	0.18	98.60	132.40	33.80	98.60	132.24	32.64
10	D-08	D-09	13	234	23514	0.046	COMMERCIAL	966	0	966	24579	25	61	43	48	0.0001	0.01	98.60	132.24	33.64	98.60	132.23	32.63

Anjana Nandal
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CA/2011/52210



PROJECT :- RESIDENTIAL PLOTTED COLONY GLOBAL HORIZON (8.15 ACRE)						
TITLE :- WATER SUPPLY QTY FLUSHING WATER LINE						
S.NO	Line No		Length of Pipe	Dia of Pipe	Sluice valve	PIPE MATERIAL
	From	To				
			MTR.	MM	Each	
1	STP	F-01	7.5	80	1	HDPE PE-80
2	F-01	F-02	51.5	80	0	HDPE PE-80
3	F-02	F-03	125.5	80	0	HDPE PE-80
4	F-01	F-04	90.5	80	1	HDPE PE-80
5	F-04	F-05	44.0	80	0	HDPE PE-80
6	F-05	F-10	93.0	80	1	HDPE PE-80
7	F-05	F-06	60.0	80	0	HDPE PE-80
8	F-06	F-07	139.0	80	1	HDPE PE-80
9	F-06	F-08	8.5	80	0	HDPE PE-80
10	F-08	F-09	65.5	80	1	HDPE PE-80
	TOTAL	80 MM	685		5	

Anjana

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Architect
CA/2011/52210



PROJECT :- RESIDENTIAL PLOTTED COLONY GLOBAL HORIZON (8.15 ACRE)
TITLE :- FLUSHING WATER SUPPLY HYDRAULIC CHART FOR RING LINES.

TITLE :- FLUSHING WATER SUPPLY HYDRAULIC CHART FOR RING LINES.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
S.NO	Line No		PLOTS (GENERAL)				Water Requirement for Non Residential Plots.										Gross Water Requirement (Load on Line)				Peak Demand @ 2.5 Times	Flow Rate	Length of Pipe	Head Loss Mtr	Total Head Loss	Velocity	Dia of Pipe	Ground LVL at start	Hydraulic LVL at start	Head at start	Ground LVL at End	Hydraulic LVL at End	Head at End																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	From	To	Nos.	Population @ 10 persons / Plot.	Water Requirement @ 155.25 Ltr/head / day	Commercial Area in Acre	TYPE OF BUILDING	Basis of Water Requirement in LPD	OCF	Total Water Requirement in LPD	LPD	Average Demand	KLD	KLD	MTR	MTR	MTR	M/SEC	MM	MTR														MTR	MTR	MTR	MTR	MTR	MTR	MTR	MTR	MTR																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Anjana Nandal
Architect
CA/2011/52210

PROJECT :- RESIDENTIAL PLOTTED COLONY GLOBAL HORIZON (8.15 ACRE)						
GARDEN IRRIGATION LINE				CITY WATER SUPPLY LINE		
SL NO.	DIA OF PIPE IN MM	LENGTH IN M	GARDEN HYDRANT	SL NO.	PIPE DIA IN MM	LENGTH IN M
1	25	50	8	1	100	256
TOTAL				1	100	80

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Behera Associates Pvt. Ltd.
MEP Consultant
F5324, Sector 10, Gurgaon
Gurgaon, Haryana 122002
011-40583399

PROJECT : RESIDENTIAL PLOTTED COLONY, GLOBAL HORIZON, LOAD ON SEWAGE LINES (8.15 ACRES)

S. No.	Name of Sewer Line		Plots (DDJAY)			Water Requirement for Non Residential Plots			Sewage Flow (Self Load on Line)		
			Number of Plots	Population @ 18 persons / Plot.	Water Requirement @ 155.25 Ltr/ head / day	Other Type of Building	Other Water Requirement	Gross Water Requirement (Load on Line)	Sewage Flow (Self Load on Line)	Sewage Flow (Self Load on Line)	
	From	To									
1	SW-01	SW-03	3	54	8384	PLOTS	0	8384	6707	6.71	
2	SW-02	SW-03	10	180	27945	PLOTS	0	27945	22356	22.36	
3	SW-03	SW-04	5	90	13973	PLOTS	0	13973	11178	11.18	
4	SW-04	SW-06	21	378	58685	PLOTS	0	58685	46948	46.95	
5	SW-05	SW-06	12	216	33534	PLOTS	0	33534	26827	26.83	
6	SW-06	SW-08	14	252	39123	PLOTS	0	39123	31298	31.30	
7	SW-07	SW-08	2	36	5589	PLOTS	0	5589	4471	4.47	
8	SW-08	SW-10	4	72	11178	COMMERCIAL	8581	19759	15807	15.81	
9	SW-09	SW-10	3	54	8384	PLOTS	0	8384	6707	6.71	
10	SW-10	SW-15	20	360	55890	PLOTS	0	55890	44712	44.71	
	SUMP-1	SW-11	3	54	8384	COMMERCIAL	1312	9695	7756	7.76	
11	SW-11	SW-12	11	198	30740	PLOTS	0	30740	24592	24.59	
12	SW-12	SW-13	14	252	39123	COMMERCIAL+ COMMUNITY CENTRE	21190	60313	48251	48.25	
13	SW-14	SW-15	5	90	13973	PLOTS	0	13973	11178	11.18	
14	SW-15	STP	0	0	0	PLOTS	0	0	0	0.00	


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 CA/2011/52210



PROJECT :- RESIDENTIAL PLOTTED COLONY, GLOBAL HORIZON (8.15 ACRE)																										
TITLE :- STORM WATER DRAINAGE - HYDRAULIC DESIGN CHART.																										
S.No	Line No.		Length In mtr.	self area in sqmtr.	Self Area (Hec)	previous area In hec.	Total Area (Hec)	Rain Fall mm/hr	Discharge @12.15 lps/Hec	Pipe dia (mm)	Slope (mm) 1 in	Velocity m/sec.	Cap of pipe in lps.	Fall in line mtr.	Ground level at Start	Invert Level at Start	Ground level at End	Invert Level at End	Manhole Depth			No. of Manhole	Manhole Type			
																			Depth at Start	Depth at End	Average Depth		910 Dia upto 1.67m Type-A	1220 Dia upto 2.29m Type-B	1520 Dia From 2.29 to 4.18m	1520 Dia Above 4.19m
1	ST-01	ST-03	54.5	2113	0.211	0.000	0.211	6.25	2.57	400	450	0.923	127.67	0.12	98.60	97.70	98.60	97.58	0.90	1.02	0.96	4	4	0	0	0
2	ST-02	ST-03	13.5	3223	0.322	0.000	0.322	6.25	3.92	400	450	0.923	127.67	0.03	98.60	97.70	98.60	97.67	0.90	0.93	0.92	1	1	0	0	0
3	ST-03	ST-04	61.5	3134	0.313	0.534	0.847	6.25	10.29	400	450	0.923	127.67	0.14	98.60	97.58	98.60	97.44	1.02	1.16	1.09	5	5	0	0	0
			STORM WATER PUMPING STATION OF 1700 LPM PUMP (2W+1S) - 28 CUM PUMPING STATION																							
4	ST-05	ST-07	104.5	4721	0.472	0.847	1.319	6.25	16.03	400	450	0.923	127.67	0.23	98.60	97.70	98.60	97.47	0.90	1.13	1.02	7	7	0	0	0
5	ST-06	ST-07	13.5	389	0.039	0.000	0.039	6.25	0.47	400	450	0.923	127.67	0.03	98.60	97.70	98.60	97.67	0.90	0.93	0.92	1	1	0	0	0
6	ST-07	ST-14	38.5	934	0.093	1.358	1.451	6.25	17.64	400	450	0.923	127.67	0.09	98.60	97.47	98.60	97.33	1.13	1.27	1.20	3	3	0	0	0
7	ST-08	ST-10	16.0	748	0.075	0.000	0.075	6.25	0.91	400	450	0.923	127.67	0.04	98.60	97.70	98.60	97.66	0.90	0.94	0.92	1	1	0	0	0
8	ST-09	ST-10	42.0	1970	0.197	0.000	0.197	6.25	2.39	400	450	0.923	127.67	0.09	98.60	97.70	98.60	97.61	0.90	0.99	0.95	3	3	0	0	0
9	ST-10	ST-11	53.0	849	0.085	0.272	0.357	6.25	4.33	400	450	0.923	127.67	0.12	98.60	97.61	98.60	97.49	0.99	1.11	1.05	3	3	0	0	0
10	ST-11	RWH	22.0	1907	0.191	0.357	0.547	6.25	6.65	400	450	0.923	127.67	0.05	98.60	97.49	98.60	97.39	1.11	1.21	1.16	3	3	0	0	0
11	RWH	ST-13	69.0	1907	0.191	0.547	0.738	6.25	8.97	400	450	0.923	127.67	0.15	98.60	97.39	98.60	97.19	1.21	1.41	1.31	4	4	0	0	0
12	ST-12	ST-13	70.5	1730	0.173	0.000	0.173	6.25	2.10	400	450	0.923	127.67	0.16	98.60	97.70	98.60	97.54	0.90	1.06	0.98	4	4	0	0	0
13	ST-13	ST-14	51.5	2024	0.202	0.911	1.114	6.25	13.53	400	450	0.923	127.67	0.11	98.60	97.19	98.60	97.07	1.41	1.53	1.47	3	3	0	0	0
14	ST-14	OUT	53.5	1843	0.184	2.565	2.749	6.25	33.41	400	450	0.923	127.67	0.12	98.60	97.07	98.60	96.95	1.53	1.65	1.59	4	4	0	0	0

663.50 Mtr
Say 664 Mtr

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F623A, GROUND FLOOR, IAPD
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ROAD CALCULATION			
ROAD LENGTH (MTR)		WIDTH IN MTR	AREA IN SQMTR
ROAD A (12 MTR)	50.00	5.50	275.00
ROAD B (10 MTR)	20.69	5.50	113.80
ROAD C (12 MTR)	17.00	5.50	93.50
ROAD D (9 MTR)	62.83	5.50	345.57
ROAD E (9 MTR)	63.30	5.50	348.15
ROAD F (9 MTR)	156.73	5.50	862.02
ROAD G (11 MTR)	43.05	5.50	236.78
ROAD H (9 MTR)	72.30	5.50	397.65
ROAD I (9 MTR)	276.23	5.50	1519.27
ROAD J (9 MTR)	9.50	5.50	52.25
ROAD K (9 MTR)	48.69	5.50	267.80
ROAD L (4.19 MTR)	AS PER PLAN		53.00
TOTAL	824.51	60.50	4564.79
ADD 5% FOR CURVES	865.74	MTR	4793.03
SAY ROAD LENGTH	866	MTR	4795.00



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