Directorate of Town & Country Planning, Haryana

Plot No. 3, Nagar YojnaBhawan, A-wing, Madhya Marg, Sector-18 Chandigarh,
Website: tcpharyana.gov.in; Phones: 0172-2548475, 2707175; email:
tcpharyana7@gmail.com

Regd.

To

Model Economic Township Ltd.,
Regd. Off. 3rd floor, 77-B, IFFCO Road,
Sector-18, Gurugram, Haryana-122015.

Memo No. LC-4610 B/PA (SK) 2024/7635 Dated: 01/03/2024

Subject: **Approval of Service Plan / Estimate in licence No. 138 of 2023 dated 06.07.2023 granted for setting up of a Industrial Plotted Colony over an area measuring 155.8375 acres falling in the revenue estate of Village Nirmana, Tehsil-Badli, District Jhajjar - Model Economic Township Ltd.**

Please refer your application on the matter as subject cited above.

The service plan/estimates in respect of Licence No. 138 of 2023 dated 06.07.2023 granted for setting up of a Industrial Plotted Colony over an area measuring 155.8375 acres falling in the revenue estate of Village Nirmana, Tehsil-Badli, District Jhajjar has been checked and corrected wherever necessary and are hereby approved subject to the following terms and conditions:-

1. For the industrial licence granted in agriculture zone beyond 500 meter of urbanizable limit, at least cost of infrastructure made available by various agencies/ Department of the State Government, including infrastructure sought and availed by the licensee shall be charged in agriculture zone.
2. 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.
3. That you are liable to maintain the licensed area for ten years or as per HSVP norms till such time, the colony is taken over by the local authority/State Govt.
4. 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.
5. 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 solely responsible for fire safety arrangement.
6. 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.
7. 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 master services.

8. That level/extent of external services to be provided by HSVP will be in accordance with EDC deposited. The colonizer will be fully responsible to meet the demand, to dispose off effluent and rain water till these services are provided by HSVP.
9. You shall be solely responsible for disposal of sewage of your colony as per requirement of HSPCB/Environment Deptt. till such time the external services are made available as per the proposal of the town. All the link connections with the external services shall be made by you at your own cost after seeking approval from competent authority. There should be no pollution due to disposal of sewerage of the colony. The disposal of the effluent should be in accordance with the standard norms fixed by Haryana State Pollution Board/Environment Department.
10. The estimate does 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 HVPNL.
11. That you shall be solely responsible to lay the services upto the external services laid/to be laid by HSVP or any developing agency on Sector dividing road at respective locations/points.
12. You have proposed to utilize recycled water for flushing purposes and provision of separate flushing line, storage tank, metering system, pumping system and plumbing has been made. Therefore, it is clarified that no tap or outlet of any kind will be provided from the flushing lines/plumbing lines for recycled water except for connection to the cistern of flushing tanks and any scouring arrangement. Even ablution taps should be avoided.
    (i) Two separate distribution systems, independent to each other, will be adopted, one for potable water supply and second for recycled water. Every Home/Office/Business establishment will have access to two water pipe lines.
    (ii) Potable water and recycled water supply lines will be laid on opposite berms of road. Recycled water lines will be above sewer lines. Wherever unavoidable and if all pipes are required to be laid on same side of road, these will be located from the ground surface in order of descending quality. Potable water shall be above recycled water which should be above sewer. Minimum clear vertical separation between a potable water line and a recycled water line shall be one ft, if it not possible then readily identifiable sleeve should be used.

    To avoid any accidental use of recycled water for potable purposes all:-

    (a) Recycle water pipes, fitting, appurtenances, valves, taps, meters, hydrants will be of Red Colour or painted red.
    (b) Sign and symbols signifying and clearly indicating "Recycle Water" "Not fit for Drinking" must invariably be stamped/fixed on outlets, Hydrants Valves

both surface and subsurface, Covers and at all conspicuous places of recycle distribution system.

(c) Detectable marker tapes of red colour bearing words "Recycle Water" should be fixed at suitable interval on pipes.

(d) Octagonal covers, red in colour or painted red and words "Recycle Water Not fit for Drinking" embossed on them should be used for recycled water.

13. That it shall be mandatory to provide dual/two button or lever flushing system in toilets.

14. You shall be solely 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 stability responsibility will entirely rest upon you.

15. In case some additional structures are required to be constructed and decided by HSVP/development agency at a later stage, the same will be binding upon you. Flow of control valves will be installed preferably of automatic type on water supply connection with main water supply line, laid by developing agency or HSVP.

16. The formation level of internal road should match with sector roads. Similar other services like water supply, sewerage and SWD level etc. should be fixed in integration of levels of EDC services of water supply, sewerage and SWD etc, which shall be ensured by you.

17. In case it is decided by Govt. that HSVP/Govt. will construct 24 m wide road and will extend master services on 24 m wide internal circulation road, then additional amounts at rates as decided by the authority/Govt. will be recoverable over and above EDC.

18. Since, the construction of master plan roads is yet to take place, you will get the road level/formation level of your service fixed from the concerned Superintencing Engineer, before execution.

19. This estimate does not include the common services like water supply, storage tank on the top of the building block, the plumbing works etc. will part of the building works.

20. You will have to ensure that the sewer/storm water drainage to be laid by you, will be connected with the proposed existing master services by gravity. If it is not possible to connect the services by gravity, it will be your sole responsibility to make the pumping arrangement and maintenance thereof for all the time to come.

21. That you shall not make any connection with the master services i.e. water supply, sewerage, storm water drainage, without prior approval of the competent authority in writing.

22. That the detailed technical proposal/scheme shall be got approved from this office before execution of work at site.

23. The firm will provide solar water heating system as per the guidelines issued by Haryana Govt./Ministry of Environment/Govt. of India.

24. It is made clear that roof top rain narvesting system shall be provided by you as per Central Ground Water Authority norms/Haryana Govt. Notification and the same shall be kept operational/maintained all the time. The arrangement for segregation of first rain water not to be entered into the system shall also be made by you.

25. That you shall transfer the land under master plan road as well as service road in Govt./HSVP for construction of road/service road free of cost and proportionate cost for construction of service road shall also be paid by you.

26. That you shall abide the compliance of all conditions of Chief Engineer-1, Haryana Shehri Vikas Pradhikaran, Panchkula imposed in his office letter memo no. CE-I/SE(HQ)/EE(M)/SDE(W-1)/2023/8156 dated 09.01.2024 (enclosed as Annexure-A).

Note :-

a. That you shall implement the directions given by National Green Tribunal O.A. No. 21 of 2014 and no. 95 of 2014 (in the matter of Vardhman Kaushik V/s Union of India & Others) and instructions have been issued by HSVP time to time shall be intimated at site.

b. 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 Act 1981) and Water (Prevention and Control of Pollution Act 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

(S. K. Sehrawat)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana, Chandigarh

Endst. No. C-4610 B/PA (SK) 2024/ Dated :

A copy is forwarded to the Chief Engineer-I, HSVP, Panchkula with reference to his memo No. CE-I/SE(HQ)/EE(M)/SDE(W-1)/2023/8156 dated 09.01.2024 for information and necessary action please.

(S. K. Sehrawat)
District Town Planner (HQ)
For Director, Town & Country Planning
Haryana, Chandigarh

Model Economic
Township Limited

METL/2023-24/230 September 22, 2023

To,
Executive Engineer
HSVP Division
Bahadurgarh

Subject: Submission of Service Plan Estimate for 155.8375 acres Licensed industrial colony vide License no. 138 of 2023 dated 06.07.2023 falling in village Nimana, Tehsil Badli, District Jhajjar.

Sir,

With Reference to the above subject, we would like to submit the following: -

1) 5 sets of service plan estimate. – **Annexure 1**
2) Undertaking – **Annexure 2**

We request you to kindly grant the approval on the service plan estimate at the earliest.

Thanking you,
For **Model Economic Township Limited**

Authorized Signatory
Enclosure: 5 Copies of Service Plan Estimate & Undertaking

Cc without annexures for information : Director Town & country planning, Haryana
: Chief Administrator HSVP, Panchkula, Haryana
: Chief Engineer HSVP, Panchkula, Haryana
: Superintending engineer HSVP, Rohtak, Haryana

Model Economic
Township Limited

Undertaking

1. We shall make suitable arrangements for providing water fit for drinking purpose till the water supply is made available by HSVP.

2. That our company will not claim for any external services from HSVP.

3. METL has provisioned and will make its own arrangements for treatment / recycling / disposal of wastewater generated from the project area.

4. The company shall abide by all the prevailing norms / rules and regulation as may be applicable to its colony.

5. The MSL formation levels of roads have been verified and are correct. Our company shall be responsible in case any mistake in levels etc.

Solemnly affirmed and undertaken on this 22nd day of September 2023.

For Model Economic Township Limited

Authorized Signatory
22nd September, 2023

Regd.Office: 3rd Floor, 77-B, IFFCO Road, Sector-18 Gurugram -122015, Haryana, India
Phone: +91-124-482 7369, Fax: +91-124-482 7337
CIN: U70109HR2006PLC036416
www.ModelEconomicTownship.com

Chapter-1
Project Brief

Introduction

Model Economic Township Limited (METL) is developing an Industrial township in the district of Jhajjar.

METL has obtained Licenses from Govt. of Haryana vide License No. License No. 138 Of 2023 to develop Industrial Township over 155.8375 Acres of land.

METL through this report seek approval of service plan and estimate for Sector-11 of MET as per **Layout Plan attached as Annexure-1**

Location

Land of 155.8375 Acres of Sector-11 is in the village Nimana, Jhajjar district, Haryana.

Land use

Approved land use within the license area of Sector-11 is as follows:

S. No.	Land use	Area (acres)
1	Industrial	95.37
2	Commercial	1.013
3	Utilities	11.41
4	Green	3.77
5	Undetermined	7.15
6	Roads	37.1245
7	**Total**	**155.8375**

For Model Economic Township Limited

Authorized Signatory

Chapter -2
Potable Water Supply

Source of Water

METL has approval from Govt. of Haryana to withdraw surface water from NCR Channel at RD 47.100 Kms and at RD 61.925 Kms. METL has constructed WTP in village Munda Khera which is operational and from this WTP treated surface water is being supplied to various sectors of MET for distribution.

METL also has permission to withdraw ground water from HRWA to meet the domestic horticulture demand in the initial stages of the project and domestic water demand of the industries in case of emergency.

Water Demand

Water demand of the sector is as follows: -

a.	Total Water Demand	1964.21	KLD
b.	Potable Water Demand	1179.03	KLD
c.	Horticulture Water Demand	785.17	KLD

Note: -

i. For detailed water demand assessment refer **Annexure-2.**
ii. 100% water demand for horticulture purpose in parks/green, green belts and road side green shall be met through recycled treated wastewater and in case shortage of treated wastewater treated surface water / groundwater shall be used.
iii. METL has planned separate network for recycling of treated waste water for horticulture purpose and to supply to various units for non-potable uses.

Storage & Pumping

Requirement

Potable water supplied from METL's WTP will be stored in an underground tank (UGT). From the UGT water will be pumped to overhead tank (OHT) of 20 m staging height for further distribution.

Potable water storage required for the sector: -

a.	8 hours daily water demand	393	KL
b.	Fire reserve	139	KL
c.	Total storage	532	KL

Note:

a. Fire reserve required for the project is calculated at 220 KL/ Sq Km
b. Suitable provision shall be made in the UGT to have fixed fire reserve all time to be used only in case of emergency.

For Model Economic Township Limited

Authorized Signatory

Provision
Following storage has been provided in the sector: -

a.	UGT	550	KL
b.	OHT	500	KL
c.	Total	1050	KL

Note:

a. It may be noted that total storage provided in the sector is higher than the requirement of the sector hence the additional storage of 885 KL provided shall be utilized for serving future expansion of the sector or other sector to be developed by METL under same or different license.
b. For detailed calculation of water storage requirement, refer **Annexure-3.**

Pumping Machinery
Pump room has been planned with UGT to pump water to OHT for further distribution. Pump room shall be equipped with pumps (1W+1S), monorail, electrical panel, DG set and other appurtenances.
For detailed calculation of pumping machinery, refer **Annexure-3**.

Distribution
Potable water distribution network has been planned to supply potable water to all units in the sector. Potable water distribution network consists of DI pipe and necessary valves like air valve, sluice valves and other appurtenances etc.
Summary of the pipe size is shown below:

Pipe Dia (mm)	Length (m)	MOC
100	4620	DI-K7
150	1551	DI-K9
200	1183	DI-K9
250	196	DI-K9
Total	**7550**	

Note:

a. For detailed pipe summary refer **Annexure-4.**
b. Drawing for Water Distribution Network is enclosed at **Appendix-A.**

Authorized Signatory

Chapter -3
Horticulture Water Supply

Source of Water

Wastewater collected from various units in the sector will be treated in centralized wastewater treatment unit. After suitable tertiary treatment, treated waste water shall be recycled for horticulture and non-potable uses in various units.

Water Demand

Water demand of the sector is as follows: -

a.	Total Water Demand	1964.21	KLD
b.	Potable Water Demand	1179.03	KLD
c.	Horticulture Water Demand	785.17	KLD

Note:-

i. For detailed water demand assessment refer **Annexure-2.**
ii. 100% water demand for horticulture purpose in parks/green, green belts and road side green shall be met through recycled treated wastewater and in case shortage of treated wastewater treated surface water / groundwater shall be used.
iii. METL has planned separate network for recycling of treated waste water for horticulture purpose and to supply to various units for non-potable uses.

Storage & Pumping

Requirement

Recycled treated wastewater after tertiary treatment will be stored in an underground tank (UGT). From the UGT water will be pumped into to recycled water network for further distribution.

Recycled treated wastewater storage required for the sector: -

i. 12 hours daily water demand = 400 KL

Provision

Following storage has been provided in the sector: -

i. UGT = 400 KL

Note:

a. For detailed calculation of water storage requirement, refer **Annexure-5.**

Pumping Machinery

UGT shall have suitable pumping arrangements like submersible pumps (1W+1S) with required appurtenances to pump water into recycled water distribution network.

For detailed calculation of pumping machinery, refer **Annexure-5**.

For Model Economic Township Limited

Authorized Signatory

Distribution

A separate network has been planned to recycle treated wastewater to all units in the sector for non-potable uses and to green areas for horticulture purposes. Recycled water distribution network consists of DI pipe (K7) & HDPE pipe and necessary valves like air valve, sluice valves and other appurtenances etc.

Summary of the pipe size is shown below:

Pipe Dia (mm)	Length (m)	MOC
90 mm	4254	HDPE
110 mm	4419	HDPE
180 mm	726	HDPE
225 mm	757	HDPE
Total	**10156**	

Note:

a. For detailed pipe summary refer **Annexure-6.**
b. Drawing for Recycled Water Distribution Network is enclosed at **Appendix-B.**

For Model Economic Township Limited

Authorized Signatory

Chapter -4
Sewerage System

Sewage Generation

Assessed sewage contribution of the sector is as follows: -

a.	Total Water Demand	1964.21	KLD
b.	Potable Water Demand	1179.03	KLD
c.	Horticulture Water Demand	785.17	KLD
d.	Sewage Generation	1347.47	KLD

Note: -

i. For detailed water demand assessment refer **Annexure-2.**
ii. 80% of total domestic & recycled water demand has been considered as sewage contribution from the sector.

Sewer Collection Network

Sewer network comprising of RCC NP3 pipe with all required appurtenances has been planned to collect wastewater generated from all units within the sector. This being industrial sector peak factor of 3 has been adopted for the design.

Summary of the pipe size is shown below:

Pipe Dia (mm)	Length (m)	MOC
200	4415	RCC-NP3
250	200	RCC-NP3
300	408	RCC-NP3
350	70	RCC-NP3
400	136	RCC-NP3
Total	**5229**	

Note: -

i. For detailed pipe summary refer **Annexure -7.**

Inlet Parameters

METL has also prescribed maximum inlet parameters for the discharge of wastewater into public sewers based on CPCB norms. Units not meeting the prescribed inlet parameters will have to install suitable treatment unit within the unit to meet the requirement prior to discharge of wastewater into MET's network.

Wastewater Treatment

Centralized STP/CETP for treatment of wastewater has been planned within the sector. Treatment unit has been planned with tertiary treatment facility in order to recycle treated wastewater water for horticulture purpose and non-potable uses within the units, and safe disposal into Outfall Drain No. 8 during monsoon.
Capacity of STP/CETP planned is as follows:

For Model Economic Township Limited

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Sewage Generation	STP/CETP Capacity
KLD	KLD
1347.47	1350

Note: -

1. For location of STP/CETP and sewer network drawing, refer **Appendix-C.**

For Model Economic Township Limited

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Chapter -5
Rainwater Management System & Rainwater Harvesting

Rainwater Collection Network

Network comprising of RCC NP3 pipe with road gully chamber and required appurtenances has been planned to collect rainwater from roads and various units with in the sector.

Summary of the pipe size is shown below:

Pipe Dia (mm)	Length (m)	MOC
400	1519	RCC-NP3
500	342	RCC-NP3
600	561	RCC-NP3
800	1277	RCC-NP3
1000	805	RCC-NP3
1200	139	RCC-NP3
1400	186	RCC-NP3
1600	702	RCC-NP3
Total	**5531**	

Note: -

i. Network has been designed for rainfall intensity upto 20 mm/hr.
ii. For detailed pipe summary refer **Appendix-8**.

Rainwater Harvesting

a. Rainwater harvesting in the sectors shall be implemented based on norms prescribed by HWRA & condition of ground water table.
b. All units within the sector shall implement rainwater harvesting within their premises as per norms and building plan approval.
c. At sector level rainwater harvesting structures shall be constructed at suitable location in green and open spaces.
d. Water body shall be constructed at suitable location for retention of rainwater and natural recharge of ground water.

Disposal

Provisions for disposal of rainwater into Outfall Drain No. 8 shall be made

Note: -

i. For rainwater network and location of retention pond and pumping station, refer **Appendix-D.**

For Model Economic Township Limited

Authorized Signatory

Chapter -6
Roads

Design Parameters
Average CBR Value of 5% and 5 msa traffic is considered for road crust design.

Road Crust in Industrial Component

Bituminous Concrete (BC)	:	30 mm
Dense Bituminous Macadam (DBM)	:	65 mm
Wet Mix Macadam (WMM)	:	250 mm
Granular Sub-Base (GSB)	:	200 mm

Note: - For detailed road lengths and other calculations refer **Annexure-9** respectively.

From	To	Length (m)	ROW (m)
8	8A	85	15
Total		**85**	
1	1A	137	18
2	2A	268	18
3	3A	277	18
7	7A	139	18
9	9A	158	18
11	11A	113	18
12	12A	363	18
13	13A	157	18
14	14A	233	18
16	16A	450	18
17	17A	243	18
18	18A	57	18
19	19A	47	18
22	22A	77	18
22A	22B	68	18
23	23A	36	18
24	24A	36	18
Total		**2859**	
6	6A	554	24
10	10A	158	24
15	15A	167	24
Total		**879**	
20	20A	107	30
20A	20B	227	30
21	21A	1135	30
Total		**1469**	
25	25A	539	60
Total		**539**	
Grand Total		**5831**	

For Model Economic Township Limited

Authorised Signatory

Chapter -7
Other Services

Horticulture / Arboriculture
Fine grassing is proposed in all the parks.
Shrubs and creepers will be provided at suitable places.
Road side plantation will be carried out as per norms
Green area /Open Spaces proposed under 155.8375 Acre area = 3.77 Acres

Street Lighting
LED light fittings have been proposed for street lighting.
Octagonal poles will be provided.
Spacing between street lighting pole will be as per lux level requirement specified in IS: 1944. Accordingly, suitable capacity of LED light fittings to be used.

Note:
Specifications:
The work shall be carried out in accordance with the MORTH, HARYANA PWD & HUDA specification/ Guidelines, Indian Standards, CPHEEO, and IRC Codes.

Rates
The Costing for providing services in this project has been prepared on the basis of recent market rates and H.S.R.

For Model Economic Township Limited

Authorised Signatory

Tel. : 2570982
Toll Free No. : 1800-180-3030
Website : www.hsvp.in
Email : cencrhuda@gmail.com

हरियाणा शहरी विकास प्राधिकरण
HARYANA SHEHARI VIKAS PRADHIKARAN
HSVP

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

CE-I No. 8157
Dated: 9/9/2024
Annexure-X

SUB:- Approval of service plan estimate for 155.8375 acres licensed Industrial Colony vide license no. 138 of 2023 dated 06.07.2023 falling in Village Nimana, Tehsil Badli, Distt. Jhajjar developed by M/s Model Economic Township Limited.

Technical note and comments:-

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

FINAL ABSTRACT OF COST

NAME OF WORK	DESCRIPTION	COST (Rs. In Lakh)
SUB WORK NO. I	WATER SUPPLY	~~911.9415~~ 1087.98
SUB WORK NO. II	SEWERAGE	~~479.7168~~ 735.62
SUB WORK NO. III	STORM WATER DRAINAGE	~~2902.0844~~ 1575.87
SUB WORK NO. IV	ROAD AND FOOTPATH WORK	~~2343.7017~~ 2390.89
SUB WORK NO. V	HORTICULTURE	~~35.5298~~ 43.14
SUB WORK NO. VI	STREET LIGHT	~~358.7457~~ 597.90
SUB WORK NO. VII	MAINTENANCE CHARGES	3687.2679
Total		~~10718.9878~~ 10108.47
	Area in acre	**155.8375** Say 10108.50 Lacs
	Cost Per Acre	~~68.78~~ Rs 64.87

Executive Engineer
HSVP Division
Bahadurgarh

Checked subject to Comments
In forwarding letter No. ...
Dt. 9.1.2024.....and notes
Attached with the estimate

Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP Circle, Gurugram

Town & ... Planning
Haryana

For Model Economic Township Limited

Authorized Signatory

Abstract of cost
Sub work no. 1 (Water supply system)

NAME OF WORK	DESCRIPTION	COST (Rs. In Lakh)
SUB HEAD NO. 1	Head Works	~~225.75~~ 251.95
SUB HEAD NO. 2	Pumping Machinery	~~72.00~~ 81.48
SUB HEAD NO. 3	Distribution System/ Rising Mains	~~156.37~~ 156.55
SUB HEAD NO. 4	Recycled water distribution System	~~140.09~~ 219.49
Sub Total		~~594.21~~ 709.39
Add 3% contingency and PE charges		~~17.83~~ 21.26
Add 49% administrative charges , Price escalation , unforseen charges		~~299.90~~ 730.05
Total		~~911.94~~ 957.73

1087.76 Rs.

C.o.t final asstract of cost

For Model Economic Township Limited

Authorized Signatory

Cost estimation for subwork no.-1 (water supply)
Sub Head No. 1 (Head works)

Sr. No	Description	Unit	Qty.	Rate (Rs.)	Amount in (lacs)
1	Drilling and installing 510mm I/d tube well with reverse/direct rig complete with pipe and strainer upto a depth of 30 M, BGL complete in all respects.	4	Each	15	60.00
2	Construction of pump chamber for tube wells as per standard design of HUDA/PHED	4	Each	2	8.00
3	Construction of Under ground service reservoir of 965 KL Capacity	550	KL	4500	~~24.75~~ 30.25
4	Construction of overhead service reservoir of 500 KL of 20 m staging height.	500	KL	15000	75.00
5	Construction of boundary wall and gate around water works site		LS		15.00
6	Construction of footpath, lawns etc. as required at water work site				
a.	Water Work site	1	Each	5	5.00
b.	Tube well	4	Each	0.75	3.00
7	Construction of pump chamber at water works for housing control panel & machinery for boosting station as per standard design of HUDA	1	LS	15	15.00
8	Provision for carriage of material and other unforseen items	1	LS	10	10.00
9	Provision for Staff Quarter for Maintenance staff	1	LS	~~10~~ 7.50 each	~~10.00~~ 3.00
	TOTAL				~~225.75~~ 251.25 lacs

For Model Economic Township Limited

Authorised Signatory

Cost estimation for subwork no.-1 (water supply)
Sub Head No. 2 (Pumping machinery)

Sr. No	Description	Qty.	Unit	Rate (Rs.)	Amount in (lacs)
1	Providing and installing electrically driven submersible pumping set capable of delivering about 18 KL of water per hour against a total head of 40 M complete with 5 BHP motor and all other accessories.	4	Each	2.50	~~10~~ 14.0
2	Provision of automatic type chlorination plant complete in all respect.	4	LS	1.50 Lks	~~6~~ 4
3	Providing and installing electrically driven centrifugal pumping sets for boosting station equipped with 35 BHP motors and capable of delivering about 120 KL of water per hours against a total head of 35m complete with motors and all other accessories.	(1+1) 2	~~LS~~ 7 Lks each	4	~~8~~ 14.0
4	Provision for pipes, valves and specials inside the pump chamber for pumps		LS		12
5	Provision for electric service connection and electric fittings in the tube well and boosting station including transformer.		LS		12.50
6	Provision for DG set 100 KVA for industrial area		LS		15.0
7	Provision for carriage of material and other unforseen items		LS		5.0
8	Provision for Making Foundation & Erection of Machinery		LS		5
	Total Cost				~~72.00~~ 81.50

For Model Economic Township Limited

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Cost estimation for subwork no.-1 (Water supply)
Sub Head No. 3 (Distribution system/ Rising mains)

SUB WORK NO. 1

SUB HEAD NO. 3 DISTRIBUTION SYSTEM / RISING MAINS

S.No	Item Description	Qty	Unit	Rate (Rs)	Amount in (lacs)
1	Providing, laying, jointing, testing DI pipe lines including cost of excavation, complete in all respect.				
	100mm id (K-7)	4620	Rm	1460	67.452
	150mm id (K-9)	1551	Rm	2040	31.6404
	200mm id (K-9)	1183	Rm	2700	31.941
	250mm id (K-9)	196	Rm	3540	6.9384
2	Providing and fixing sluice valves including cost of brick masonry chamber complete in all respect				
	250mm dia	2	Nos.	25000	0.5
	200mm dia	3	Nos.	20000	0.6
	150mm dia	3	Nos.	15000	0.45
	100mm dia	21	Nos.	12000	2.52
3	Providing and fixing air valve including cost of brick masonry chamber completes in all respect	14	Nos.	10000	1.4
4	Providing and fixing fire hydrants including cost of brick masonry complete in all respect.	15	Nos.	10000	~~1.5~~ 2 3.5
5	Providing and fixing indicating plates for sluice valves and air valves.	43	Nos.	1000	~~0.43~~
6	Provision for carriage of material and other unforeseen items		L.S		3
7	Provision for cutting of roads and making good to its original condition.		L.S		5
	Provision for water supply connection				3
	Total Cost				~~156.37~~ 156.33

For Model Economic Township Limited

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Cost estimation for subwork no. 1 (Water supply)
Sub Head No. 4 (Horticulture water distribution)

Sr. No	Description	Qty.	Unit	Rate (Rs.)	Amount in (lacs)
1	Providing, laying, jointing, testing HDPE PE 80 PN 6 Pipe line including cost of excavation, complete in all respect.				
	90 mm	4254	Rm	~~950~~ 1350	~~40.41~~ 57.45
	110 mm	4419	Rm	~~1000~~ 1460	~~44.19~~ 64.52
	180 mm	726	Rm	~~1000~~ 1700	~~7.26~~ 19.60
	225 mm	757	Rm	1000	~~7.57~~ 21.20
2	Providing and fixing sluice valve complete in all respect				
	200 mm	2	Nos.	20000	0.4
	150 mm	2	Nos.	15000	0.3
	100 mm	10	Nos.	12000	1.2
3	Providing and fixing air valve including cost of brick masonry chamber complete in all respect	8	Nos.	10000	0.8
4	Providing and fixing irrigation hydrant valve complete in all respect	272	Nos.	~~3500~~ 5000	~~9.52~~ 13.60
5	Providing and fixing indicating plates for sluice valves and air valves.	22	Nos.	2000	0.44
6	Provision for carriage of material and other unforeseen items		LS		10
7	Construction of Underground tank of 400 KL	400 KL	LS	4500	~~18~~ 22.5
	Total Cost				~~140.09~~

7) For water transfer pump of 1200 LPM 40 m head with 20 HP (1+1) 2 Nos @ Rs 4.5 lacs each

+ 8.5

₹ 219.49 lacs

For Model Economic Townships Limited

Authorised Signatory

Cost estimation for subwork no.-2 (Sewerage)

Sr. No	Description	Unit	Qty.	Rate(Rs.)	Amount in (lacs)
1	Providing, Lowering and Jointing RCC pipes in trenches including including. cost of excavation, bedding including cost of manholes & vent shafts etc. complete as per standard specifications.				
	RCC NP3 Pipe				
	200mm i/d	Rm	4415	2040	~~9.01~~ 90.07
	250mm i/d	Rm	200	2400	~~0.48~~ 4.80
	300mm i/d	Rm	408	2880	~~1.18~~ 11.75
	350mm i/d	Rm	70	3680	~~0.26~~ 2.58
	400mm i/d	Rm	136	4860	~~0.66~~ 6.61
2	Provision for provding oblique junctions	L.S			10.00
3	Provision for timbering & shoring	L.S			25.00
4	Provision for provding and fixing vent shafts at suitable places as per HUDA requirements	L.S			30.00
5	Provision for CETP upto tertiary level	L.S	1350	~~16000~~	~~216.00~~
6	Provision for cutting of roads and making good to its original condition and carriage of material and other unforseen charges	L.S			20.00 21.00
7	**Sub Total** Rate for Sewer Connection with HSVP main				~~312.58~~
	Add 3% Contingencies & PE charge				~~9.38~~
	Add 49% administration charges, Price escalation , unforeseen charges				~~157.76~~
	GRAND TOTAL				~~479.72~~

735.62 lacs

For Model Economic Township Limited

Authorized Signatory

Cost estimation for subwork no.-3 (STORM WATER DRAINAGE)

Sr. No	Description	Unit	Qty.	Rate(Rs.)	Amount in (lacs)
1	Providing, Lowering and Jointing RCC-NP3 pipes in trenches including cost of excavation & bedding and including cost of manholes & Catch Basin etc. complete as per standard specifications.				
	400mm i/d	Rm	1519	2500	37.98
	500mm i/d	Rm	342	3400	11.63
	600mm i/d	Rm	561	4070	22.83
	800mm i/d	Rm	1277	6715	85.75
	1000mm i/d,	Rm	805	10690	86.05
	1200mm i/d	Rm	139	12640	17.57
	1400mm i/d	Rm	186	~~12640~~	~~23.51~~
	1600mm i/d	Rm	~~5531~~	18363	~~1015.66~~
2	Provision for road Gullies including pipe connection (For collection of surface Runoff)	L.S			~~100.00~~
3	Provision for temporary diversion of traffic	L.S			5.00
4	Provision for cutting of roads and making good to its original condition and carriage of material and other unforseen charges	L.S			~~15.00~~
5	Provision for Pumping station with Sump well including rising main for disposal for rain water	L.S			400.00
6	Provision for rain water harvesting arrangement at selected places complete in all respects	L.S			~~60.00~~
	Sub Total				~~1890.98~~
	Add 3% Contingencies & PE charge				~~56.73~~
	Add 49% administrative charges, Price escalation , unforseen charges				~~954.38~~
	GRAND TOTAL				~~2902.08~~

For Model Economic Township Limited

Authorized Signatory

Cost estimation of Sub work No.1 (ROAD)

Sr. No		Description	Unit	Qty.	Rate (Rs.)	Amount in (lacs)
1		Provision for leveling, earth filling/ cutting as per site condition:	Acres	37.1246	175000	64.97
2	a	Supply and laying of Granular Sub Base (GSB) 250 mm thick	Sqm.	77841	1500	1167.61
	b	Supply and laying of Wet Mix Macadam (WMM) 250mm thick layer complete in all respect				
	c	Supply and laying of Bituminous Macadam (BM) layer complete in all respect (50 mm)				
	d	Supplying and laying of Bituminous concrete (30 mm BC) layer complete in all respect				
3		Providing & fixing Kerb and channel of Concrete in all respect	Rmt	17436	600	104.62
4		Provision for cement concrete concrete paver block (walk ways) along all roads complete in al respect	Sqm.	13994	1000	139.94
5		Provision for Guide map & plot indicator , Road Marking , Strips & Post Delinators		LS		20.00
6		Provision for carriage of material		LS		20.00
7		Provision for traffic lights		LS		10.00 (30.75)
8		Total Prov. for Pavement in Comm area 1s 50% of the				~~1527.14~~
		Add 3% Contingencies & PE charges area = [101 x 404]/2 = 2043.75 sqm @ Rs 1500/sqm				45.81 1557.89
		Total cost say 2050 sqm				1572.95 46.73
		Add 49% deptt. Charges % price Escalation , Administration & unforseen charges				770.75 1604.62
		Grand total				2343.70 786.27

2390.89

C.o. & final abstract of cost

For Mundal Economic Township Limited

Authorised Signatory

SUB WORK NO. V					HORTICULTURE		
S.No	Item Description			Qty	Unit	Rate (Rs)	Amount (Rs) (in lakhs)
1	Development of Lawn areas a) Trenching the ordinary soil upto depth of 30 cm, including removal and packing of serviceable material and disposing at a lead of upto 50 M and making up the trench area to proper level by filling with earth mixed with manure and before and after flooding trench with water including cost of imported earth and manure b) Rough dressing of trenched area c) Grassing with "doob grass" including watering and maintenance of lawns free from weeds and fit for moving in rows 7.5 cm in either direction including for hedges and grill and barbed wire fencing around park and green belt (as per HUDA norms)			3.77	Acre	150000	5.66
2	Planting of tree guards on road at 12' interval			972	Each	~~1800~~ 2310	~~17.50~~ 29.45
	Width of the road(mt)	Length of road(mt)	No of sides	Total length			
	15	85	2	170			
	18	2859	2	5718			
	24	879	2	1758			
	30	1469	2	2938			
	60	539	2	1076			
			Total	11662			
	Spacing of tress @ 12 m c/c						
	Number of tress to be planted	972	Nos				
	Sub Total						~~98.11~~ ~~23.15~~
	Add 3% contingency & PE charges						~~2.94~~ 0.69
	Add 49% Administrative charges , Price escalation , unforseen and department charges						~~98.95~~ ~~14.52~~ 14.19
	Total						~~35.53~~ 43.14

c o t final abstract & cost

SUB WORK NO. VI STREET LIGHTING

S.No	Item Description	Qty	Unit	Rate (In lakhs)	Amount (In lakhs)
1	Provision for street lightinh on roads as per standard specification of HVPN with CFL complete in all respects	155.8375	Acre	~~1.5~~ 2.50 Lacs	~~233.76~~ 389.59 lacs
	Add 3% Contigency & PE charges				~~7.01~~ 11.68
	Add 49% deptt charge , Price escalation , unforseen & administrative charges				401.28 ~~117.98~~ 196.62
	Grand Total				~~358.75~~ 597.90 Lacs

c.o. to final abstract of cost

For Model Economic Township Limited

Authorised Signatory

SUB WORK NO. VII **MAINTENANCE CHARGES & RESURFACING OF ROADS**

S.No	Item Description	Qty	Unit	Rate (Rs)	Amount (Rs in lakh)
1	Provision for maintenance charges for water supply, sewerage, storm water drainage, street lights, horticulture etc. complete including operational and establishment charge as per HUDA norms after completion.	155.8375	Acres	800000	1246.66
2	Provision for maintenance charges for water supply, sewerage, storm water drainage, street lights, horticulture etc. complete including operational and establishment charge as per HUDA norms after completion.	77841	sqm	660	513.75
3	Provision of surfacing of roads after 10 years by providing 25 mm thick premix carpet	77840.8	sqm	825	642.18
	Total				2402.60
	Add 3% Contigency & PE charges				72.08
	Add 49% Deptt. Charges & Price escalation , Unforseen and Administrative charges				1212.59
	Total				3687.27

c.o. to final abstract of cost

For Modgil Economic Township Limited

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Annexure-02

Assessment of Water Demand & Sewage Generation in Sector-11, MET-Jhajjar

S. No.	Landuse	Area (acres)	Water Norms				Water Demand			Sewage	Recycled Water Availability	
				Potable	Recycled	Sewage	Total	Potable	Recycled			
				%	%	%	KLD	KLD	KLD	KLD	%	KLD
1	Industrial	95.37	15 kld/acre	70%	30%	80%	1430.61	1001.43	429.18	1144.49	80%	915.59
2	Commercial	1.013	32 kld/acre	70%	30%	80%	32.41	22.69	9.72	25.93	80%	20.74
3	Utilities	11.41	10 kld/acre	70%	30%	80%	114.06	79.84	34.22	91.25	80%	73.00
4	Green	3.77	25 kld/acre	0%	100%		94.25	0.00	94.25	0.00		
5	Undetermined	7.15	15 kld/acre	70%	30%	80%	107.25	75.08	32.18	85.80	80%	68.64
6	Roads	37.1246	5 kld/acre	0%	100%		185.62	0.00	185.62	0.00		
7	**Total**	**155.8375**					**1964.21**	**1179.03**	**785.17**	**1347.47**		1077.97

a.	Total Water Demand	1964.21	KLD
b.	Potable Water Demand	1179.03	KLD
c.	Horticulture Water Demand	785.17	KLD
d.	Sewage Generation	1347.47	KLD

Sewage Generation	STP/CETP Capacity
KLD	KLD
1347.47	1350

a.	8 hours daily water demand	393	KL
b.	Fire reserve	139	KL
c.	Total storage	532	KL

a.	UGT	550	KL
b.	OHT	500	KL
c.	Total	1050	KL

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Annexure-03

Assessmet of Storage & Pumping Machinery For Potable Water Distribution

S. No.	Description		UOM	Value
1	Project Area		Acre	155.838
2	Fire Reserve Requirement (Norm)		SqKm	0.63
3	Fire Reserve Required For Project		KL/SqKm	220
4	Potable Water Demand		KL	139
5	Storage Retention		KLD	1179.03
6	Potable Water Storage Required		Hrs	8
7	Total storage Required including Fire Reserve		KL	393
8			KL	532
9	Capacity of UGT Provided	Say	KL	550
10	Capacity of OHT Provided		KL	550
11	Total Storage Provided		KL	500
12	Peak Water Demand		KL	1050
13	No. of Pumps		KLD	1769
14	Pumping Hours		Nos.	1
15	Pump Discharge of each Pump		Hrs	16
16			KL/Hr	110.53
17	Pump Head	Say	KL/Hr	120
18	Pump Capacity		m	35
19			HP	19.46
20	Pumps Provided (1W+1S)	Say	HP	30
			Nos.	2

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Potable Water Network Design Output and Pipe Summary for Sector-11

Start Node	Stop Node	Diameter (mm)	Material	Flow (m³/s)	Velocity (m/s)	Headloss Gradient (m/m)	Headloss (m)	Hazen-Williams C	Length (m)	Pressure (Stop) (m H2O)	Pressure (Start) (m H2O)	Hydraulic Grade (Start) (m)	Hydraulic Grade (Stop) (m)
1	3	100	DI K7	0.006134	0.78	0.008	0.29	130	37	13.77	14.08	227.92	227.63
3	5	100	DI K7	0.005966	0.76	0.007	0.58	130	79	13.16	13.77	227.63	227.05
5	4	100	DI K7	0.005798	0.74	0.007	0.26	130	37	12.88	13.16	227.05	226.8
12	15	100	DI K7	-0.003771	0.48	0.003	0.05	130	15	12.09	12.04	225.96	226.01
13	17	100	DI K7	-0.006981	0.89	0.01	0.36	130	37	12.64	12.28	226.19	226.55
14	12	100	DI K7	-0.003640	0.46	0.003	0.11	130	37	12.04	11.93	225.85	225.96
15	16	100	DI K7	-0.003943	0.5	0.003	0.13	130	37	12.22	12.09	226.01	226.13
16	13	100	DI K7	-0.004110	0.52	0.004	0.06	130	15	12.28	12.22	226.13	226.19
17	4	100	DI K7	-0.007102	0.9	0.01	0.24	130	24	12.88	12.64	226.55	226.8
18	1	100	DI K7	0.006301	0.8	0.008	0.29	130	36	14.08	14.38	228.21	227.92
19	18	100	DI K7	0.006301	0.5	0.008	0.03	130	3	14.38	14.41	228.24	228.21
32	34	100	DI K7	0.003382	0.43	0.003	0.05	130	19	11.74	11.79	225.69	225.64
33	32	100	DI K7	0.003572	0.45	0.003	0.11	130	37	11.79	11.91	225.79	225.69
34	36	100	DI K7	0.002682	0.34	0.002	0.06	130	37	11.65	11.74	225.64	225.58
35	39	100	DI K7	0.001253	0.16	0	0.02	130	37	11.59	11.62	225.56	225.54
36	35	100	DI K7	0.002037	0.26	0.001	0.02	130	19	11.62	11.65	225.58	225.56
37	33	100	DI K7	0.003751	0.48	0.003	0.03	130	9	11.91	11.95	225.82	225.79
39	181	100	DI K7	-0.000606	0.08	0	0	130	15	11.55	11.59	225.54	225.55
43	47	100	DI K7	0.011181	1.42	0.023	0.44	130	19	10.94	11.39	225.31	224.88
45	179	100	DI K7	0.010509	1.34	0.021	0.33	130	16	9.73	10.11	224.06	223.73
47	45	100	DI K7	0.010783	1.37	0.022	0.81	130	37	10.11	10.94	224.88	224.06
48	13	100	DI K7	-0.002751	0.35	0.002	0.03	130	18	12.28	12.25	226.16	226.19
48	49	100	DI K7	0.000259	0.03	0	0	130	37	12.24	12.25	226.16	226.16
54	55	100	DI K7	0.001068	0.14	0	0.01	130	30	18.44	18.44	232.03	232.02
55	61	100	DI K7	0.000700	0.09	0	0.01	130	37	18.45	18.44	232.02	232.02
56	54	100	DI K7	0.001247	0.16	0	0.01	130	37	18.44	18.45	232.04	232.03
57	58	100	DI K7	0.001940	0.25	0.001	0.03	130	37	18.46	18.48	232.1	232.06
58	56	100	DI K7	0.001557	0.2	0.001	0.02	130	30	18.45	18.46	232.06	232.04
60	85	100	DI K7	0.004542	0.58	0.004	0.16	130	37	19.18	19.33	232.98	232.81
61	62	100	DI K7	0.000383	0.05	0	0	130	27	18.45	18.45	232.02	232.01
62	59	100	DI K7	0.000383	0.05	0	0	130	34	18.43	18.45	232.01	232.01
63	65	100	DI K7	0.001230	0.16	0	0.03	130	75	17.98	18.03	231.74	231.71
64	63	100	DI K7	0.001609	0.2	0.001	0.02	130	37	18.03	18.07	231.76	231.74
65	67	100	DI K7	0.000860	0.11	0	0.01	130	37	17.97	17.98	231.71	231.7
66	102	100	DI K7	0.000098	0.01	0	0	130	37	17.9	17.91	231.69	231.69
67	66	100	DI K7	0.000478	0.06	0	0.01	130	166	17.91	17.97	231.7	231.69
68	64	100	DI K7	0.001788	0.23	0.001	0.06	130	75	18.07	18.14	231.82	231.76
69	71	100	DI K7	0.002593	0.33	0.002	0.05	130	30	18.32	18.38	232.01	231.96
70	69	100	DI K7	0.002849	0.36	0.002	0.07	130	37	18.38	18.46	232.08	232.01
71	73	100	DI K7	0.002382	0.3	0.001	0.05	130	37	18.27	18.32	231.96	231.92
72	68	100	DI K7	0.002025	0.26	0.001	0.04	130	37	18.14	18.19	231.85	

Start Node	Stop Node	Diameter (mm)	Material	Flow (m^3/s)	Velocity (m/s)	Headloss Gradient (m/m)	Headloss (m)	Hazen-Williams C	Length (m)	Pressure (Stop) (m H2O)	Pressure (Start) (m H2O)	Hydraulic Grade (Start) (m)	Hydraulic Grade (Stop) (m)
73	72	100	DI K7	0.002203	0.28	0.001	0.06	130	52	18.19	18.27	231.92	231.85
75	81	100	DI K7	0.000000	0	0	0	130	42	19.8	19.82	233.52	233.52
79	142	100	DI K7	0.002251	0.29	0.001	0	130	2	8.75	8.76	222.86	222.86
80	81	100	DI K7	0.000000	0	0	0	130	14	19.8	19.8	233.52	233.52
82	84	100	DI K7	0.005022	0.64	0.005	0.2	130	37	19.55	19.73	233.41	233.22
83	82	100	DI K7	0.005153	0.66	0.006	0.24	130	44	19.73	19.95	233.66	233.41
83	87	100	DI K7	0.000401	0.05	0	0	130	29	19.93	19.95	233.66	233.66
84	60	100	DI K7	0.004843	0.62	0.005	0.24	130	49	19.33	19.55	233.22	232.98
85	74	100	DI K7	0.004242	0.54	0.004	0.11	130	27	19.08	19.18	232.81	232.7
86	148	100	DI K7	0.000401	0.05	0	0	130	71	19.91	19.88	233.65	233.65
87	86	100	DI K7	0.000401	0.05	0	0.01	130	102	19.88	19.93	233.66	233.65
97	F31	100	DI K7	0.000000	0	0	0	130	16	15.93	15.93	229.75	229.75
104	57A	100	DI K7	0.005346	0.68	0.006	0.16	130	27	18.5	18.66	232.28	232.11
106	108	100	DI K7	0.009722	1.24	0.018	0.15	130	8	11.53	11.68	225.73	225.58
107	106	100	DI K7	0.009722	1.24	0.018	0.03	130	2	11.68	11.71	225.76	225.73
108	110	100	DI K7	0.009623	1.23	0.018	0.66	130	37	10.86	11.53	225.58	224.92
109	112	100	DI K7	0.008544	1.09	0.014	0.53	130	37	10.21	10.75	224.81	224.28
110	109	100	DI K7	0.009043	1.15	0.016	0.11	130	7	10.75	10.86	224.92	224.81
112	113	100	DI K7	0.008445	1.08	0.014	0.1	130	7	10.11	10.21	224.28	224.19
113	155	100	DI K7	0.006692	0.85	0.009	0.16	130	18	9.94	10.11	224.19	224.02
113	115	100	DI K7	0.001287	0.16	0	0.02	130	37	10.09	10.11	224.19	224.17
114	111	100	DI K7	0.000292	0.04	0	0	130	37	10.07	10.09	224.17	224.17
115	114	100	DI K7	0.000788	0.1	0	0	130	7	10.09	10.09	224.17	224.17
116	119	100	DI K7	0.000098	0.01	0	0	130	37	9.75	9.75	223.83	223.83
117	152	100	DI K7	0.005507	0.7	0.006	0.25	130	39	9.25	9.51	223.59	223.35
118	116	100	DI K7	0.000598	0.08	0	0	130	16	9.75	9.75	223.84	223.83
118	117	100	DI K7	0.005605	0.71	0.007	0.24	130	37	9.51	9.75	223.84	223.59
123	133	100	DI K7	0.009820	1.25	0.018	0.68	130	37	12.41	13.1	227.1	226.42
124	123	100	DI K7	0.009926	1.26	0.019	0.73	130	39	13.1	13.85	227.83	227.1
125	196	100	DI K7	0.004202	0.53	0.004	0.09	130	23	12.89	12.94	226.97	226.88
126	128	100	DI K7	0.007189	0.92	0.01	0.35	130	34	13.56	13.92	227.88	227.53
127	126	100	DI K7	0.007572	0.96	0.011	0.42	130	37	13.92	14.35	228.3	227.88
128	130	100	DI K7	0.006807	0.87	0.009	0.35	130	37	13.21	13.56	227.53	227.18
129	125	100	DI K7	0.004202	0.53	0.004	0.06	130	16	12.94	13	227.03	226.97
130	129	100	DI K7	0.006424	0.82	0.008	0.15	130	18	13	13.21	227.18	227.03
132	107	100	DI K7	0.009722	1.24	0.018	0.28	130	16	11.71	11.99	226.04	225.76
133	132	100	DI K7	0.009722	1.24	0.018	0.37	130	21	11.99	12.41	226.42	226.04
135	141	100	DI K7	0.000117	0.01	0	0	130	37	8.69	8.7	222.81	222.81
136	135	100	DI K7	0.000222	0.03	0	0	130	7	8.7	8.7	222.81	222.81
137	138	100	DI K7	0.000098	0.01	0	0	130	16	19.73	19.73	233.63	233.63
139	137	100	DI K7	0.000197	0.03	0	0	130	34	19.73	19.8	233.63	233.63
140	136	100	DI K7	0.000605	0.08	0	0	130	37	8.7	8.7	222.81	222.81
142	144	100	DI K7	0.002251	0.29	0.001	0.01	130	9	8.74	8.75	222.86	222.85
143	140	100	DI K7	0.000999	0.13	0	0	130	7	8.7	8.71	222.82	

For Model Economic Township Limited

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Annexure 4

Start Node	Stop Node	Diameter (mm)	Material	Flow (m³/s)	Velocity (m/s)	Headloss Gradient (m/m)	Headloss (m)	Hazen-Williams C	Length (m)	Pressure (Stop) (m H2O)	Pressure (Start) (m H2O)	Hydraulic Grade (Start) (m)	Hydraulic Grade (Stop) (m)
144	143	100	DI K7	0.001933	0.25	0.001	0.03	130	37	8.71	8.74	222.85	222.82
145	146	100	DI K7	0.000295	0.04	0	0	130	38	19.9	19.9	233.64	233.64
146	150	100	DI K7	0.000295	0.04	0	0	130	99	20	19.9	233.64	233.64
147	145	100	DI K7	0.000401	0.05	0	0	130	84	19.9	19.9	233.65	233.64
148	147	100	DI K7	0.000401	0.05	0	0	130	62	19.9	19.91	233.65	233.65
150	151	100	DI K7	0.000295	0.04	0	0	130	82	19.83	20	233.64	233.63
151	139	100	DI K7	0.000295	0.04	0	0	130	21	19.8	19.83	233.63	233.63
152	154	100	DI K7	0.005407	0.69	0.006	0.29	130	48	8.95	9.25	223.35	223.05
153	158	100	DI K7	0.002251	0.29	0.001	0.02	130	16	8.77	8.79	222.9	222.88
154	157	100	DI K7	0.002010	0.26	0.001	0.04	130	39	8.75	8.79	222.9	222.86
155	153	100	DI K7	0.005301	0.67	0.004	0.16	130	27	8.79	8.95	223.05	222.9
156	118	100	DI K7	0.006692	0.85	0.009	0.19	130	20	9.75	9.94	224.02	223.84
157	159	100	DI K7	0.000802	0.1	0	0	130	16	8.73	8.73	222.85	222.85
158	156	100	DI K7	0.000908	0.12	0	0.01	130	37	8.73	8.75	222.86	222.85
159	79	100	DI K7	0.002251	0.29	0.001	0.01	130	12	8.76	8.77	222.88	222.86
160	160	100	DI K7	0.000408	0.05	0	0	130	37	8.73	8.73	222.85	222.84
162	164	100	DI K7	0.000325	0.04	0	0	130	37	11.65	11.67	225.66	225.66
163	166	100	DI K7	-0.001981	0.25	0.001	0	130	2	11.55	11.55	225.55	225.55
163	182	100	DI K7	0.001375	0.18	0	0.01	130	19	11.57	11.55	225.55	225.54
165	162	100	DI K7	0.000733	0.09	0	0	130	16	11.67	11.67	225.66	225.66
165	186	100	DI K7	-0.003130	0.4	0.002	0.08	130	37	11.73	11.67	225.66	225.74
166	327	100	DI K7	-0.001981	0.25	0.001	0.07	130	78	11.65	11.55	225.55	225.62
167	165	100	DI K7	-0.001897	0.24	0.001	0.03	130	35	11.67	11.65	225.63	225.66
168	327	100	DI K7	0.001192	0.15	0	0	130	1	11.65	11.65	225.62	225.62
168	167	100	DI K7	-0.001192	0.15	0	0.01	130	19	11.65	11.65	225.62	225.63
169	171	100	DI K7	0.001000	0.13	0	0	130	13	8.24	8.24	222.28	222.28
170	169	100	DI K7	0.001099	0.14	0	0.01	130	37	8.24	8.27	222.3	222.28
171	173	100	DI K7	0.000902	0.11	0	0.01	130	37	8.22	8.24	222.28	222.27
172	175	100	DI K7	0.007898	1.01	0.012	0.02	130	2	9.36	9.39	223.39	223.36
172	178	100	DI K7	0.002610	0.33	0.002	0.04	130	24	9.39	9.39	223.39	223.35
173	174	100	DI K7	0.000778	0.1	0	0	130	25	8.21	8.22	222.27	222.27
175	205	100	DI K7	0.007898	1.01	0.012	1.06	130	86	8.28	9.36	223.36	222.3
177	180	100	DI K7	0.000609	0.08	0	0	130	37	11.53	11.55	225.53	225.52
178	184	100	DI K7	0.002111	0.27	0.001	0.04	130	37	9.33	9.39	223.35	223.31
179	172	100	DI K7	0.010509	1.34	0.021	0.35	30	17	9.39	9.73	223.73	223.39
181	163	100	DI K7	-0.000606	0.08	0	0	30	17	11.55	11.55	225.55	225.55
182	177	100	DI K7	0.000992	0.13	0	0.01	30	35	11.55	11.57	225.54	225.53
183	185	100	DI K7	0.001039	0.13	0	0.01	30	37	9.28	9.31	223.29	223.28
184	183	100	DI K7	0.001593	0.2	0.001	0.01	130	23	9.31	9.33	223.31	223.29
185	187	100	DI K7	0.000499	0.06	0	0	130	18	9.28	9.28	223.28	223.28
188	190	100	DI K7	0.002399	0.31	0.001	0.05	130	37	7.25	7.3	221.35	221.3
190	192	100	DI K7	0.001954	0.25	0.001	0.01	130	6	7.24	7.25	221.3	221.3
191	193	100	DI K7	0.001127	0.14	0	0	130	10	7.21	7.21	221.27	221.27
192	191	100	DI K7	0.001535	0.2	0.001	0.02	130	37	7.21	7.24	221.3	

Annexure 4

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Start Node	Stop Node	Diameter (mm)	Material	Flow (m³/s)	Velocity (m/s)	Headloss Gradient (m/m)	Headloss (m)	Hazen-Williams C	Length (m)	Pressure (Stop)(m H20)	Pressure (Start) (m H20)	Hydraulic Grade (Start) (m)	Hydraulic Grade (Stop) (m)
193	189	100	DI K7	0.000540	0.07	0	0	130	37	7.2	7.21	221.27	221.27
194	209	100	DI K7	0.006285	0.8	0.008	0.13	130	17	7.38	7.52	221.57	221.43
194	202	100	DI K7	0.000000	0	0	0	130	36	7.51	7.52	221.57	221.57
197	188	100	DI K7	0.002818	0.36	0.002	0.03	130	16	7.3	7.33	221.38	221.35
197	207	100	DI K7	0.003300	0.42	0.002	0.09	130	37	7.23	7.33	221.38	221.29
199	201	100	DI K7	0.006523	0.83	0.009	0.21	130	24	8.05	8.26	222.29	222.08
201	203	100	DI K7	0.006431	0.82	0.008	0.31	130	37	7.73	8.05	222.08	221.77
202	200	100	DI K7	0.000000	0	0	0	130	18	7.51	7.51	221.57	221.57
203	194	100	DI K7	0.006286	0.8	0.008	0.2	130	25	7.52	7.73	221.77	221.57
204	170	100	DI K7	0.001197	0.15	0	0	130	6	8.27	8.27	222.3	222.3
205	204	100	DI K7	0.001197	0.15	0	0.01	130	20	8.27	8.28	222.3	222.3
205	199	100	DI K7	0.006523	0.83	0.009	0.02	130	2	8.26	8.28	222.3	222.29
206	208	100	DI K7	0.000438	0.06	0	0	130	37	7.22	7.22	221.28	221.28
207	206	100	DI K7	0.001670	0.21	0.001	0.01	130	13	7.22	7.23	221.29	221.28
208	210	100	DI K7	0.000164	0.02	0	0	130	25	7.22	7.22	221.28	221.28
209	197	100	DI-K7	0.006118	0.78	0.008	0.05	130	7	7.33	7.38	221.43	221.38
327	327A	100	DI K7	0.001321	0.17	0	0.01	130	22	11.64	11.65	225.62	225.61
57A	70	100	DI K7	0.003071	0.39	0.002	0.03	130	16	18.46	18.5	232.11	232.08
57A	57	100	DI K7	0.002275	0.29	0.001	0.02	130	14	18.48	18.5	232.11	232.1
Total									4620				
2	30	150	DI K9	-0.000241	0.01	0	0	130	78	14.89	14.92	228.84	228.84
6	2	150	DI K9	0.000464	0.03	0	0	130	50	14.92	14.94	228.84	228.84
7	9	150	DI K9	0.003223	0.18	0	0.02	130	62	15.02	15.07	228.88	228.86
8	7	150	DI K9	0.005715	0.32	0.001	0.03	130	37	15.07	15.12	228.91	228.88
9	11	150	DI K9	0.002517	0.14	0	0.01	130	37	15	15.02	228.86	228.85
10	6	150	DI K9	0.001110	0.06	0	0	130	37	14.94	14.96	228.84	228.84
11	10	150	DI K9	0.001872	0.11	0	0.01	130	62	14.96	15	228.85	228.84
20	22	150	DI K9	0.001987	0.11	0	0.01	130	55	15.12	15.15	229	228.99
21	20	150	DI K9	0.002085	0.12	0	0.01	130	37	15.15	15.17	229	229
22	23	150	DI K9	0.001808	0.1	0	0	130	37	15.1	15.12	228.99	228.99
23	25	150	DI K9	0.001640	0.09	0	0	130	48	15.07	15.1	228.99	228.98
24	21	150	DI K9	0.002184	0.12	0	0.01	130	55	15.17	15.21	229.01	229
25	F37	150	DI K9	0.001516	0.09	0	0	130	44	15.05	15.07	228.98	228.98
27	24	150	DI K9	0.002282	0.13	0	0.01	130	37	15.21	15.23	229.02	229.01
28	27	150	DI K9	0.002380	0.13	0	0	130	27	15.23	15.25	229.02	229.02
30	198	150	DI K9	-0.000362	0.02	0	0	130	54	14.86	14.89	228.84	228.84
31	8	150	DI K9	0.005835	0.33	0.001	0.03	130	31	15.12	15.16	228.94	228.91
37	41	150	DI K9	0.014673	0.83	0.005	0.12	130	22	11.83	11.95	225.82	225.71
38	37	150	DI K9	0.018423	1.04	0.008	0.01	130	2	11.95	11.96	225.84	225.82
40	46	150	DI K9	0.012181	0.69	0.004	0.14	130	37	11.62	11.78	225.66	225.51
41	40	150	DI K9	0.014673	0.83	0.005	0.05	130	9	11.78	11.83	225.71	225.66
44	43	150	DI K9	0.011679	0.66	0.004	0.13	130	37	11.39	11.54	225.44	225.31
46	44	150	DI K9	0.012013	0.68	0.004	0.07	130	19	11.54	11.62	225.51	225.44
50	53	150	DI K9	0.018781	1.06	0.008	0.46	130	54	13.55	14.02	227.8	

For [illegible]

[illegible]
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Annexure 4

Start Node	Stop Node	Diameter (mm)	Material	Flow (m³/s)	Velocity (m/s)	Headloss Gradient (m/m)	Headloss (m)	Hazen-Williams C	Length (m)	Pressure (Stop) (m H2O)	Pressure (Start) (m H2O)	Hydraulic Grade (Start) (m)	Hydraulic Grade (Stop) (m)
51	50	150	DI K9	0.018897	1.07	0.009	0.32	130	37	14.02	14.35	228.12	227.8
52	38	150	DI K9	0.018423	1.04	0.008	0.85	130	104	11.96	12.88	226.69	225.84
53	52	150	DI K9	0.018602	1.05	0.008	0.66	130	79	12.88	13.55	227.34	226.69
120	134	150	DI K9	0.010130	0.57	0.003	0.11	130	39	14.06	14.17	228.14	228.03
121	120	150	DI K9	0.010228	0.58	0.003	0.1	130	37	14.17	14.29	228.24	228.14
127	121	150	DI K9	0.010327	0.58	0.003	0.06	130	22	14.29	14.35	228.3	228.24
134	124	150	DI K9	0.010031	0.57	0.003	0.2	130	75	13.85	14.06	228.03	227.83
161	127	150	DI K9	0.018282	1.03	0.008	0.33	130	41	14.35	14.69	228.63	228.3
195	161	150	DI K9	0.018282	1.03	0.008	0.21	130	25	14.69	14.86	228.84	228.63
198	F36A	150	DI K9	-0.018644	1.06	0.008	0.13	130	16	14.99	14.86	228.84	228.97
F35	F36	150	DI K9	0.001516	0.09	0	0	130	37	15.01	15.03	228.98	228.97
F36	F36A	150	DI K9	0.001516	0.09	0	0	130	24	14.99	15.01	228.97	228.97
F37	F35	150	DI K9	0.001516	0.09	0	0	130	47	15.03	15.05	228.98	228.98
Total									1651				
19	78	200	DI K9	0.019080	0.61	0.002	0.04	130	19	14.37	14.41	228.24	228.2
26	28	200	DI K9	0.033596	1.07	0.006	0.02	130	3	15.25	15.27	229.04	229.02
28	31	200	DI K9	0.031216	0.99	0.005	0.08	130	16	15.16	15.25	229.02	228.94
29	19	200	DI K9	0.025381	0.81	0.004	0.69	130	190	14.41	15.16	228.94	228.24
31	29	200	DI K9	0.025381	0.81	0.004	0.01	130	1	15.16	15.16	228.94	228.94
74	103	200	DI K9	0.057414	1.83	0.017	0.39	130	24	18.69	19.08	232.7	232.31
78	51	200	DI K9	0.019080	0.61	0.002	0.08	130	36	14.35	14.37	228.2	228.12
89	91	200	DI K9	0.018471	0.59	0.002	0.06	130	28	16.36	16.44	230.16	230.1
90	89	200	DI K9	0.018471	0.59	0.002	0	130	2	16.44	16.44	230.16	230.16
90	26	200	DI K9	0.033596	1.07	0.006	1.12	130	182	15.27	16.44	230.16	229.04
91	93	200	DI K9	0.018373	0.58	0.002	0.04	130	19	16.31	16.36	230.1	230.07
92	96	200	DI K9	0.018373	0.58	0.002	0.03	130	15	16.27	16.31	230.06	230.03
93	92	200	DI K9	0.018373	0.58	0.002	0.01	130	5	16.31	16.31	230.07	230.06
95	97	200	DI K9	0.018096	0.58	0.002	0.07	130	37	15.93	16.02	229.82	229.75
96	100	200	DI K9	0.018253	0.58	0.002	0.08	130	42	16.17	16.27	230.03	229.94
97	99	200	DI K9	0.017964	0.57	0.002	0.11	130	55	15.8	15.93	229.75	229.64
98	94	200	DI K9	0.017291	0.55	0.002	0.08	130	46	15.61	15.71	229.57	229.49
99	98	200	DI K9	0.017674	0.56	0.002	0.07	130	37	15.71	15.8	229.64	229.57
100	101	200	DI K9	0.018253	0.58	0.002	0.01	130	6	16.15	16.17	229.94	229.93
101	95	200	DI K9	0.018253	0.58	0.002	0.11	130	54	16.02	16.15	229.93	229.82
103	104	200	DI K9	0.057414	1.83	0.017	0.03	130	2	18.66	18.69	232.31	232.28
104	105	200	DI K9	0.052068	1.66	0.014	1.85	130	134	16.71	18.66	232.28	230.43
105	90	200	DI K9	0.052068	1.66	0.014	0.27	130	19	16.44	16.71	230.43	230.16
198	195	200	DI K9	0.018282	0.58	0.002	0	130	2	14.86	14.86	228.84	228.84
F100A	F100	200	DI K9	-0.017127	0.55	0.002	0.04	130	23	15.42	15.36	229.3	229.34
F36A	F36B	200	DI K9	-0.017127	0.55	0.002	0	130	2	14.99	14.99	228.97	228.97
F36B	F100A	200	DI K9	-0.017127	0.55	0.002	0.32	130	184	15.36	14.99	228.97	229.3
Total									1183				
75	77	250	DI K9	0.053621	1.09	0.005	0.18	130	37	19.65	19.82	233.52	233.34
76	74	250	DI K9	0.053373	1.09	0.005	0.23	130	48	19.08	19.29	232.94	

Annexure 4

Start Node	Stop Node	Diameter (mm)	Material	Flow (m³/s)	Velocity (m/s)	Hazen-Williams Gradient (m/m)	Headloss (m)	Hazen-Williams C	Length (m)	Pressure (Start) (m H2O)	Pressure (Stop) (m H2O)	Hydraulic Grade (Start) (m)	Hydraulic Grade (Stop) (m)
77	76	250	DI K9	0.059621	1.09	0.005	0.4	130	82	19.29	19.65	233.34	232.94
83	75	250	DI K9	0.058777	1.1	0.005	0.14	130	27	19.82	19.95	233.66	233.52
226	83	250	DI K9	0.059332	1.21	0.006	0.01	130	2	19.95	0	233.67	233.66
Total									196				

Pipe Dia. (mm)	Length (m)	MOC
300	4620	DI-K7
150	1551	DI-K9
200	1185	DI-K9
250	196	DI-K9
Total	7550	

Annexure 4

Annexure-05

Assessmet of Storage & Pumping Machinery For Recycled Water Distribution

S. No.	Description	UOM	Value
1	Recycled Water Demand	KLD	785.17
2	Storage Retention	Hrs	12
3	Recycled Water Storage Required	KL	392.59
	Say	KL	400
4	Capacity of UGT Provided	KL	400
5	Supply Hours	Hrs	12.00
6	Peak Water Demand	KLD	1570
7	Pump Discharge	KL/Hr	65.43
	Say	KL/Hr	70
8	Pump Head	m	45
9	Pump Capacity	HP	15.14
	Say	HP	35.0 ~~20~~
10	Pumps Provided (1W+1S)	Nos.	2

2000 lpm

$\frac{2000 \times 45}{60 \times 75 \times 0.6} = 33.33$ HP

Say 35.0 HP

For Modal Economic Township Limited

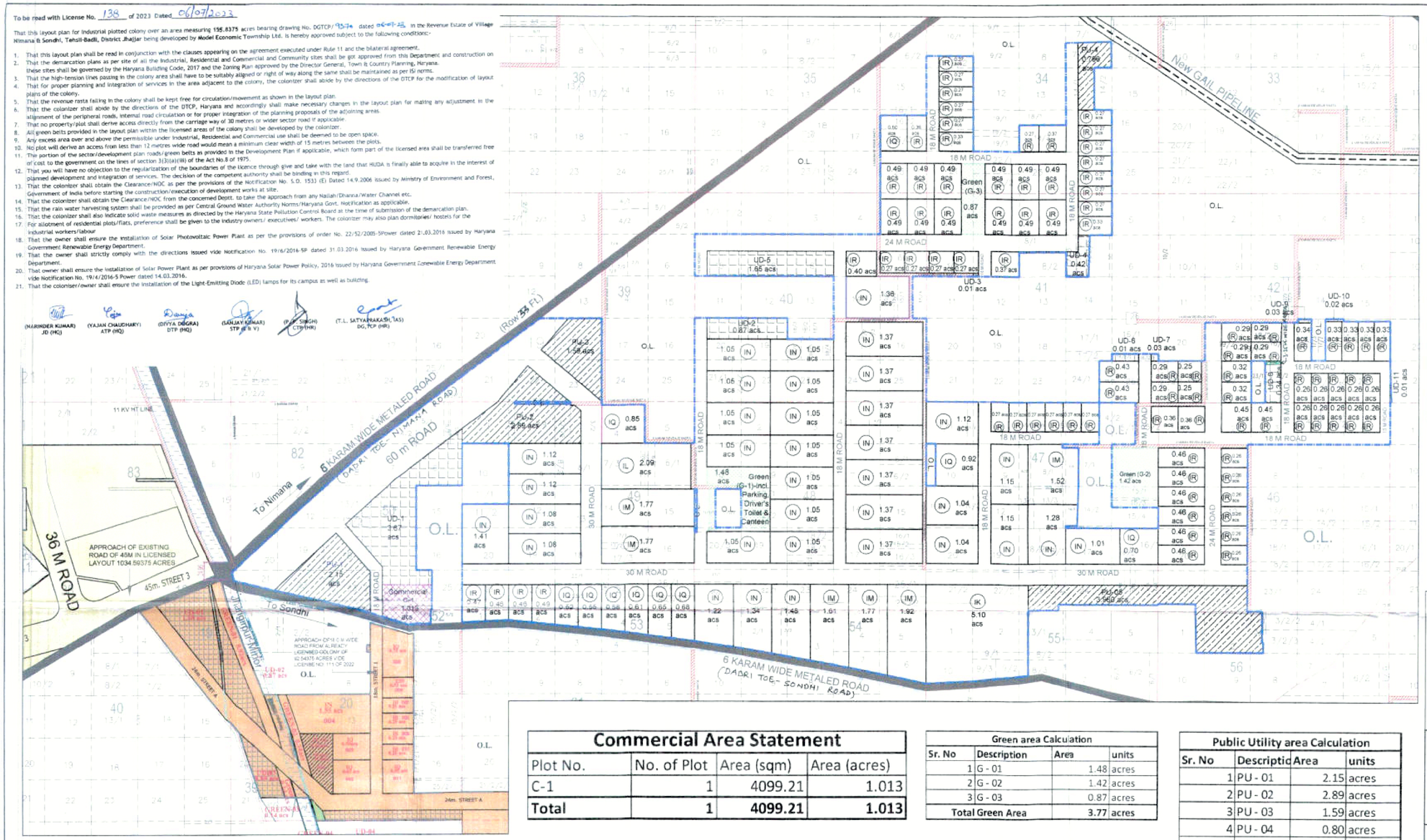
Authorised Signatory

To be read with License No. 138 of 2023 Dated 06/07/2023

That this layout plan for industrial plotted colony over an area measuring 155.8375 acres bearing drawing No. DGTCP/ 9574 dated 26-07-23 in the Revenue Estate of Village Nimana & Sondhi, Tehsil-Badli, District Jhajjar being developed by Model Economic Township Ltd. 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 demarcation plans as per site of all the Industrial, Residential and Commercial and Community sites 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 General, Town & Country Planning, Haryana.
3. That the high-tension lines passing in the colony area shall have to be suitably aligned or right of way along the same shall be maintained as per ISI norms.
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 licensed areas of the colony shall be developed by the colonizer.
9. Any excess area over and above the permissible under Industrial, Residential and Commercial use shall be deemed to be open space.
10. No plot will derive an access from less than 12 metres wide road would mean a minimum clear width of 15 metres between the plots.
11. The portion of the sector/development plan roads/green belts as provided in the Development Plan if applicable, which form part of the licensed 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.
12. 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.
13. That the colonizer shall obtain the Clearance/NOC as per the provisions of the Notification No. S.O. 1533 (E) Dated 14.9.2006 issued by Ministry of Environment and Forest, Government of India before starting the construction/execution of development works at site.
14. That the colonizer shall obtain the Clearance/NOC from the concerned Deptt. to take the approach from any Nallah/Dhanna/Water Channel etc.
15. That the rain water harvesting system shall be provided as per Central Ground Water Authority Norms/Haryana Govt. Notification as applicable.
16. That the colonizer shall also indicate solid waste measures as directed by the Haryana State Pollution Control Board at the time of submission of the demarcation plan.
17. For allotment of residential plots/flats, preference shall be given to the industry owners/ executives/ workers. The colonizer may also plan dormitories/ hostels for the industrial workers/labour
18. That the 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.
19. That the 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.
20. That 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.
21. That the colonizer/owner shall ensure the installation of the Light-Emitting Diode (LED) lamps for its campus as well as building.

(NARINDER KUMAR) JD (HQ) | (YAJAN CHAUDHARY) ATP (HQ) | (DIVYA DOGRA) DTP (HQ) | (SANJAY KUMAR) STP (E & V) | (P.C. SINGH) CTP(HR) | (T.L. SATYAPRAKASH, IAS) DG, TCP (HR)



Commercial Area Statement

Plot No.	No. of Plot	Area (sqm)	Area (acres)
C-1	1	4099.21	1.013
Total	**1**	**4099.21**	**1.013**

Green area Calculation			
Sr. No	Description	Area	units
1	G - 01	1.48	acres
2	G - 02	1.42	acres
3	G - 03	0.87	acres
Total Green Area		3.77	acres

Public Utility area Calculation			
Sr. No	Descriptio	Area	units
1	PU - 01	2.15	acres
2	PU - 02	2.89	acres
3	PU - 03	1.59	acres
4	PU - 04	0.80	acres
5	PU - 05	3.98	acres
Total PU Area		11.41	acres

AREA CALCULATION			
Sr. No.	Description		Area (Acres)
a	Land area on which license is being applied		155.8375
b	Area under proposed widening of SH-15A to 75M		0
c	50% benefit of Area under road widening		0
d	Area under Undetermined use		7.15
e	**Net Planned Area (c - f)**		**148.6875**
	LANDUSE AREA STATEMENT		
h	Achieved Industrial Saleable Area	64.14%	95.37
j	Achieved Residential Saleable Area	0%	0.00
k	Achieved Commercial Saleable Area	0.68%	1.01
l	Green Area (incl. Parking, Canteen & driver's Toilet)	2.54%	3.77
m	Balance area in Public Utility, Road, Open Space etc.	32.64%	48.53
n	Total No of Industrial Plots		141
o	Total No of Commercial Plots		1

Land Use	Permissible percentages as per approved policy dated 1.10.2015 (For land area more than 50 acres & upto 200 acres)		Proposed Landuse percentages in the Layout	
Minimum area under Industrial Plots	40% (Min.)	65%	64.14%	64.83%
Area Under Residential Component	20%		0.0%	
Maximum Area under Commercial	5% (max.)		0.68%	
Additional facilities considered under saleable area	0.00%		0.0%	
Green Area (incl. Parking, Canteen & driver's Toilet)	35.00%		2.54%	35..7%
Balance area under Roads, Greens and Public Utilities			32.64%	

Undetermined area Calculation			
Sr. No	Description	Area	units
1	UD - 01	3.67	acres
2	UD - 02	0.87	acres
3	UD - 03	0.01	acres
4	UD - 04	0.42	acres
5	UD - 05	1.65	acres
6	UD - 06	0.10	acres
7	UD - 07	0.03	acres
8	UD - 08	0.34	acres
9	UD - 09	0.03	acres
10	UD - 10	0.02	acres
11	UD - 11	0.01	acres
Total UD Area		7.15	acres

Plot Area Statement of Industrial Plots

Type	Category	Total Area in each category: Area of Single plot (acres)	No. of Plots	Total Area (acres)
Industrial	IK	5.1	1	5.10
		Total	1	5.10
	IL	2.09	1	2.09
		Total	1	2.09
	IM	1.52	1	1.52
		1.61	1	1.61
		1.92	1	1.92
		1.77	3	5.31
		Total	6	10.36
	IN	1.01	1	1.01
		1.04	2	2.08
		1.05	12	12.60
		1.08	2	2.16
		1.12	3	3.36
		1.15	2	2.30
		1.22	1	1.22
		1.28	1	1.28
		1.34	1	1.34
		1.36	1	1.36
		1.37	7	9.59
		1.41	1	1.41
		1.48	1	1.48
		Total	35	41.19
	IQ	0.50	1	0.50
		0.52	1	0.52
		0.55	1	0.55
		0.58	1	0.58
		0.61	1	0.61
		0.65	1	0.65
		0.68	1	0.68
		0.92	1	0.92
		0.70	1	0.70
		0.85	1	0.85
		Total	10	6.56
	IR	0.25	2	0.50
		0.26	16	4.16
		0.27	23	6.21
		0.29	6	1.74
		0.32	2	0.64
		0.33	6	1.98
		0.34	1	0.34
		0.36	3	1.08
		0.37	2	0.74
		0.40	1	0.40
		0.43	2	0.86
		0.45	2	0.90
		0.46	8	3.68
		0.47	1	0.47
		0.49	13	6.37
		Total	88	30.07
TOTAL			141	95.37

Legend
- License Applied Area 155.8375 acs
- Panchayat Rasta
- Canal/Dhana/ Water Channel
- Jahangirpur Minor
- Undetermined
- Existing license area 1034.59375 acres
- Metalled Road
- Public Utility
- Greens/Open space
- Commercial
- Existing license area 92.54375 acres vide license no. 111 of 2022

PROJECT:-
Layout Plan for license applied on land area of 155.8375 acres located at revenue village of Nimana, Tehsil: Badli, District Jhajjar.

Developer:-
Model Economic Township Limited
3rd Floor, 77-B, IFFCO Road, Sector 18, Gurgaon Haryana - 122 015

DRG. TITLE:-
Layout Plan

DRG. No:-
METL/S10/R3

Date:- 16 JUNE 2023

Scale:- 1 : 1000

North:-

Architect's/Town planer

Owner
For Model Economic Township Ltd.
Authorized Signatory

LEGEND:-	
	MANHOLE
1	MANHOLE NUMBER
214.21	MANHOLE TOP LEVEL
	FLOW DIRECTION
19.9m/400 Ø /800	PIPE LENGTH / DIAMETER / SLOPE
213.10	IL AT START OF PIPE LINE
213.06	IL AT STOP OF PIPE LINE
	STORM NETWORK

Checked subject to Comments
In forwarding letter No. 9158
Dt. 09/01/2024 ...and notes
Attached with the estimate

Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP Circle, Gurugram

Checked for Public Health Services
Service Plan Estimate

Executive Engineer
HSVP Division
Bahadurgarh

PROJECT	CLIENT	DRAWING TITLE	DRAWING NO	STAGE	REVISION	DATE	CONSULTANT
SECTOR 11, MET	Model Economic Township Limited 77-B, 3RD FLOOR, IFFCO ROAD, GURUGRAM, HARYANA 122015	STORM NETWORK	ICPL/11SEC/SPE/STR/MP/02	SPE	R1	21 SEPT 23	INFRAPLUS Infraplus Consulting Pvt. LGFC. Office No. 170, First Floor, Tower B1, Spaze I Tech Park, Sohna Road, Sector 49 Gurgaon, Haryana, India

Checked subject to Comments
In forwarding letter No. 8118
Dt. 9/10/2024 and notes
Attached with the estimate

Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP, Circle, Gurugram

Checked for Public Health Services
Service Plan Estimate

Executive Engineer
HSVP Division
Bahadurgarh

Town & Country Planning

PROJECT SECTOR 11, MET	CLIENT Model Economic Township Limited 77-B, 3RD FLOOR, IFFCO ROAD, GURUGRAM, HARYANA 122015	DRAWING TITLE ROAD NETWORK	DRAWING NO ICPL/11SEC/SPE/RD/MP/01	STAGE SPE	REVISION R1	DATE 21 SEPT 23	CONSULTANT INFRAPLUS Infraplus Consulting Pvt. LGFC. Office No. 170, First Floor, Tower B1, Spaze I Tech Park, Sohna Road, Sector 49 Gurgaon, Haryana, India

LEGEND

NODE NO.	110
PIPE LENGTH /PIPE DIA	34M/100∅
FIRE HYDRANT	
SCOUR VALVE	
AIR VALVE	
SLUICE VALVE	
PWS NETWORK	

Checked subject to Comments
In forwarding letter No. 8250
Dt. 05/10/2023 ...and notes
Attached with the estimate

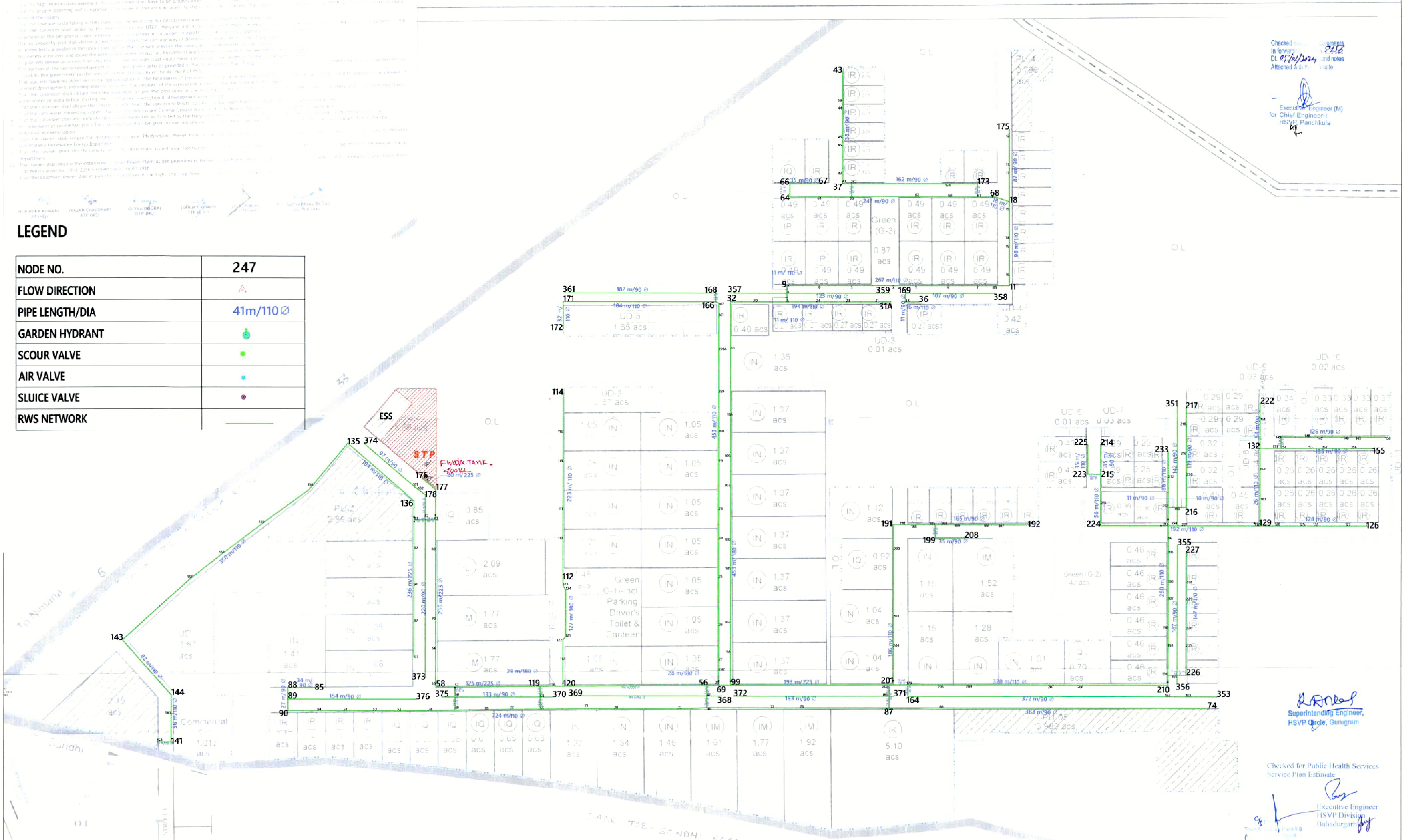
Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP Circle, Gurugram

Checked for Public Health Services
Service Plan Estimate

Executive Engineer
HSVP Division
Bahadurgarh

PROJECT	CLIENT	DRAWING TITLE	DRAWING NO	STAGE	REVISION	DATE	CONSULTANT
SECTOR 11, MET	Model Economic Township Limited — 77-B, 3RD FLOOR, IFFCO ROAD, GURUGRAM, HARYANA 122015	POTABLE WATER SUPPLY NETWORK	ICPL/11SEC/SPE/PWS/MP/01	SPE	R1	21 SEPT 23	INFRAPLUS — Infraplus Consulting Pvt. LGFC. Office No. 170, First Floor, Tower B1, Spaze I Tech Park, Sohna Road, Sector 49 Gurgaon, Haryana, India



LEGEND

NODE NO.	247
FLOW DIRECTION	
PIPE LENGTH/DIA	41m/110∅
GARDEN HYDRANT	
SCOUR VALVE	
AIR VALVE	
SLUICE VALVE	
RWS NETWORK	

PROJECT	CLIENT	DRAWING TITLE	DRAWING NO	STAGE	REVISION	DATE	CONSULTANT
SECTOR 11, MET	Model Economic Township Limited 77-B, 3RD FLOOR, IFFCO ROAD, GURUGRAM, HARYANA 122015	HORTICULTURE WATER SUPPLY NETWORK	ICPL/11SEC/SPE/RWS/MP/01	SPE	R1	21 SEPT 23	INFRAPLUS Infraplus Consulting Pvt. LGFC. Office No. 170, First Floor, Tower B1, Spaze I Tech Park, Sohna Road, Sector 49 Gurgaon, Haryana, India

LEGEND:-	
■	MANHOLE
119	MANHOLE NUMBER
214.00	MANHOLE TOP LEVEL
➤	FLOW DIRECTION
29.5m/200Ø/400	PIPE LENGTH / DIAMETER / SLOPE
211.10	IL AT START OF PIPE LINE
211.10	IL AT STOP OF PIPE LINE
———	SEWER NETWORK

O.L.

Checked subject to Comments
In forwarding letter No. 8816
Dt. 9/10/2024 ....and notes
Attached with the estimate

Executive Engineer (M)
for Chief Engineer-I
HSVP, Panchkula

Superintending Engineer,
HSVP Circle, Gurugram

Checked for Public Health Services
Service Plan Estimate

Executive Engineer
HSVP Division
Bahadurgarh

PROJECT	CLIENT	DRAWING TITLE	DRAWING NO	STAGE	REVISION	DATE	CONSULTANT
SECTOR 11, MET	Model Economic Township Limited — 77-B, 3RD FLOOR, IFFCO ROAD, GURUGRAM, HARYANA 122015	SEWER NETWORK	ICPL/11SEC/SPE/SWR/MP/01	SPE	R1	21 SEPT 23	INFRAPLUS — Infraplus Consulting Pvt. LGFC. Office No. 170, First Floor, Tower B1, Spaze I Tech Park, Sohna Road, Sector 49 Gurgaon, Haryana, India