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## DEFINITIONS

- (i) **“Authority”** Designated employees are authorized to conduct inspections and takes steps to administer and enforce these requirements in line with the regulation. The details of any construction which are not specifically dealt within this regulation shall be performed to the satisfaction of a designated employee, which authority shall be reasonably exercised by the designated employee. Designated employees are hereby authorized to determine whether equipment, techniques, conditions, circumstances and all other matters meet the standards and requirements of this regulation or are otherwise acceptable.
- (ii) **“Act”** The Environment (Protection) Act - 1986, The Water (Prevention and Control of Pollution) Act – 1974.
- (iii) **“Agreement”** means the application form along with general terms and conditions and other incidental documents signed and submitted by the Applicant for the connection of sewage connection at a specified location within building envelope and duly accepted by the Service Provider.
- (iv) **“Applicant”** or **“Consumer”** means a Legal Entity (a company, partnership firm, LLP, Housing Society or Trust) or a proprietary concern or an individual, who has applied for sewage connection for commercial / residential / institutional purpose.
- (v) **“Application”** means request by an Applicant for Connection of sewage in the prescribed format / application form of the Service Provider duly filled and signed by the Applicant.

- (vi) **“Authorized Representative”** refers to all officers, staff & Representatives of the GIFTCL, discharging functions under the general or specific authority of the GIFTCL.
- (vii) **“Board”** means the Central Board or a State Board.
- (viii) **“Code”** means The National Building Code of India-2005 or relevant Indian standards adopted by this regulation.
- (ix) **“Connection”** means installation of combination of one or more pipelines, related fittings, valves, regulator, meter, etc. in Applicant’s Site in order to be able to provide sewage connection to the Applicant.
- (x) **“Consumer”** means the Applicant to whom the connection for sewage for commercial / residential / institutional purpose has been installed.
- (xi) **“Domestic Connection”** means the connection used for Residential purposes.
- (xii) **“Non-Domestic connection”** means the connection used for commercial, institutional, hospitals, public uses, horticulture and fire demand.
- (xiii) **“Delayed Payment Charges”** means the charges as are payable by the Consumer as per rate given in the Tariff Card, for late payments of the Bill or such other demands raised by the Service Provider.
- (xiv) **“Designated Employee”** The Manager of Development and Inspections of the Planning, Property and Development Department of the GIFT City and any GIFTCL employee whom he or she has delegated authority to administer or enforce all or part of this regulation.
- (xv) **“Developer”** A persons or organization procuring plots from the GIFTCL making necessary development and finally lease or sale flat to

end user.

- (xvi) **“Distribution”** means any of several mains, valves, service connections or other appurtenances used for controlling and transporting sewage within building envelope.
- (xvii) **“Owner”** A person or the agent, servant or employee of a person who owns, manages or is in possession of land or a building to which this regulation applies. Who is in receipt of the whole or a part of any rents or profits, there from whether the rents and profits are received on the person’s own account, or as agent or trustee for another person.
- (xviii) **“Person”** shall include any Company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person;
- (xix) **“Sewage / Wastewater”** means the water carried wastes from Residential, Commercial and Institutional building in GIFT City notified area.
- (xx) **“Premises”** includes any land, building or structure;
- (xxi) **“Prescribed”** means prescribed by rules made under Water Act by the Central Government or, as the case may be, the State Government;
- (xxii) **“Reconnection”** means, restart of the sewage connection on fresh application submitted by the Applicant, after termination.

- (xxiii) **“Regulations”** means regulations prescribed or as may be prescribed by the Commission under the Act;
- (xxiv) **“Rules”** means the Rules prescribed or as may be prescribed under the Act; The Water (Prevention and Control of Pollution) Rules - 1975, 1956 (as amended up-to 24<sup>th</sup> Nov. 2011).
- (xxv) **“Security Deposit”** means the amount of security (interest free) to be deposited by the Applicant, as per the Tariff Card, at the time of Application for Connection or Reconnection.
- (xxvi) **“Service / Services”** means sewage connection by the Service Provider up to the Connection at the Applicant’s premises.
- (xxvii) **“Service Provider”** means hereinafter referred as GIFTCL.
- (xxviii) **“Site”** means the building, building envelope or property or establishment owned or occupied by the Applicant in the GIFT notified area.
- (xxix) **“Street”** includes any way, road, lane square, court, alley, passage or open space, whether a thoroughfare or not, over which the public have a right of way and also the roadway and footway over any Public Bridge or Causeway;
- (xxx) **“Tariff Card”** means a schedule, issued by the Service Provider, from time to time, in respect of the Security Deposit, Charges for New Sewage Connection, Sewage disposal Charges, Delayed Payment Charges and such other charges to be paid by the Applicant/ Consumer to the Service

Provider.

(xxxi) “**Termination**” means as defined in clause 10 of Sewage Connection Agreement.

## **2. SEWAGE NETWORK**

### **2.1 OVERALL SEWAGE SYSTEM IN GIFT**

#### **Sewage Collection Network**

The city’s sewage is collected only by main sewer line which will be laid to collect sewage by gravity.

However, when gravity sewers are laid collecting sewage for long stretches, the invert level of the sewage pipe at the tail end is likely to go much below the ground level. Hence, it is logical to design the pumping station and pump sewage to higher elevation for treatment purpose. Sewage pumping stations are used for pumping sewage from a lower to higher elevation, particularly where the elevation of the source is not sufficient for gravity flow and/or when the use of gravity conveyance will result in excessive excavation and higher construction costs.

The sewage from individual building will be discharged into the machine-hole\* of main sewer line.

*\*in this document, the manhole is replaced by the machine-hole.*

## **Sewage / Wastewater Treatment Plant**

The wastewater generated from entire area will be collected by main sewer leading to terminal or intermediate sewage pumping stations (TSPS/ ISPS) and conveyed to inlet chamber of Sewage treatment plant of the city

### **2.2 SCOPE OF SEWAGE NETWORK FOR GIFTCL AND DEVELOPER**

The demarcation of boundary of GIFTCL and Developer is as follows:

#### **A) Developer's Scope**

##### **Wastewater Network**

- Developer will design and lay internal sewage network up to the GIFTCL's machine-hole of main sewage corridor considering all latest relevant guidelines and Central Public Health and Environmental Engineering Organization (CPHEEO) Standard – Sewerage and Sewage Treatment Manual.
- Developer to ensure a minimum self-cleansing velocity at ultimate peak flow as per latest CPHEEO Standard – Sewerage and Sewage Treatment Manual & NBC; and provide minimum pipe diameter of 200 mm.
- Developer has to install all pipes, fittings, pumps; valves etc. in a manner as to provide easy accessibility for repair & maintenance & shall not cause obstruction in shafts, passage, etc.
- Developer has to design and lay internal building sewage network in a manner to match invert level of the GIFTCL's machine-hole of main sewage corridor through gravity.

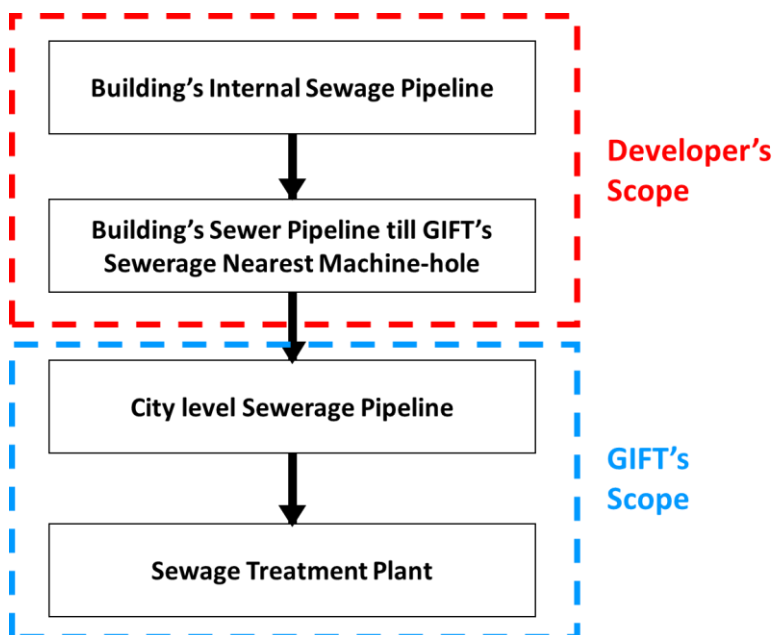


- The operation and maintenance of all the pipes, fittings, pumps, valves etc. laid by Developers is the responsibility of them until machine-hole of main sewer line will get functional.
- Developer may have to install and operate package sewage treatment plant until the main sewer network of GIFT City will be functional. Developer will be responsible for disposal of treated sewage.
- Developer has to provide raw sewage sample analysis reports every quarterly by MoEF approves Schedule II auditor / Laboratory or as per the frequency suggested by GIFTCL's representative
- Sampling location should be decided by GIFTCL's representative from time to time. Construction of 'Diaphragm Wall' is mandatory for all the building works. Same has been reflected in the GIFT area DCR as e.g., "Construction of Diaphragm Wall, mandatory, to avoid damage to adjacent infrastructure, and to make the existing utilities run uninterrupted, under all conditions".
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## **B) GIFTCL's Scope**

- GIFTCL will lay gravity-based sewage corridor through closed conduit pipeline, which will carry the sewage to the sewage treatment plant for ultimate treatment.
- GIFTCL will not be responsible for any asset of network inside building; developer will be solely responsible for maintenance / O&M / repair works.
- GIFTCL has right to terminate the sewage connection, if quality of raw sewage does not meet criteria mentioned in Annexure III.
- Sampling location should be decided by GIFTCL's representative from time to time.

The schematics for scope is shown below –



## 2.3 SEWAGE CONNECTION PHILOSOPHY

The General Terms and Conditions for Sewage Connection is shown in Annexure – I.

### **Validation / Submission of Documents / Drawings by Developer:**

- GIFTCL will validate all drawing / documents based upon standards and specifications mentioned in Blue Book.
- Developer will submit soft and hard copy, dully stamped and signed by signatory authority by Developer with proper Letter of Transmittal.

- GIFTCL will review and wherever required all necessary comments should be incorporated by Developer.

Developer will only consider the approved documents / drawings by GIFTCL for further proceedings. Developer will consider the comment given by GIFTCL and shall resubmit the revised drawing / documents for approval with “Letter of Transmittal” as mentioned in above point till acceptance of final approval from GIFTCL

### **Documents to be Submitted along with Application**

List of documents to be submitted at the subsequent stages (namely DP/CC/OC) for approval but not limited and may change on case to case basis which are as follows:

- Building location along with GIFT Master Plan
- Floor wise plan of sewage network
- Toilet details showing drain/trap location and diameter of pipe.
- Drainage schematic showing total number of connections each floor and diameter.
- Related design calculation.
- External sewage network plan of the plot connecting to main machine-hole of sewer network along with invert level
- All drawing should be in proper readable scale and legend with revision number, reference drawing number if required as per following –

<b>Sr. No.</b>	<b>Location of pipe</b>	<b>Color</b>
1	Vertical Soil pipe	RED

2	Vertical Waste pipe	BLUE
3	Horizontal Soil pipe (100 diameter or above)	RED
4	Horizontal Water pipe (100 diameter or above)	BLUE
5	Horizontal Soil pipe (Less than 100 mm diameter)	MAGENTA
6	Horizontal Waste pipe (Less than 100 mm diameter)	CYAN

- Any changes/Modification in the design or concept should bring in notice to GIFTCL before executing on project.
- Before awarding final OC by GIFTCL, developer must ensure the sewage infrastructure checklist.

The checklist for all stages, but not limited to following, is as below –

Checklist for Various Stages for Developer	
DP	
Drawings for Space Arrangements	Assumptions
	Sewage Philosophy

	Basis of Calculations
	Sewage Generation
	Sewage Outfall Locations
<b>CC</b>	
Drawings	Internal sewer layout with I.L.s and outfall location
Submission of DBR	Assumptions
	Sewage Philosophy
	Design Calculations for per capita sewage generation and invert levels
<b>OC</b>	
Pipeline Connection	Connection of developer's premises sewage connection to GIFTCL's machine-hole, at appropriate invert level

### 3. PROCEDURE SEWAGE CONNECTION

#### 3.1 SUBMISSION OF APPLICATION

The GIFTCL shall be contacted for following application:

- To obtain a new sewage connection
- Reconnection
- Transfer of registered name

#### d) Termination

The application for connection should be done in the prescribed format shown in Annexure – II.

### **3.2 QUALITY OF WASTEWATER**

The quality of wastewater to be discharged into main sewer network of the GIFT city should be as per annexure III. The Developer has to ensure to meet the same standard prescribed in the annexure III. GIFTCL will ensure to treat the sewage as per the prevailing standard norms.

## **4. DEVELOPER'S INSTALLATIONS**

Developer shall consider following guidelines for sewage collection network within the building.

### **4.1 ESTIMATION OF SEWAGE GENERATION**

- Developer of any building or block / amenities needs to submit sewage generation as per standard norms and guidelines mentioned (Reference: latest; CPHEEO – Sewerage and Sewage Treatment and NBC)
- Developer will consider Peak dry weather flow comprises of peak domestic, non-domestic wastewater flow and infiltration as per latest prevailing standard norms in CPHEEO – Sewerage and Sewage Treatment and NBC
- The peak factor or the ratio of maximum to average flows depends upon the contributory population and according to the same Developer has to

consider the peak flow as per latest prevailing standard norms in CPHEEO – Sewerage and Sewage Treatment and NBC.

- Developer should provide minimum pipe diameter for vertical drainage and minimum pipe diameter should be used inside basement or stilt floor where vertical pipe are transferred to horizontal, as per the prevailing standards. Cleaning eye should be provided for both soil/waste pipes wherever required for the future maintenance.
- The connection between machine-hole to machine-hole should not be done from pipe less than 200mm diameter. Developer should ensure a minimum self-cleaning velocity at ultimate peak flow in sewage network inside the development.

## 4.2 SOURCES OF SWEAGE

Sewage is mostly the spent water of the community draining into the sewer system with minimal or negligible infiltration. For the reference of this document, Domestic/ Non-Domestic sewage is the wastewater from kitchen, bathroom, lavatory, toilet and laundries.

## 4.3 PIPES / FITTINGS AND ACCESSORIES INSTALLATION

### Pipe material

Following factors will be considered in the selection of pipe materials:

- Applicable IS codes
- Availability of pipe and fittings in required sizes, lengths.
- Ease of handling and installation
- Physical strength

- Any special bedding requirements
- Flow characteristics or friction coefficient
- Joint water-tightness and ease of installation
- Resistance to acids, alkalis, high temperature or corrosive wastes, and
- corrosive soils
- Ease in Repairs and maintenance

The pipe materials most often used for gravity sewers are High Density Poly Ethylene (HDPE), Glass Reinforced Plastic (GRP), Reinforced Concrete (RCC), Ductile Iron (D.I.) etc.

## **RECOMMENDED PIPE MATERIAL SPECIFICATIONS**

### **4.3.1 HDPE**

HDPE pipes as per IS 14333 are available in sizes from 63 mm to 1000 mm OD. The commonly used sizes range from 150 mm to 600 mm. The length of each pipe is 5m to 10m. The material is light, has very good impact strength, flexibility and corrosion resistance. The jointing can be done by butt- welding, insert jointing or by flange jointing and requires skilled manpower. HDPE pipes are tough and resilient. HDPE pipes are easy to carry and install because of their lightness. Metallic tags could be fixed at regular intervals for ease in locating the pipe with a pipe locator. The pipe has an N-value of 0.011, which does not deteriorate much with age.

For sewerage applications, the HDPE are available in the range of 63 mm to 1000 mm nominal diameter of pressure rating 0.25 MPa to 1.60 MPa on materi-



al grades of PE 63, PE 80 and PE 100. Material Grade, Minimum Required Strength and Maximum Allowable Hydrostatic Design Stress is specified in the relevant clause of IS – 14333: 2000.

### **General Requirements**

- Regarding guidance for laying and joining of polyethylene pipe, including storage and handling, a reference may be made to IS 7634 (Part 2) : 1973.
- When tested from a composite sample of minimum three pipes as per IS 2530:1963, at 190° C with nominal load of 5 kgf, Melting Flow Rate shall be between 0.4 to 1.1 g/10 min (both inclusive) and also shall not differ by more than 20 percent of the MFR of the material used in manufacturing pipes declared by the manufacturer.
- The percentage of anti-oxidant used shall not be more than 0.3 percent by mass of finished resin.
- The pressure rating of HDPE pipes specials shall be confirming to IS: 14333 or equivalent international standard with temperature & maximum allowable operating pressure criteria as per IS: 14333.
- Each straight length of the pipe shall clearly be marked in inedible ink/paint (inkjet printing) at every one meter with the following information:
  - i) The manufacturer's name and /trademark
  - ii) Designation of the pipe as per the standard specified.
  - iii) Lot number/Batch number/year of mfg.
  - iv) The words "PROJECT NAME".

All HDPE fabricated fittings shall be manufactured from the pipe itself made out of same raw material & dimensions as specified above. Necessary certificate to

be provided by the manufacturer. No fabrication or molding should be allowed at site, unless specifically permitted by the Developer.

### **Carting and Handling**

- Pipes and fittings / specials shall be transported from the factory to the work site places along the alignment of pipeline as directed by the Employer's representative.
- While unloading the pipes and fittings / specials shall not be thrown down from the ruck on to hard surface. They should be unloaded on timber skids with steadying ropes or by any other approved means.
- Polythene is a tough resilient material which may be handled easily. However, because it is softer than metals it is more prone to damage by abrasion and by objects with a cutting edge. Such practices as dragging coils over rough ground should therefore be avoided.
- If, due to unsatisfactory storage or handling, a pipe is damaged or kinked, the damaged portion should be cut out completely.
- The material is not affected by low temperatures as much as are some other plastics materials, and there is no need of more cautious handling during cold weather.

### **Storage**

- Black polythene pipe may be stored either under cover or in the open. It is suitably protected from ageing due to sunlight by the addition of the appropriate quantity and type of carbon black. Natural polythene pipe should be stored under cover and protected from direct sunlight.

- Coils may be stored either on edge or stacked flat one on top of the other, but in either case they should not be allowed to come into contact with hot water or steam pipes and should be kept away from hot surface.
- Storage of pipes in heated areas exceeding 27° C should be avoided.

### **Pipe laying and fixing**

- All precautions shall be taken during laying operations to guard against possible damage to any existing structure / pipeline or water, gas, sewage etc.
- All the pipes are to be laid perfectly true both in alignment and to gradient specified.
- Precautions shall be taken to prevent dirt from entering the jointing space.
- Provisions shall be made for the effects of thermal movement. Between the anchors for suspended pipes, the support should not grip or distort the pipe, but should allow free movement of the pipe due to temperature variation.
- Plastic pipe shall not be laid near hot water pipes or near any other heat sources.
- Pipes and fittings / specials which do not allow a sufficient and uniform space for joints shall be removed and replaced with pipes and fittings / specials of proper dimensions to ensure such uniform space.

### **Jointing**

Jointing for pipes and fittings / specials shall be done in accordance with the relevant Employer's Requirements depending upon types of pipe being used. The commonly used joints for HDPE pipes are as follows:

- Insert type joints
- Fusion welding
- Threaded joints
- Flanged joints
- Telescopic joints

Developer shall provide fusion welded butt joints for HDPE pipes and flanged joints for above ground installations .

### **Testing**

- All pipe work, fittings and appliances shall be inspected and tested hydraulically after the completion of installation. Before starting any test, the systems shall be visually inspected to ensure that the recommendations for the correct installation procedure have been compiled with, and that the pipeline together with appliances, valves and fittings are laid in the prescribed manner. Solvent welded pipelines should not be pressure tested until at least 24 hours after the last solvent welded joint has been made.
- Tests on pipes and fittings shall be carried out in accordance with IS 8329 and IS 9523. The pipes will be subjected to following tests for acceptance:
  - Visual and dimensional check as per Clause 13 and 15 of IS 8329-2000

- Mechanical Test as per Clause 10 of IS 8329-2000
- Hydrostatic Test as per Clause 11 of IS 8329-2000
- The test reports for the rubber gaskets shall be as per acceptance tests of the IS
- 5382-198 and will be in accordance to Clause 3.8.
- The sampling shall be as per the provisions of the IS 8329 -2000.
- Failure to pass the test - All pipes or joints which are proved to be in any way defective shall be replaced or remade and re-tested as often as may be necessary until a satisfactory test shall have been obtained. Any work which fails or is proved by test to be unsatisfactory in any way shall be redone by the Developer.
- All control valves shall be positioned “open” for the duration of the test and open ends temporarily closed with water-tight fittings. The testing pressure should not be less than one and a half times the rated pressure of the pipe under use.
- Pressure should be applied either by hand pump or power-driven pump. Pressure gauges should be correctly positioned and closely observed to ensure that at no time are the test pressures exceeded. The system should be slowly and carefully filled with water, to avoid surge pressure of water hammer. Air vents should be open at all high points so that air may be expelled from the system during filling.
- The pipe joint assembly shall withstand an external pressure of 80 kPa or an internal vacuum of -80 kPa, in both angularly deflected and laterally offset positions.
- When the system has been fully charged with water and air displaced from the line, air vents should be closed, and the line initially inspected

for seepage at joints and the firmness of the support under load. Pressure then may be applied until the required test pressure is reached.

- **Pressure Check:** In any application where polyethylene pipe is attached to a pressure source which is higher than the pressure rating of the polyethylene pipe being installed, adequate pressure reduction devices shall be installed. Whenever such valves are installed, a regular check of such valves should be made to ensure their continued proper functioning as a protection to the polyethylene pipe.

## **Clamps**

GI fabricated clamps may be used to support the pipe. Standard pipe clips may also be used but care shall be taken not to over tighten and cause the clips to bite into the pipe. Pipe clips should be correctly aligned and should provide a smooth flat surface for contact with pipe.

### **4.3.2 GRP**

The GRP pipes as per IS 14402 are in sizes of 200 mm to 3000 mm. These pipes have been introduced in India few years back. The commonly used sizes range from 300 mm to 1200 mm. The length of each pipe is 6 m to 12 m. The pipe is light, has good impact strength and has a very good corrosion resistance.

## **Standards**

The testing, supplying, jointing and testing at work of GRP pipes shall comply with all currently applicable statutes, regulations, standards and codes. In partic-

ular, the following standards unless otherwise specified herein, shall be referred. In all cases, the latest revision of the codes shall be referred to. If requirements of this specification conflict with the requirements of the codes and standards, this specification shall govern.

- I.S. 14402 Specification for glass fibre reinforced plastic (GRP) pipes, joints and fittings, for the use for Sewerage, Industrial Waste and Water (other than potable)
- I.S. 13916 Code of practice for Installation of glass fibre reinforced plastic (GRP) piping system
- I.S. 5382 Rubber sealing rings for gas mains, water mains and sewers
- I.S. 6746 Unsaturated, polyester resin systems for low pressure fibre reinforced plastic
- I.S. 11320 Glass fibre rovings for the reinforcement of polyester and of epoxide resin systems.
- I.S. 11273 Woven roving fabrics for "E" class fibre
- I.S. 11551 Glass fibre chopped strand mat for the reinforcement of polyester resin system
- I.S. 12709 Glass fibre reinforced plastic (GRP) pipes, joints and fittings for use in potable water supply – Specification.
- ASTM D 3262 Standard specification for "Fibreglass" (glass fibre reinforced thermosetting resin) sewer pipe.
- ASTM D 4161 Standard specification for "Fibreglass" (glass fibre – reinforced thermosetting resin) pipe joints using flexible elastomeric seals.
- ASTM D 2321 Standard practice for underground installation of Thermoplastic pipe for Sewers and Other Gravity Flow Applications.

- ASTM D 3839 Standard practice for Underground Installation of "Fibre-glass" (glass fibre reinforced thermosetting resin) pipe.

### **General Requirements**

Design of GRP pipes (Non-Pressure pipes of stiffness classes B (124 kPa) and C (248 kPa) and pressure class PN3 (300 kPa) shall be in accordance with relevant clauses of I.S. 14402.

The GRP pipes and joints shall be systematically checked for any manufacturing defects by experienced supervisors so as to maintain a high standard of quality. The inside surface of each pipe shall not have any visible defects such as bulges, dents, ridges, foreign inclusion, cracks, crazing, pin holes and bubbles to the extent that it does not detrimentally affect the performance of the pipe.

Joint sealing surfaces shall be free of dents, gauges and other surface irregularities that will affect the integrity of the joints.

### **Carting and Handling**

- All pipe sections shall be supported on flat timbers spaced on a maximum of 4 meters centres with a maximum overhang of 2 meters in trucks. No pipes shall be in contact with other pipes while transportation, so that vibrations during transport will not cause abrasion.
- Maximum stack height will be approximately 2.0 meters. Pipes shall be strapped to the vehicle over the support points using pliable non-metallic



straps or ropes. Steel cables or chains shall not be allowed for strapping without adequate padding.

## **Storage**

- Pipes of diameter less than 1 m may be directly stored on sandy soil while pipes with diameter greater than 1 m shall be stored on their delivery cradles or on flat timbers. When storing on ground the ground shall be flattened and made free of potentially damaging debris. All pipes shall be chocked to prevent rolling.
- If it is necessary to stack pipes, flat timber supports at maximum 6 meter spacing with chocks shall be used. If it is available, the original shipping dunnage shall be used. The stacks shall be stable against wind or other horizontal forces. Maximum stack height allowable shall be approximately 2 metres.
- Rubber gasket rings shall be shipped separately from the couplings and shall be stored in the shade in their original packaging and shall not be exposed to sunlight except during pipe jointing. The gaskets shall also be protected from exposure to greases and oils and from solvents and other deleterious substances.
- Gasket lubricant shall be carefully stored to prevent damage to the container. Partially used buckets shall be resealed to prevent contamination of the lubricant.

## **Pipe Laying and Fixing**

- Adequate control shall be ensured during unloading and lifting of pipes with guide ropes attached to pipes or packages. Spreader bars shall be

used when multiple locations are necessary. The pipes shall not be dropped to avoid impact or bump, particularly at pipe ends.

- If any time during handling or installation of pipe, any damage, such as gouge, crack or fracture occurs, the pipe shall be repaired or replaced.

### **Jointing**

- Pipes shall be joined together using either Double Socket Couplings or Double O-Ring spigot and socket joints which shall be in accordance with the relevant clauses of IS 13916.
- The joints shall be axially unrestrained joints, using rubber rings or gaskets. The rings or gaskets used for jointing shall conform to the requirements of IS 5382.

### **Testing**

- All criteria listed for HDPE pipes should be adopted.

#### **4.3.3 CAST IRON**

- Cast iron pipes with a variety of jointing methods are used for pressures sewers, sewers above ground surface, submerged outfalls, piping in sewage treatment plants and occasionally on gravity sewers where absolutely

water tight joints are essential or where special considerations require their use, IS:3989-1984 and LS:1537-1976 give the specifications for spun and vertically cast pipes respectively.

- The advantage of cast iron pipes are long laying lengths with tight joints, ability when properly designed to withstand relatively high internal pressure and external loads and corrosion resistance in most natural soils. They are however subject to corrosion by acids or highly septic sewage and acidic soils.
- Whenever it is necessary to deflect pipes from a straight line either in the horizontal or in the vertical plane, the amount of deflection allowed should not normally exceed 2.5 degrees for lead caulked joints and for mechanical joints, the deflection should be limited to 5 degrees for 80 to 300mm diameter, 4 degrees for 350 to 400mm diameter and 3 degrees upto 750mm diameter pipes.
- When specifying cast iron pipe, it is necessary to give the pipe class, the type of joint, the type of lining and the type of exterior coating. Necessary care should be taken during transport and handling of the pipes against breakage and cracks.
- The pipes shall be laid in position with the socket ends of all pipes facing up gradient. Any deviations either in plan or in elevation of less than  $1\frac{1}{4}$  degree shall be effected by laying the straight pipes round the flat curve of such radius that the minimum thickness of lead in a rubber gasket joint at the face of the socket, shall not be reduced below 6mm, The spigot shall be carefully pushed into the socket with one or more laps of spun yarn wound round it. Each joint shall be tested before running the lead, by passing completely round it a wooden gauge notched out to the

correct depth of lead and the notch being held close up against the face of socket. IS: 3114-1985 should be followed in setting out the sewers.

#### **4.3.4 DUCTILE IRON PIPES**

The pipes will be centrifugally cast (spun) Ductile Iron pipes for Water confirming to the IS 8329: 2000. The pipes used will be either with push on joints (Rubber Gasket Joints) or Flanged joints. The class of pipe to be used shall be of the class K-9.

The pipes shall be coated with bitumen as per appendix C and have factory provided cement mortar lining in the inside as per the provisions of Appendix B of the IS 8329: 2000.

The pipes will be supplied in standard length of 5.50- and 6.00-meters length with suitably rounded or chamfered ends. Each pipe of the push on joint variety will also be supplied with a rubber EPDM gasket.

The specials and gaskets should also be supplied by the manufacturer of the pipes. It should preferably be manufactured by the manufacturer of the pipes. In case they are not, it will be the responsibility of the manufacturer of the pipes to have them manufactured from a suitable manufacturer under its own supervision and have it tested at his/sub developer's premises as per the contract. The pipe manufacturer will however be responsible for the compatibility and quality of the products. The flanged joints will confirm to the Clause 6.2 of IS 8329-2000. The pipe supply will also include one rubber gaskets for each flange.

#### **Inspection and Testing**

The pipes will be subjected to following tests for acceptance:

Visual and dimensional check as per Clause 13 and 15 of IS 8329-2000

Mechanical Test as per Clause 10 of IS 8329-2000

Hydrostatic Test as per Clause 11 of IS 8329-2000

The test reports for the rubber gaskets shall be as per acceptance tests of the IS 5382-1985 and will be in accordance to Clause 3.8.

The sampling shall be as per the provisions of the IS 8329 -2000.

### **Marking**

All pipes will be marked as per Clause 18 of IS 8329-2000 and show as below:

- Manufacturer name/ stamp
- Nominal diameter
- Class reference
- A white ring line showing length of insertion at spigot end

### **Specials for Ductile Iron Pipes**

This section covers the general requirements for Ductile Iron (DI) fittings suitable for Tyton joints to be used with Ductile Iron pipes with flanged and Tyton jointing system.

### **Specials**

The following types of DI fittings shall be manufactured and tested in accordance with IS: 9523-2000 or BS: EN 545.

- a. Flanged socket
- b. Flanged spigot
- c. Double socket bends (900, 450, 22 1/2 0, 11 1/4 0)
- d. Double socket branch flanged tee
- e. All socket tee.
- f. Double socket taper.
- g. All flanged tee.
- h. All flanged taper.

All the DI fittings shall be supplied with one rubber ring for each socket. The rubber ring shall conform to IS: 12820-2004 and IS: 5382 -1985 as described in the preceding chapter. Flanged fittings shall be supplied with one rubber gasket per flange and the required number of nuts and bolts.

### **Lubricant for Ductile Iron Pipes and Specials**

#### **Specification**

The lubricant has to have the following characteristics:

- a. Must have a paste like consistency and be ready for use
- b. Has to adhere to wet and dry surfaces of DI pipes and rubber rings
- c. To be applied in hot and cold weather; ambient temperature 0 - 50°C, temperature of exposed pipes up to 70°C

- d. Must be non toxic
- e. Must be water soluble
- f. Must not affect the properties of the drinking water carried in the pipes
- g. Must not have an objectionable odour
- h. Has to inhibit bacterial growth
- i. Must not be harmful to the skin
- j. Must have a shelf live not less than 2 years
- k. Acceptance tests
- l. They shall be conducted in line with the provisions of the IS 9523-2000

### **Packing for DI Specials**

All the DI fittings shall be properly packed with jute cloth. Rubber rings shall be packed in polyethylene bags. Rubber rings in PE bags and nuts, bolts etc. shall be supplied in separate jute bags. The fittings should also be supplied by the manufacturer of the pipes. They should preferably be manufactured by the manufacturer of the pipes. In case they are not, it will be the responsibility of the manufacturer of the pipes to have them manufactured from a suitable manufacturer under its own supervision and have it tested at his/sub developer premises as per the contract. The pipe manufacturer will however be responsible for the compatibility and quality of the products.

### **Laying and jointing of DI pipes and fittings**

Pipes should be lowered into the trench with tackle suitable for the weight of pipes. For smaller sizes, up to 200 mm nominal bore, the pipe may be lowered by the use of ropes but for heavier pipes suitable mechanical equipment have to be used.

All construction debris should be cleared from the inside of the pipe either before or just after a joint is made. This is done by passing a pull-through in the pipe, or by hand, depending on the size of the pipe. All persons should vacate any section of trench into which the pipe is being lowered.

On gradients of 1:15 or steeper, precautions should be taken to ensure that the spigot of the pipe being laid does not move into or out of the socket of the laid pipe during the jointing operations. As soon as the joint assembly has been completed, the pipe should be held firmly in position while the trench is back filled over the barrel of the pipe.

The designed anchorage shall be provided to resist the thrusts developed by internal pressure at bends, tees, etc. Where a pipeline crosses a watercourse, the design and method of construction should take into account the characteristics of the watercourse to ascertain the nature of bed, scour levels, maximum velocities, high flood levels, seasonal variation, etc. which affect the design and laying of pipeline.

The assembly of the pipes shall be made as recommended by the pipe manufacturer and using the suitable tools.

The socket and spigot ends of the pipes shall be brushed and cleaned. The chamfered surface and the end of the spigot end have to be coated with a suitable lubricant recommended by the manufacturer of the pipes. Oil, petroleum



bound oils, grease or other material which may damage the rubber gasket shall not be used as lubricant. The rubber gasket shall be inserted into the cleaned groove of the socket. It has to be checked for correct positioning.

The two pipes shall be aligned properly in the pipe trench and the spigot end shall be pushed axially into the socket either manually or with a suitable tool specially designed for the assembly of pipes and as recommended by the manufacturer. The spigot has to be inserted up to the insertion mark on the pipe spigot. After insertion, the correct position of the socket has to be tested with a feeler blade.

Deflection of the pipes - if any- shall be made only after they have fully been assembled. The deflection shall not exceed 75 % of the values indicated by the pipe manufacturer.

Pillars for ductile iron pipes: In case of unstable subsoil or in case of ductile iron pipes laid above ground they shall be laid on pillars. Each pipe is supported at the plain end and behind the socket. One pillar shall support the socket end of one and the plain end of the other pipe. The pillars shall be of Cement Concrete and shall be founded on solid soil, not subject to erosion by wind or water. The foundation of the pillars has to be calculated according to the soil conditions.

The top of the pillar shall form two saddles for the pipe having the same radius as the pipe. The socket will be lying free between the two saddles. The pipes shall be laid on a coat of polyethylene of 2 mm thickness, put on mortar. It has to be ensured that the spigot end of the pipe is supported by the saddle and does not unduly compress the rubber ring in the lower part. Each

pipe is fixed by one adjustable galvanised steel spanner, fixed to the pillar with anchor bolts. In case of vertical deviations, the pipes shall be protected against uplift by additional reinforced clamps of mild steel.

#### **4.3.10 R.C.C. PIPES**

- RCC pipes as per IS 458 are available for NP2, NP3 and NP4 class pipes with diameter. varying from 80 to 2600 mm. The length of each pipe is 2 m to 2.5 m. The jointing of pipes is done either by collar or S/S rubber ring joint, the latter being more suitable from the point of view of flexible joint. The design N-value for these pipes is considered as 0.013.
- The R.C.C, pipes shall be laid in position over proper bedding, the type of which may be determined in advance, the abutting faces of the pipes being coated by means of a brush with bitumen in liquid condition.
- The wedge shaped groove in the end of the pipe shall be filled with sufficient quantity of .either special bituminous compound or sufficient quantity of cement mortar of 1:3. The collar shall then be slipped over the end of the pipe and the next pipe butted well against the plastic ring by appliances so as to compress roughly the plastic ring or cement mortar into the grooves, care being taken to see that concentricity of the pipes and the levels are not disturbed during the operation.
- Spigot and socket R.C.C. pipes shall be laid in manner similar to stone-ware spigot and socket pipes. The structural requirements should be as per IS:783-1967 may be followed.

## 4.4 BEDDING

The pipe bedding should be placed so as to give complete contact between the bottom of the trench and the pipe. The bedding shall be provided as per the drawing. However, the bottom face / trench bed where pipe shall be placed shall be compacted to provide a minimum compaction corresponding to 95% of maximum dry density.

### 4.4.1 Granular Bedding

Where pipes are laid with a granular bed or surround the appropriate bedding material shall, as soon as a section of trench has been trimmed to grade, be placed carefully over the full trench width without segregation. The material shall be spread and thoroughly compacted by approved mechanical means in successive uniform layers each not exceeding 150mm compacted thickness to produce a uniform bed to the required gradient. Where plate vibrators are used, there shall be a minimum of one pass for crushed stone and two passes for sands. Hand tamping will only be permitted where insufficient space is available to allow the use of mechanical plant. The minimum thickness of compacted granular material shall be as follows: -

- a) 150mm (minimum 100mm under sockets) for pipes not exceeding 300mm nominal diameter, except when trench is in rock.
- b) 200mm (minimum 100mm under sockets) for pipes greater than 300mm nominal diameter, or all pipes when trench is in rock.

The pipes shall then be set evenly on the bed, great care being taken to ensure uniform support for the entire length of the pipe.

Pockets in the bedding shall be formed at each pipe joint to permit jointing to be carried out without the sleeve or socket of the pipe joint bearing on the bedding material and without bedding material entering the joint.

After the pipeline alignment and joints have been inspected and approved, the water testing of the pipeline satisfactorily completed, and, where appropriate, the annular gap at each pipe joint sealed, each joint pocket shall be carefully filled with granular material and thoroughly compacted up to the same level as the top of the bedding. Granular bedding material of the same type shall be placed on both sides of the pipeline in successive uniform layers not exceeding 150mm thick and compacted according to one of the methods given in Table. Care shall be taken to ensure that no cavities remain under the pipe, and that the pipes are not displaced by differential pressure from either side.

When placing and compacting surround material the Developer shall take care not to displace or damage the pipes. The tipping of surround material from ground levels directly onto the pipes shall not be permitted.

**Table showing Granular Surround - Compaction Requirements**

Surround Material	Max. Layer Thickness (mm)	Alternative Methods (Number of Passes of Compaction Plant)		
		Hand Rammer	Vibrating Plate	100 Kg Power Rammer*
Crushed Aggregate	150	2	1	2

Sand	75	3	2	4

*\* Not to be used above springing level*

The granular material shall extend up to a minimum height of 300mm over the crown of the pipes. For rigid pipes, the granular material shall extend up to the springing level of the pipe. The surround shall be completed by the careful placing of selected excavated material in layers not exceeding 150mm thick, thoroughly compacted on both sides of the pipeline to a level at least 300mm above the crown of the pipes.

For pipelines of 600mm diameter or greater the bed should be prepared ahead for approximately two pipe lengths whilst two pipes are being laid and the previous two pipes are receiving side filling.

If the Developer wishes to use any other method of laying pipes in granular bedding or surround, he must submit his proposals in writing to and obtain the approval in writing well in advance of the date when he wishes to perform the work.

#### **4.4.2 Concrete Bedding**

Concreting shall be carried out in accordance with specification given in General Civil and Structural Works.

The minimum thickness of concrete between the bottom of the pipe and the trench shall be  $0.25 \times$  nominal pipe diameter, subject to 150mm minimum, with a minimum 100mm beneath sockets.

The pipes shall be set to correct alignment as detailed below:-

The Developer may use rectangular concrete blocks (two per pipe), cast at least 7 days before use, together with pairs of approved hardwood wedges of the same width as the blocks in order to align and support the pipe before concreting. The blocks and wedges shall be of sufficient size and suitably founded on the bottom of the trench to support the pipe adequately without settlement or movement at any stage. The blocks and wedges should be placed near the end of each pipe length and should be left undisturbed during jointing of subsequent pipes and during construction, although the wedges should be removed during placing of the concrete.

Blocks may have thin tie wires cast in to assist in holding down the pipe when the concrete surround is being mechanically vibrated.

After approval of the joints and satisfactory testing of the pipeline a transverse flexible joint shall be formed by insertion of a template of compressible joint filler consisting of bitumen impregnated insulating board as per BS 1142 Part 3 or other equally compressible material shaped exactly to the pipe and full extent of the concrete cradle or surround. The thickness of this flexible joint shall be a minimum of 25mm.

For spigot and socket pipes, the flexible joint in the concrete shall be aligned with the face of the socket. For sleeve type and flexible mechanical joints, the flexible joint shall be aligned with one end of the sleeve or mechanical joint. In

certain cases, a flexible joint may be required at both ends of the sleeve or mechanical joint. The concrete infill for flexible mechanical joints shall only be placed after the application of the specified protection materials to the joint. No steel reinforcement shall pass through the flexible joint. Concrete for beddings, surrounds and joint infill shall be placed carefully and uniformly, suitable measures being adopted to ensure that the pipeline is not displaced by differential side pressure or by flotation. Concrete shall be properly compacted with particular care being taken to ensure that no cavities are left underneath the pipe.

The concrete shall provide a minimum cover to the pipe of 150mm for surrounds.

Concrete beds to pipes of all diameters and surrounds to pipes of one metre diameter or less shall be poured in a single operation. Concrete surrounds to pipes over one metre diameter shall normally be poured in two lifts, with a horizontal joint not more than 100mm below the crown of the pipe. Concrete shall be prevented from entering pipe joints.

Formwork shall be used for all vertical faces and faces sloping more steeply than 1 vertically to 2 horizontally. Side forms should not normally be required, if trench widths specified are such that the concrete bedding / surround will extend the full width of the trench.

All formwork used for forming the concrete bedding shall be removed, unless the written approval is given to leave it in place for safety or similar reasons. The voids which left on removal of the formwork should be backfilled.

The bedding and surround shall be completed by the careful placing of selected

excavated material in layers not exceeding 150mm thick, thoroughly compacted by hand on both sides of the pipeline to a level at least 300mm above the crown of the pipes. As this material is placed and compacted in the trench, the supports to the sides of the trench shall be concurrently partly withdrawn so that there are no voids or uncompacted zones.

No traffic load may be imposed upon the trench within 72 hours of the placing of the concrete cradle or surround.

If the Developer wishes to use any other method of laying pipes in concrete cradle or surround, he must submit his proposals in writing to and obtain the approval in writing well in advance of the date when he wishes to perform the work.

## **4.5 MACHINE-HOLES**

### **4.5.1 General Requirements of Machine-holes**

- a) The machine-holes shall be circular or rectangular as per developer's requirement and constructed in reinforced cement concrete or PVC machine-hole can be use as the developers requirement.
- b) The machine-hole spacing in general shall be as per latest CPHEEO and NBC and at every change in angle/direction.
- c) The developer shall provide typical detail of machine-hole, catch basin, grease trap, etc.
- d) The Developer, while constructing the machine-holes, shall suitably provide one or two (one each on either side) uPVC pipe piece/s for the house sewer connection, as directed by the GIFTCL.



- e) The location of machine-holes shall be as per drawing or layout given by the GIFTCL.
- f) The machine-hole cover and frame shall be heavy duty Steel Fibre Reinforced Concrete (SFRC) and shall be capable of withstanding Class AA loading as per IRC and shall conform to IS: 12592 (Part I & II).
- g) The inspection and testing of machine-hole frames and covers shall be done at factory and the cost of inspection shall be reimbursed to the Developer from the provisional sum.
- h) The entire height of the machine-hole shall be tested for water tightness by closing both the incoming and outgoing ends of the sewer and filling the machine-hole with water and drop in water level not more than 50mm per 24 hours shall be permitted. The Developer at his own cost shall arrange the required water for testing and other requirements.

#### 4.5.2 RCC Machine-holes

The material of construction of machine-holes is RCC depending upon the various reasons such as space constraint, soil conditions and pressure, etc. In such cases, machine-holes with reinforced cement concrete shall be used and maintained.

#### 4.5.3 C. C. Channel

Cement concrete channel be constructed in C.C. of M15 grade. Both sides of the channel shall be taken up to the level of the crown of the outgoing sewer. They shall be benched up in concrete and rendered in cement mortar (1:1) 20 mm thick and formed to a slope of not flatter than 1 in 12 to the channel.

#### **4.5.4 Pipe entering or leaving machine-hole**

Whenever a pipe enters or leaves a machine-hole, bricks on edge must be out to a proper form and laid around the upper end of the pipe so as to form an arch. All around the pipes, there shall be a joint of cement mortar 1:2, 13 mm thick between it and the bricks.

#### **4.5.5 Steel Fibred Reinforced Concrete Covers (SFRC Covers)**

The steel fibred reinforced concrete covers shall be heavy duty and extra heavy duty as per IS 12592 (Part-I & II) with adequate steel reinforcement having thickness 75 mm to 150 mm, anti-corrosive bitumen painted M.S. plate, rim and on M.S. lifting hooks, admixture like plasticizer bond-improving compound, shrinkage resistance compound abrasion resistant complete, as per approved design. Extra heavy duty SFRC covers shall be provided for highways.

#### **4.5.7 Drop Machine-hole**

When a sewer connects a main sewer, and where the difference in level between water line (peak flow levels) of main line and the invert level of branch lines is more than 600 mm or a drop of more than 600 mm is required to be given in the same sewer line and it is uneconomical or impractical to arrange the connection within 600 mm, a drop connection shall be provided for which a machine-hole shall be constructed as per relevant drawing, incorporating a vertical drop pipe from the higher sewer to the lower one. This pipe shall be provided outside the shaft and encased in concrete. A continuation of the branch sewer should be built through the shaft wall to form a rodding and inspection eye, which should be provided with a half blank flange. The diameter of the back drop should be at

least as large as that of the incoming pipe. The drop pipe should terminate at its lower end with a plain or duck-foot bend turned so as to discharge its flow at 45 degrees or less to the direction of the flow in the main sewer. The pipe, unless of cast iron, shall be surrounded with 150 mm thick concrete.

## **5.0 OPERATION AND MAINTENANCE**

### **5.1 LIST OF DOCUMENTS**

The Developer has to provide but not limited to following documents for inspection as and when required by GIFTCL / GPCB / CPCB / MoEF's representative.

- Availability of Detailed plan / Drawings
- Operation and Maintenance Manual
- Schedule of Daily Operation
- Schedule of Inspection of Machinery
- Records of Quality of Raw & Treated Wastewater
- Wastewater Analysis Report Methodology
- Records of Key Activity of O & M
- Staff position / Organogram / Hierarchy
- Inventory of Stores
- Cleaning frequency of sumps and Methodology

### **5.2 O&M GUIDELINE**

- Operation and routine maintenance work shall include the day to day operation, inspection, performance logging, maintenance, servicing, periodic testing and calibration of the equipments.

- Any tools, equipment, testing instruments, consumable items and sundry materials required for the operation and routine maintenance work shall be provided by the Developer. Safety and protective equipment such as safety helmet, shoe, eye protectors, ear shields, etc. shall also be included.
- Uniform shall be provided for wearing by workers at all time while on duty and shall bear the Developer's company name. The cost of such provision shall be borne by the Developer.
- Remote Operation- Operation shall be carried out remotely using the designated remote-control software.
- Operation, Routine Maintenance, Preventive Maintenance & Break down maintenance shall be carried out.
- All necessary maintenance and operation staff experienced on both mechanical and electrical work such as engineers, foremen, operators, mechanics, helpers, etc., for effective maintenance and operation of all systems should be engaged.
- Provide sufficient personnel to operate a 24 hours per day, 7 days per week. Sufficient personnel shall remain on duty on the Premises at all times to immediately respond to emergency maintenance and repair work.
- Keep all records, logbooks, log sheets, maintenance job cards, etc., in neat order to the satisfaction of the GIFTCL's Representative. All records, logbooks and log sheets, charts, maintenance job cards, etc., shall become the property of the GIFTCL.
- Operate, control, maintain, replace and repair any part of equipment or material within the systems which may prove defective due to De-

veloper's design, erection, operation, performance, or workmanship, or prove defective from any act or omission that may develop from use in the works or any section thereof. Defective is hereby defined to include, but not limited to operation or control system failures, Performance below required minimum, excessive wear, unusual deterioration or aging of materials or finishes, unsafe conditions, the need of excessive maintenance, abnormal noise or vibration and similar unusual, unexpected and unsatisfactory conditions.

- Provide all spare parts for replacements made necessary due to wear and tear of equipment. Provide all consumable such as: refrigerants, oils, grease, filters, chemicals, etc., and all tools and maintenance equipment required for proper operation and complete maintenance of the Works.
- Provide all routine operational maintenance and full prevention maintenance as recommended by the equipment manufacturers to keep equipment and systems in proper operation condition.
- Allow for maintaining adequate stocks of all manufacturer's recommended spare parts and consumables as necessary to guarantee that all equipment and systems can be immediately repaired and properly maintained in satisfactory operation condition at all times.

## ANNEXURE-I GENERAL TERMS AND CONDITIONS

The following terms and conditions will apply and govern the sewage connection for discharge of sewage/ wastewater from the Domestic / Non-Domestic Applicant, into the Machine-hole of GIFTCL GIFTCL (hereinafter referred to as the Service Provider).

### 1. DEFINITIONS:

- (i) **“Agreement”** means the application form along with general terms and conditions and other incidental documents signed and submitted by the Applicant for the connection of water supply at a specified location within building envelope and duly accepted by the Service Provider.
- (ii) **“Applicant”** or **“Consumer”** means a Legal Entity (*a company, partnership firm, LLP, Housing Society or Trust*) or a proprietary concern or an individual, who has applied for water Connection for commercial / residential / institutional purpose.
- (iii) **“Application”** means request by an Applicant for Connection of water supply in the prescribed format / application form of the Service Provider duly filled and signed by the Applicant.
- (iv) **“Bill”** means bill of demand, issued by the Service Provider, on monthly basis or for such period as determined by the Service Provider, for Minimum Fixed Charges or charges for the actual consumption of water supply and such other incidental charges, taxes, cess, duties and levies payable by the Consumer.

- (v) “**Connection**” means installation of combination of one or more pipelines, related fittings, valves, regulator etc. in Applicant’s Site in order to be able to discharge sewage/ wastewater into the Machine-hole of the Service Provider.
- (vi) “**Consumer**” means the Applicant to whom the sewage Connection for commercial / residential / institutional purpose has been given.
- (xxxii) “**Domestic Connection**” means the connection used for Residential purposes.
- (xxxiii) “**Non-Domestic connection**” means the connection used for commercial, institutional, hospitals, public uses, horticulture and fire demand.
- (vii) “**Delayed Payment Charges**” means the charges as are payable by the Consumer as per rate given in the Tariff Card, for late payments of the Bill or such other demands raised by the Service Provider.
- (viii) “**Reconnection**” means, restart of the supply of sewage connection on fresh application submitted by the Applicant, after termination.
- (ix) “**Security Deposit**” means the amount of security (*interest free*) to be deposited by the Applicant, as per the Tariff Card, at the time of Application for Connection or Reconnection.
- (x) “**Service / Services**” means conveyance & treatment of sewage from the machine-hole of Service Provider.

- (xi) **“Sewage”** means the water carried wastes from Residential, Commercial and Institutional building in GIFT City notified area.
- (xii) **“Site”** means the building, building envelope or property or establishment owned or occupied by the Applicant in the GIFT notified area.
- (xiii) **“Tariff Card”** means a schedule, issued by the Service Provider, from time to time, in respect of the Security Deposit, Charges for New Sewage Connection, Sewage Disposal Charges, Delayed Payment Charges and such other charges to be paid by the Applicant/ Consumer to the Service Provider.
- (xiv) **“Termination”** means as defined in clause 10.1 of this Agreement.

## **2. DISCHARGE OF SEWAGE:**

- 2.1 The discharge of sewage would be allowed, at the discretion of the Service Provider and the Service Provider shall at any time, be entitled to withdraw the Services.
- 2.2 By submission of this Application duly filled by the Applicant, shall be deemed to have unconditionally agreed to and accepted discharge of sewage/ wastewater on the terms and conditions herein contained, and these terms and conditions shall constitute a binding Agreement between the Service Provider and the Applicant.

## **3. USE OF SEWAGE CONNECTION:**



- 3.1 Sewage connection shall be used only for the purpose of discharging sewage/ wastewater from the building as per the type of Connection requested for in the Application form at the Site and shall not be permitted/allowed to be used for any other purpose.
- 3.2 Applicant shall have to obtain the specific prior written permission of the Service Provider for change in installing any pipeline and / or modification / alteration/ transfer of the Connection.
- 3.3 The Applicant shall not discharge the sewage or wastewater to any other Site or permit any other person or party to use the sewage connection.

#### **4. SEWAGE CONNECTION:**

- 4.1 On submission of the Application and payment of the security deposit charges as per the tariff card, the Service Provider or its representative will carry out a technical survey of the Site.
- 4.2 On completion of the technical survey, the Service Provider shall determine the location and manner of laying the pipeline for discharge of sewage/ wastewater as per the prevailing engineering norms into the Machine-hole of Service Provider. The applicant shall make necessary arrangement for a collection chamber having the capacity of one-hour retention time of the sewage flow and the connection of the pipeline for discharge of sewage into the machine-hole of main sewage pipeline. The applicant shall be required to comply with the standard engineering norms and practices for the connection of sewage line and shall also follow the instruction as may be given by the Service Provider. If at the time of connection or subsequently any damage is caused to the property / pipeline/

machine-hole of the Service Provider, it should be repaired by the applicant at his own cost as per the satisfaction of the Service Provider.

- 4.3 The sewage Connection will be provided subject to necessary approval and permission being received along with the payments of the applicable charges, received from the Applicant as charges towards the cost of providing the Connection as well as payment of connection charges.

## **5. CHARGES/CONTRIBUTION:**

- 5.1 The sewage Connection shall be valid only after receipt of Security Deposit and completion of all formalities by the Applicant.

- 5.2 The sewage disposal charges in various segments like Commercial, residential, institutional will be determined by the Service Provider. These charges shall be subject to revisions from time to time, without prior notice to the Applicant.

5.3 All cess, taxes, duties, assessments and any other levies imposed or to be imposed in future by any State or Central Government or any Statutory Authority in relation to the discharge of sewage/ waste water shall be passed on and be payable by the Applicant.

- 5.4 For any extension / modification, rectification / alteration of the pipeline or any part of the Connection, the Applicant shall request the Service Provider in the format prescribed by the Service Provider or by a written request. The request shall be considered by the Service Provider and subject

to the technical feasibility and receipts of advance payment for the said charges are undertaken by the Service Provider. The charges for the same may be decided by the Service Provider. In no case, the Applicant shall have the right to modify / alter the Connection without prior consent of the Service Provider. In the event if it is found that the Connection has been modified / altered / tampered in part or whole, the Service Provider at its sole discretion may discontinue the Services and shall forfeit Connection charges & Security Deposit. The decision of the Service Provider shall be final and binding upon the Applicant.

## **6. BILLING AND PAYMENT:**

- 6.1 The sewage disposal charges shall be billed on the basis of the quantity of Water supplied to the Applicant as measured through the meter(s) to be installed by the Service Provider. In the event of fault of the meter(s) to record correct consumption, the quantity of Water consumed by the Applicant shall be determined on the average consumption of last three months or on any other basis as determined by the Service Provider. The decision of the Service Provider as to the quantity of the Water supplied to the Applicant shall be final.
- 6.2 A Bill shall be sent on a monthly basis i.e. once in a month or as determined by the Service Provider at the prevailing rate of charges for sewer disposal, in the particular period. (The Bill will include all other taxes, cess, duties and levies) payable for the relevant period by the Applicant. The period and manner of billing can be changed at the discretion of the Service Provider. An amount of the Bill is required to be paid in full by the Applicant within the stipulated time frame as indicated in the Bill.

- 6.3 The Service Provider reserves its right to vary the period / frequency and manner of billing from time to time without prior notice to the Applicant. Every Bill issued by the Service Provider shall be paid in full or before its due date by the Applicant or else Service Provider has the right to stop the Services without any prior notice to the Applicant.
- 6.4 In case of payment after due date, the Applicant shall have to pay delayed payment charge at rates specified by the Service Provider from time to time, as stated in the Tariff Card.
- 6.5 In case of dishonor of any cheque for any charges payable to the Service Provider, the Applicant shall without prejudice to the other rights of Service Provider hereunder or in law, be liable to pay to Service Provider such charges as decided by the service provider from time to time.
- 6.6 The Applicant shall bound to make payment of bill in full on or before the due date even in the cases where the Applicant has lodged complaint or raised any dispute with respect to the sewage disposal charges or otherwise In case of any dispute or any discrepancy with respect to amount of Bill, the Applicant shall be required to lodge his complaint within 7 (seven) days after the payment is made. Service Provider reserves the right to stop Services without any prior notice in case of non-compliance with the above by the Applicant.
- 6.7 If the due date for payment of Bill is falling either on Sunday or holiday then the same shall be considered to be due on the previous working day of the holiday.

- 6.8 The Applicant shall at all times from the date of sewage connection till the expiry or Termination of this Agreement will pay the Bill timely & regularly and maintain payment of Security Deposit to the Service Provider. The Service Provider would not pay any interest on the Security Deposit to the Applicant.
- 6.9 The Security Deposit shall be as per Tariff Card.
- 6.10 The Service Provider shall have the right to adjust any unpaid amount from Security Deposit, if the Applicant fails to pay any sum due and payable by the Applicant under this Agreement. The decision of the Service Provider shall be final and binding upon the Applicant.
- 6.11 Subject to no unpaid amount from the Applicant, the Security Deposit will be refunded to the Applicant after on Termination of the Agreement, or any such matter without any interest on this amount.
- 6.12 The Applicant shall be liable to pay the Minimum Fixed Charges per month, as prescribe in the Tariff Card, even if the Applicant has not consumed any amount of water or has consumed less than his monthly demand of water, during the period of billing month.

## **7. OBLIGATION OF THE APPLICANT:**

- 7.1 Prior to the sewage connection, the Applicant shall at its own cost obtain all necessary consents, approvals and permissions from all relevant authorities as may be required to obtain the Sewage Connection. It will be the sole responsibility of the Applicant to obtain all such “No Objection Certificates” (NOCs).

- 7.2 The Applicant has to make necessary provision for internal pipelines for discharge of sewage/ wastewater up to the machine-hole of main sewage pipeline at its own cost and shall comply with the provisions of GIFT DCR
- 7.3 The Applicant shall permit the Service Provider's authorized representative to access the Site for the purpose of laying pipelines and undertaking installation and also to alter or replace any pipeline, undertaken any inspection, installation of equipment if the Service Provider in its discretion determines the same to be necessary or expedient.
- 7.4 The Service Provider reserves the right to discontinue the Services in the event of any dispute between the Applicant and the Service Provider.
- 7.5 The Applicant shall take all adequate precautions and adopt all safety measures to safeguard pipeline, machine-holes and other installations installed by the Service Provider for sewage connection. In case the Applicant carries out any unauthorized repair, alteration, modification, directly or indirectly, in the pipeline and other installations installed for the purpose of sewage connection, the same shall be deemed to be breach of the contractual terms contained therein and in case of any accident, the Applicant shall be solely responsible for the same. Service Provider shall not take any responsibility on account of the same. Service Provider has the right to stop the Services immediately in such cases. In case of any damage or repair to the water meter then meter will be replaced by GIFTCL at Applicant's cost.

## **8 PROPERTY/OWNERSHIP:**

- 8.1 Pipe fittings and other installations used for the purpose of sewage connection up to the machine-hole shall be done by the Applicant and the Applicant shall maintain the collection chamber and pipelines up to the machine-hole chamber, in working condition. The manner and mode of disposal of sewage/ wastewater is at the absolute discretion of the Service Provider.
- 8.2 The Applicant shall permit the authorized representative of the Service Provider to enter upon the property/Site for the purpose of inspection and maintenance checkups. The Applicant shall verify the identification of such authorized representative prior to permitting such person's access upon the property/Site. The Service Provider shall not be liable/ responsible for the entry by any unidentified person or any imposter or person claiming to represent or act on behalf of the Service Provider.
- 8.3 The Applicant shall not tamper or interfere, nor permit any tampering or interference with the pipes and other installations for sewage connection. The Service Provider shall, without prejudice to its other rights, be entitled to disconnect the Connection without giving any prior notice and shall be entitled to recover suitable compensation for any damages caused by the Applicant.
- 8.4 The Applicant shall not adjust, clean, repair, replace or otherwise handle any of the pipes, t and other installation. Any damage or breakdown in the pipes or other installations shall be immediately intimated by the Applicant to the Service Provider.

## **9. SEWAGE DISPOSAL BY THE SERVICE PROVIDER:**

- 9.1 The Service Provider will endeavor to provide the Applicant with consistent and regular Services for sewage/ wastewater disposal.
- 9.2 The Service Provider reserves the right to revise the sewage disposal charges from time to time.
- 9.3 The Service Provider will collect the sewage/ wastewater at the machine-hole located at site.
- 9.4 In case of any leakage or fault in Connection or any equipment thereof, the Service Provider upon intimation by the Applicant shall rectify the leakage or fault. However, the Service Provider shall not be liable for any compensation or any damages, whatsoever.

## **10. TERMINATION:**

- 10.1 Without prejudice to the other rights of the Service Provider in law otherwise, the Service Provider may at any time, immediately and without notice disconnect the Services and terminate the Agreement with the Applicant (“Termination”), if;
  - (i) The Applicant fails to pay the Service Provider any sum due to the Service Provider under the terms and conditions and/or otherwise within the due date of payment thereof.
  - (ii) The Applicant fails to comply with any of its obligations and/or commits any breach of the covenant or conditions on his part to be observed, performed or fulfilled.



- (iii) The particulars as furnished by the Applicant in the Application are found to be false or incorrect.
- (iv) The sewage connection is used by the Applicant for any other purpose.
- (v) The Applicant tampers/modifies/alters the Connection without the consent of the Service Provider.

10.2 The Applicant may, by written notice of one month to the Service Provider requests termination of sewage connection.

- (i) In such case, no charges/contributions paid by the Applicant to the Service Provider shall be refunded except Security Deposit, without any interest, subject to settlement of all pending bills and dues by the Applicant.

10.3 In the event of Termination of the sewage connection, without prejudice to the other rights of the Service Provider:

- (i) The Service Provider shall suspend the Services.
- (ii) The Applicant shall be liable to pay the Service Provider all amounts due till that date of termination of this Agreement.

## **11. RECONNECTION:**

11.1 If after Termination the Applicant applies for the restart of the sewage connection (“Reconnection”), all charges like Connection / commissioning (as determined by the Service Provider) shall be borne and paid by the

Applicant and Applicant has to complete all formalities related to new Connection.

- 11.2 Sewage reconnection will be at the sole discretion of the Service Provider and the Service Provider may refuse the same, without assigning any reasons whatsoever.

## **12. TRANSFER OF THE CONNECTION:**

- 12.1 The Service Provider permits transfer of the Sewage Connection from one name to another name in the event of transfer or assignment of the leasehold rights of the Building, The transfer is permitted subject to the payment of such charges as may be decided by the Service Provider, from time to time. The transfer of Sewage Connection from one name to another name is subject to submission of fresh application and necessary documents, as may be required by the Service Provider and will be affected only upon full satisfaction by the Service Provider.

## **13. LIABILITY / INDEMNITY:**

- 13.1 The Applicant shall not use the Sewage connection for any unauthorized or unlawful activity or purpose. In case of any offense under or violation of any law, statute or regulation by the Applicant, the Applicant alone shall be responsible and liable for the said offense or violation and the Applicant agrees to indemnify and keep indemnified the Service Provider from and against any loss, claim, action or proceeding that may be suffered or incurred by the Service Provider as a result of any such offense or violation by the Applicant.

- 13.2 The Applicant shall be liable for any loss or damage caused to pipes or other installations whether caused on account of negligence by the Applicant or its associates or agents or due to theft, sabotage or otherwise, however.
- 13.3 The Applicant shall be deemed to be in exclusive possession and control of all the sewage/ wastewater pipes and outlets up to the machine-hole and the Applicant shall be liable for any leakage, maintenance or for any damage caused to any person or property as a result thereof. Accordingly, the Applicant shall protect, indemnify and hold the Service Provider harmless against all claims, demands, actions, suits, proceedings, judgments and all liabilities, costs, expenses, damages or losses arising out of resulting from or incidental or in connection with the discharge of sewage/ wastewater.
- 13.4 The indemnity provisions will be enforceable notwithstanding termination of services for sewage discharge.
- 13.5 The Service Provider will put in his best endeavor to cause minimum damage to garden, lawn, plants, decorations, tiles and any other decorative surface within the premises of the Applicant both on the ground and on the walls. Accordingly, the Applicant shall protect, indemnify, and hold the Service Provider harmless against all claims, demands, action, suits, proceedings, judgments and all liabilities costs, expenses, damages or losses arising out of resulting from or incidental to or connection with the discharge of sewage/ wastewater.

#### **14. FORCE MAJURE**

The Service Provider shall not be liable for any loss / damage, costs, charges or expenses whatsoever that may be caused to or occasioned by the Applicant or another person on account of failure to perform or for the delay in performing any provisions of this Agreement if the same is caused or results due to acts of God, War, Revolt, Fire, Tempest, Flood, Earthquake, Lighting, direct or indirect consequences of God (declared/undeclared) Sabotage, Hostilities, National emergencies, civil disturbances, commotion, embargo or any other law promulgation, regulation or ordinance whether Central or State or Municipal, breakage bursting or freezing of pipeline or occurrence of any event beyond the control of the Service Provider provided further that the Service Provider shall not be responsible and/or liable for any losses direct or consequential caused to the Applicant if the same is caused due to the reasons stated hereinabove.

**15. AMENDMENT:**

The Service Provider may at any time amend, add to or delete any or all these terms and conditions with immediate effect and in such case, the amended terms and conditions shall be informed to the Applicant and shall be binding on the Applicant.

**16. TERMS BINDING ON SUCCESSORS:**

These terms and conditions shall be binding on the heirs, administrator, successor and assigns of the Applicant.

**17. NOTICE:**

Any notice to the Applicant will be sent to the address of the Applicant stated in its Application.

## **18. ARBITRATION:**

All disputes arising out of this Agreement shall be referred to the sole arbitrator appointed by the M.D/CEO of the Service Provider and the provisions of The Arbitration and Conciliation Act 1996 shall be applicable. The award of the Sole Arbitrator shall be final and binding on both the Service Provider and the Applicant. The seat of arbitration shall be at Gandhinagar. However, in case of any application or appeal to be preferred the courts at Gandhinagar would only have the exclusive jurisdiction.

## **DECLARATION:**

I confirm that I am authorized to make this Agreement with GIFTCL for sewage connection. I do hereby declare that I have read and understood the above terms and conditions including the charges as applicable from time to time. I hereby accept the above stated terms and conditions in its entirety, irrevocably and unconditionally and accordingly put and subscribe my hand to these terms and conditions.

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Name of the Applicant/Developer  
representative

Sign and seal of the Rep-

of Applicant/Developer

Place:

Date:

## Tariff Structure

### I. Permanent Sewage Connection Charges:

#### 1. Charges

##### I. New connection charges:

This one-time charge is in the form of connection charges which is fixed, nonrefundable and based on ultimate water demand (in MLD) given at design stage.

#### 2. Cost Recovery

- 1) Recovery of connection charges includes cost of 50 meters pipeline and 2 numbers of manholes.
- 2) Cost recovered through DR charges includes infrastructure cost of sewer pipeline up to nearest manhole of city level main sewage corridor and treatment plant.

##### I. Security Deposit (interest free)

Sr. No.	Consumer Category	Sewage (INR)
1	Domestic	3 months X Total Sewage Charge
2	Non - Domestic	4 months X Total Sewage Charge

##### II. Consumption Tariff

Charges for FY 2023-24 i.e. from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2024.

Sr. No.	Consumer Category	Sewage Charges* (INR/ KL)
1	Domestic	30% of water charges
2	Non - Domestic	

\* Sewage charges will increase at proportion of 10% every year starting from FY 2023-24, up till it reaches to 60% of water charges; further increase will be decided by GIFTCL.

Charges for FY 2024-25 i.e. from 1<sup>st</sup> April 2024 to 31<sup>st</sup> March 2025.

Sr. No.	Consumer Category	Sewage Charges* (INR/ KL)
1	Domestic	40% of water charges
2	Non - Domestic	

\* Sewage charges will increase at proportion of 10% every year starting from FY 2023-24, up till it reaches to 60% of water charges.

### III. Delay Payment Charges

Sr. No.	Consumer Category	Penalty
1	Domestic	18% interest per annum of the bill amount payment after due date
2	Non – Domestic	

The Temporary Sewage connection will be treated as per non-domestic charges/tariff.

#### Note for Tariff Structure

- All the above rates/ charges/ tariff mentioned are exclusive of all taxes



- The billing will commence from the date of connection.
- The above tariff structure is subject to change from time to time by the Service Provider, without prior intimation to the developer.
- Penalty/ Cost recovery as per GIFT norms from developers for violation/ misuse of system.

# ANNEXURE II APPLICATION FORM FOR SEWAGE CONNECTION



## Application Form

Gujarat International Finance Tec-City Company Limited

Applied for Utility:		<input type="checkbox"/> District Cooling System ડિસ્ટ્રિક્ટ કુલિંગ સિસ્ટમ	<input type="checkbox"/> Water પાણી	<input type="checkbox"/> Sewage સુએજ	<input type="checkbox"/> Solid Waste (AWCS) એ સબ્સ્ટ્રી એસ
APPLICATION FOR:		<input type="checkbox"/> Permanent Connection કાયમી જોડાણ	<input type="checkbox"/> Temporary Connection સંચાલી જોડાણ	<input type="checkbox"/> Name Change નામ બદલી	<input type="checkbox"/> Demand Extension માંગનો વધારો
		<input type="checkbox"/> Demand Reduction માંગનો ઘટાડો	<input type="checkbox"/> Removal of Services સેવા બંદ કરવી		
Type of Premises / જગ્યાનો વર્ગ (પ્રકાર) :		For Office Use / ઓફિસ કામ માટે :		તાજેતરનો પાસપોર્ટ સાઈઝ ફોટો Latest Passport size Photo  Sign Here / સહી	
<input type="checkbox"/> Domestic ઘરેલું		<input type="checkbox"/> Non-Domestic બિન ઘરેલું			
<input type="checkbox"/> Others – Please Specify અન્ય – વિગત સ્પષ્ટ જણાવો		Date તારીખ			
For Temporary Supply / સંચાલી જોડાણ હોય તો : Date of connection _____ to _____ સંચાલીની તારીખ થી સુધી		Application No. અરજી નંબર			
In Case of Name change: Name of existing consumer નામ બદલી માટે : હાલનાં ગ્રાહકનું નામ		Consumer No. ગ્રાહક નંબર			
		SAP No. એસ એ પી નંબર			
		Applicable Tariff લાગુ પડતું			
<input type="checkbox"/> E-Bill confirmation / ઈ-બિલ પુષ્ટિ					

Details of Applicant supported by necessary evidences are furnished hereunder / અરજદારની વિગતો જરૂરી દસ્તાવેજ પુરાવા સહિત આ સાથે સામેલ છે:

Full Name of Applicant

અરજદારનું નામ

Applicant Type / અરજદારનો પ્રકાર					
<input type="checkbox"/> Public Ltd. પબ્લિક લી.	<input type="checkbox"/> Pvt. Ltd. પ્રાઇવેટ લી.	<input type="checkbox"/> Partnership ભાગીદારી	<input type="checkbox"/> Proprietary માલિકી	<input type="checkbox"/> Govt. Dept. સરકારી વિભાગ	<input type="checkbox"/> Reg. Trust રજીસ્ટર્ડ ટ્રસ્ટ
<input type="checkbox"/> Co-operative Society કો. ઓ. સોસાયટી					
PAN No. :			GST No. :		
Occupancy Type: કબજાનો પ્રકાર		<input type="checkbox"/> Owner માલિક	<input type="checkbox"/> Joint Owner સહ માલિક	<input type="checkbox"/> Tenant ભાડુઆત	<input type="checkbox"/> Lease લીઝ
<input type="checkbox"/> Others અન્ય					
Connection Address details / સંચાલીની જગ્યા અને વિગતો :					
Unit / Flat No.: એકમ / ફ્લેટ નં. :	Floor No.: ફ્લોર નં. :	Building Name: બિલ્ડિંગ નું નામ :			
Block No.: બ્લોક નં. :	Road No.: રોડ નં. :	Zone: ઝોન :	<input type="checkbox"/> DTA ડીટીએ	<input type="checkbox"/> SEZ એસઝીએ	GIFT City, Gandhinagar - 382355 ગિફ્ટ સિટી, ગાંધીનગર - ૩૮૨૩૫૫
E-mail: ઈ-મેલ :					
Mobile No.: મોબાઇલ નં. :			Landline Tel. No.: લેન્ડલાઇન ટે. નં. :		
Name and Designation of Authorized Person: અધિકૃત અધિકારીનું નામ અને પદ :					
Total Build up Area / કુલ વિસ્તાર બનાવો : _____ sq m / ચો બી.			Total number of Occupants / કબજેદાર-પરની કુલ સંખ્યા :		

DCS Demand details / ડિસ્ટ્રિક્ટ કુલિંગ સિસ્ટમ માંગની વિગતો :

Contract Demand / કરાર માંગ : _____ TR / ટી આર	Ultimate Demand / અંતિમ માંગ : _____ TR / ટી આર
--	---

Water / Sewage / AWCS Demand details / પાણી / સુએજ / એ સબ્સ્ટ્રી એસ માંગની વિગતો :

Total Water Demand / કુલ પાણીની માંગ : _____ Liters/day / સ્પષ્ટ દિવસ લિટર		
Flushing / ફ્લશિંગ : _____ Liters/day	Domestic / ડોમેસ્ટિક : _____ Liters/day	Gardening / બાગીચા : _____ Liters/day

Gujarat International Finance Tec-City Company Limited

EPS - Building no. 49A, Block 49, Zone 04, Gyan Marg, GIFT City, Gandhinagar - 382355

## A) List of latest documents to be attached with new application

## i) Identity Proof (self-attested) (anyone)

- ☐ Electoral Identity Card
 ☐ Passport
 ☐ Ration Card  
☐ Driving License
 ☐ PAN Card
 ☐ Aadhar Card

## ii) Proof of ownership or occupancy for which utility connection is required (anyone)

- ☐ Copy of registered sale deed or lease deed  
☐ Letter of Allotment  
☐ Ownership Certificate issued by GIFTUDA  
☐ NOC from Developer (For Temporary connection only)  
☐ Copy of Index (For Name Change)

## iii) If the applicant is a company, trust, educational institute, government department etc. The application form shall be signed by a competent authority (e.g., Branch Manager, Principal, Executive Engineer, etc.) along with a relevant resolution authority letter of the institution concerned.

## iv) In case of Public and/or Private Limited Company – The applicant shall furnish the Memorandum and Articles of Association and Certificate of Incorporation along with an authorization in the name of the applicant for signing the requisition form and agreement.

## v) In case of a partnership firm – The applicant shall furnish the partnership deed and an authorization in the name of applicant for signing the requisition form and agreement.

## vi) Clearly marked area of utilization on approved plan of GIFTUDA, jointly signed by building developer's authorized representative and Leaseholder's authorized representative.

## vii) List of Directors with address &amp; contact details on company's letter head (exempted for Government Institutions, PSU Banks).

## viii) Copy of PAN and GST details of the applicant.

## ix) Duly filled and signed installation test certificate is to be submitted before the release of connection. The installation test certificate is to be signed and sealed by the developer.

## x) Buildup area certificate from GIFT UDA.

## B) List of latest documents to be attached with application for Name Change

## i) Submit the document mentioned at A i) &amp; ii)

## ii) No Objection Certificate from the registered consumer or authorized person of the premises shall be required for cases involving transfer of security deposit in the name of applicant.

## iii) No Objection Certificate by Co-Owner, in case of joint Ownership.

## iv) Copy of latest bill duly paid.

## v) In case the existing consumer is deceased, death certificate is required.

## vi) In case of change of name to legal heir, any of the following document shall be considered as acceptable proof of legal heir:

- ☐ Registered Will/deed
 ☐ Succession or legal heir certificate.  
☐ Mutation in municipal/land records

## vii) NOC from other legal heir(s) in case the connection is to be changed in the name of one of the legal heirs.

## viii) If the applicant is company, submit the documents mentioned at A iii), iv), v), vi) &amp; vii).

## C) In case of application for contract demand alteration/conversion of service/change of consumer category, submit work completion certificate and installation test certificate from developer (A ix)).

## D) Any Utility dues outstanding in GIFT City area of operation in consumer's name: Yes/No.

If 'Yes', provide Consumer No.

ગિફ્ટ સિટી ક્ષેત્રમાં અરજદારના નામે અન્ય કોઈપણ બીજા ચુકવવાનું બાકી છે : હા / ના જો 'હા' હોય તો ગ્રાહક નંબર આપો

## E) Any Utility dues outstanding for the premises for which connection applied for: Yes/No.

If 'Yes', provide Consumer No.

જે પરિસરમાં કનેક્શન માટે અરજ કરી છે તે પરિસર માટે કોઈપણ બિલ ચુકવવાનું બાકી છે : હા / ના . જો 'હા' હોય તો ગ્રાહક નંબર આપો

## F) Declaration / જાહેરનામું

I / We hereby declare that.

a) The information provided in this application is true to my knowledge.

b) I/We desire and agree with the utility supplier to avail connection for the above-mentioned purpose and of the demand provided in this application form for the period not less than 2 yrs. From the first day of the month next to date of commencement of connection by the supplier.

c) I/We have read the Supply Code issued by GIFT and agree to abide by the conditions mentioned therein.

d) I/We will deposit utility dues regularly as per the applicable tariff and any other charges.

e) I/We will own the responsibility of security and safety of the meter, its accessories, and the installation thereafter.

હું / અમે આથી જાહેર કરીએ છીએ કે

એ) આ અરજમાં આપેલી માહિતી મારી જાણકારી મુજબ સાચી છે.

બી) હું/અમે ગિફ્ટ સિટી સાથે ઉપજા અને સંમતિ ધરાવીએ છીએ કે ઉપરોક્ત નિર્દિષ્ટ વેલુ માટે જ જોડાણ શરૂ કરવામાં આવે એ તારીખ પછીના મહિનાના પ્રથમ દિવસથી બે વર્ષથી ઓછા નહીં એવા સમયગાળા માટે આ અરજ ફોર્મમાં દર્શાવેલ માંગ પ્રમાણે હોય.

સી) હું / અમે ગિફ્ટ સિટીનો સપ્લાઈ કોડ વાંચેલ છે અને તેમાં ઉલ્લેખિત શરતો સાથે બાબત થવા સંમત છું/છીએ.

ડી) હું / અમે બિલના બાકી નાણાં નિયમિત રીતે લાગુ કર અને અન્ય ચાર્જિસ પ્રમાણે જમા કરાવીશું / કરાવીશું.

ઈ) હું / અમે મીટર, એના એસેસરીઝ અને ઇન્સ્ટોલેશન પછીની સુરક્ષા અને તકેદારીની જવાબદારી લઉંશું / લઉંશું.

(Signature of the consumer or Authorized Signatory with Company Seal)

(ગ્રાહક અથવા અધિકૃત અધિકારીની સહી અને સીલકો)

Witness Name / સાક્ષીનું નામ

(Building Developer Authorized Person / બિલ્ડિંગના વિકાસકર્તા અધિકૃત અધિકારી)

Witness Signature /સાક્ષીની સહી

(Building Developer Authorized Person / બિલ્ડિંગના વિકાસકર્તા અધિકૃત અધિકારી)

\*In case of thumb impression, name &amp; signature of witness is necessary. In case the applicant is a Firm / Partnership / Ltd. Company, Power of attorney holder's signature must be supported by official seal.

**Documents required at the time of submission of application****For New Connection:**

- 1) Building approval plan approved by GIFT UDA.
- 2) No Objection Certificate from GIFTCL
- 3) Certificate of Incorporation, Memorandum of Association of the applicant company or registration/ certificate of Partnership firm
- 4) List of Directors/ Partners with their contact details on the letter head of the Company/ Firm duly signed & certified by the Authorized Person.
- 5) Board Resolution/ Power of Attorney in favor of the Authorized Signatory

**For Reconnection:**

- 1) No Objection Certificate from GIFTCL
- 2) Copy of Last Paid Sewage Bill

**For Transfer of Name:**

- 1) No Objection Certificate from GIFTCL
- 2) Certificate of Incorporation, Memorandum of Association of the applicant company or registration/ certificate of Partnership firm;
- 3) List of Directors/ Partners with their contact details on the letter head of the Company/ Firm duly signed & certified by the Authorized Person.
- 4) Board Resolution/ Power of Attorney in favor of the Authorized Signatory
- 5) Payment proof of last Sewage Bill

### ANNEXURE III RAW WASTEWATER CHARACTERISTICS

Sr. No.	Parameters	Unit	Value
1	pH	-	6.5-8.5
2	BOD5	mg/L	250-350
3	COD	mg/L	450-550
4	TSS	mg/L	350-450
5	TKN	mg/L	40-50
6	Total Phosphorous	mg/L	5-7
7	Oil and Grease	mg/L	20-30