



ELCITA

## e- Toilet

India's First Self-operating Public eToilet

Proposal submitted to ELCITA, Bangalore



e-Toilet LC (Stainless Steel)Model

Manufactured By:



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## 1. Introducing eToilet: India's First Electronic Public Toilet

E-Toilet (patent pending) is a modular; pre-fabricated public toilet made of steel and is integrated with user-friendly electronic interfaces, to ensure cleanliness and hygiene to every user. Unmanned and automated, e-Toilets have remote monitoring capabilities and its health status can be tracked over web. These toilets incorporate full-cycle approach in sustainable sanitation by integrating electrical, mechanical and web-mobile technologies. They control entry, usage, cleaning, and remote monitoring capabilities with multiple revenue options.

### Features- Snapshot

- Easy to install
- Consumes less water and Power efficient
- Enhanced cleanliness through auto flushes & floor washing
- Unmanned operations
- Coin operated entry/ free access
- Onsite waste treatment using anaerobic biodegradation
- No regular manual cleaning/ maintenance required
- Outdoor advertising space on eToilet panels



## 2. General Product Features: eToilet For General Public

| Features  | Advantage  | Benefit  |
|---|--|--|
| Body built up of Stainless Steel (SS) or Mild Steel – Cold Rolled Steel (CRS) with powder coating | Durable  | Withstands environmental decaying issues                               |
| Coin validator (in SS model)  | Unmanned solution for public sanitation with transparency  | Coin collection details can be monitored from remote                   |
| Pre Flush, Auto flush, Automatic platform cleaning  | Cleans the toilet before and after usage   | Always Clean & Hygienic and not dependent on the manual operation      |
| LED indications   | Alert for user if the unit is free, occupied, water low etc.   | No user learning, easy to operate                                      |
| Voice Guidance (in SS model)  | Helps the user to operate the toilet without manual assistance. GPRS alert will help in the monitoring the health status of the unit | Self-service toilet facility for common man                            |
| Display boards  | Can place instructions in local language for the user to read and identify   | Visual alerts are easy to identify with the help of pictures and signs |

|                                  |  |   |
|----------------------------------|--|---|
| In built water tank of 225 liter | High and Low water level can be monitored  | Ensure water availability for smooth operations   |
| Advertisement panels             | Income generating and sustainable model  | Public messages, corporate advertisements can be displayed to generate income                 |
| GPRS Connectivity (in SS model)  | GPRS alerts will help to monitor the health status of machines, coin collection etc. remotely                                      | Online remote monitoring of the unit is possible.   |
| Portability                      | Unit comes in nut and bolts. Can be shifted from one location to another if needed in case of road widening, area development etc. | The invested amount will not be wasted in case the unit has to be shifted to another location |

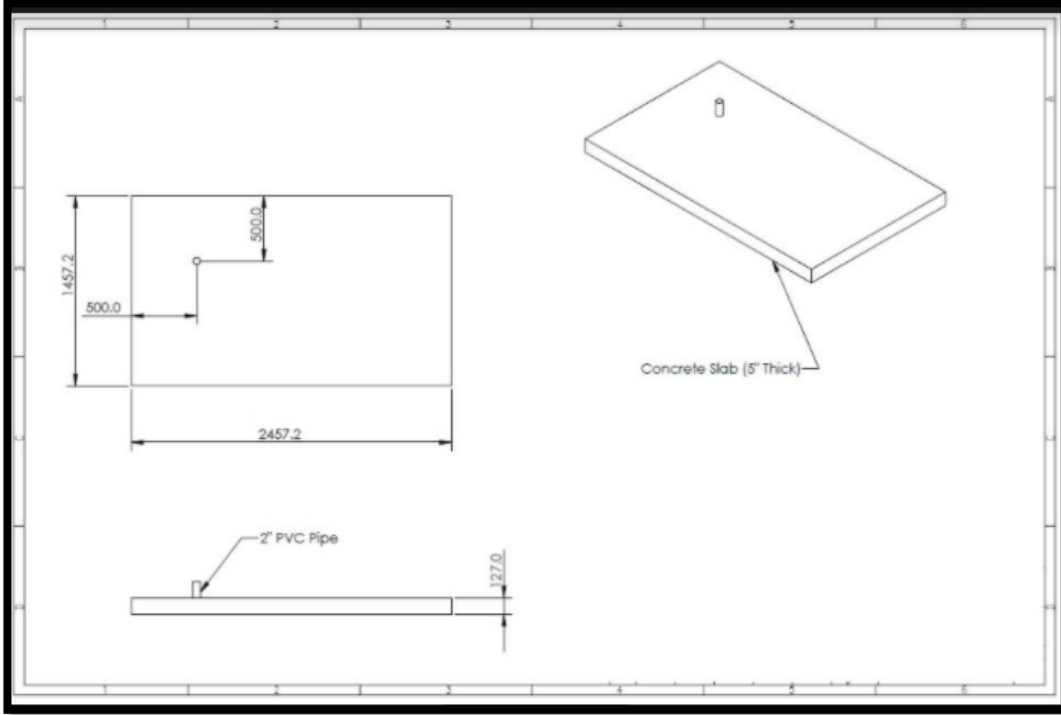
### 3. Functional Description

e-Toilet has to be placed on a basic civil construction base. The unit will have an Indian style closet, health faucet, lights, status display & instruction boards, etc. as the case may be. Water tank of 225 litre capacity will be erected on top of the toilet unit. The tank will be connected to the three flushes (pre-flush/platform washing/ after use flush) in the unit.

There will be display light outside the toilet unit, which shows whether the unit is 'Occupied' indicating with Red light or 'Unoccupied' indicating with Green light. The user can enter and close the door manually, similar to a conventional toilet.

Upon entering the toilet, indoor lights will be switched on automatically. Pre-flush system will wet the closet initially. Toilet flush can be activated using a manual flush cock provided inside the toilet. Even if the user forgets to flush after usage, the system will automatically flush after the exit. Exit from the unit is completely manual. An automatic floor cleaning mechanism is also provided through which, the floor will be cleaned automatically by pressure washing the floor. The floor cleaning can be activated either through a push switch or it can be programmed to function after a specified usage.





## 20 E-TOILETS INSTALLED AT ELECTRONICS CITY, BANGALORE

| Phase     | Location (Elcita)  | SI numbers            |
|-----------|--|-----------------------|
| Ist Lot   | Fanuc (Nr) (Near Toll )- Elcita 1                              | ESS/APT/1401D0123 (I) |
|           | HP Entrance (Nr HP Office)-Elcita 1                            | ESS/APT/1401D0120 (I) |
|           | NTTF -under fly over (Under Flyover)-Elcita 1                  | ESS/APT/1401D0121 (I) |
|           | Y Junction East Phase (Phase II)-Elcita 1                      | ESS/APT/1401D0122(I)  |
| IInd Lot  | BWSSB (Velakanni Rd)-Elcita 2                                  | ESS/APT/1508D0263     |
|           | Fire Station Rd (CANARA BANK)-Elcita 2                         | ESS/APT/1508D0264     |
|           | Under Fly Over East Phase(Under Toll Bridge Phase II)-Elcita 2 | ESS/APT/1508D0265     |
|           | Police Station (L&O) (POLICE STATION-Elcita) 2                 | ESS/APT/1508D0266     |
| IIIrd Lot | NTTF (under fly over)- Elcita 3                                | ESS/APT/1511D0328     |
|           | Doddathogur (Velankanni Bus stop)- Elcita 3                    | ESS/APT/1511D0336     |
|           | Tech Mahindra - Elcita 3                                       | ESS/APT/1511D0337     |
|           | WE School-Elcita 3   | ESS/APT/1511D0329     |
| 4th Lot   | Shantipura Jn (Fruit market )-Elcita 4                         | ESS/APT/1503D0415     |
|           | HP Skywalk (HP Gate) -Elcita 4                                 | ESS/APT/1503D0414     |
|           | DMart -Elcita 4  | ESS/APT/1503D0409     |
|           | ELCIA Complex (Elcita Office)-Elcita 4                         | ESS/APT/1503D0410     |
| 5th Lot   | KSSIDC backside (Food Ware HOTEL OPP,Elcita                    | ESS/APT/1612D0582     |
|           | MSM Building,ELCITA 3  | ESS/APT/1603D0680     |
|           | Pumb House,ELCITA 4  | ESS/APT/1603D0681     |
|           | Traffic Police Station(KSSIDC COMPLEX BLOCK 3,Elcita           | ESS/APT/1612D0583     |

### Going Social

Website: <http://eramscientific.com/>

Facebook: <http://www.facebook.com/delightbharath?ref=stream>

<https://www.facebook.com/eramscientificolutions>

YouTube: <http://www.youtube.com/channel/UCcdXDAGNGuGBi4czNibh2cw>

Twitter: <https://twitter.com/Eramscientific>

Brochure <http://www.eramscientific.com/sites/all/themes/eram/images/Brochure%20Final.pdf>

Video <https://www.dropbox.com/s/s0dlt94vgdtm86x/E%20TOILET%20SIGNATURE%20FILM.mp4?dl=0>