

Hashu Advani Complex, Near Collector's Colony, Chembur (E) Mumbai 400074.

## **Criteria 7- Institutional Values and Best Practices**

# Key Indicator - 7.1 Institutional Values and Social Responsibilities Environmental Consciousness and Sustainability

#### 7.1.4 Water conservation facilities available in the Institution

- Rain water harvesting
- Borewell /Open well recharge
- Construction of tanks and bunds
- Waste water recycling
- Maintenance of water bodies and distribution system in the campus

#### **DVV Query**

- 1) Bills for the purchase of equipment's for the facilities created under this metric.
- 2) Any other relevant proof for the selected options.

#### **DVV Response**

- Under this we have claimed following 3 facilities
  - 1. Rain water harvesting
  - 2. Borewell /Open well recharge
  - 3. Waste water recycling
- 1) We are providing bills for the purchase of equipment for the facilities under this metrics:
  - Sewage Treatment plan Purchase bill
  - Bore well /Open well recharge cleaning and exuviation Bill
- 2) We have also provided the Sewage treatment plan, Rainwater harvesting system, Ring well and Bore well facility related documents as proofs for the claims.
- 3) The geo tagged photos of the facilities are uploaded in the SSR.

The required documents bills and supporting documents are attached below.



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## **INDEX**

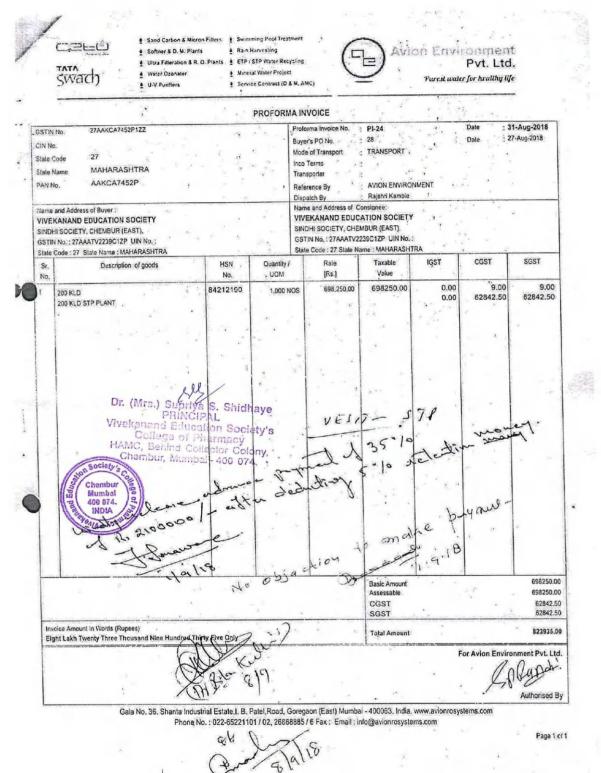
Sr. No.	Content	Page No	
	Bills for the purchase of equipment's for the facilities created		
	<u>under this metric</u>		
1.	Sewage Treatment Plant (STP) equipment purchase Bill		
	• Payment receipts	3	
	Ringwell Cleaning and exuviation Bill	5	
2.	Any other relevant proof for the selected options		
2.1	Sewage treatment Plant (STP)		
	Sewage treatment Plant (STP) Certificate	6	
	<ul> <li>Sewage treatment Plant (STP) Plan and Pipping</li> </ul>	7	
	<u>Layout</u>		
	<ul> <li>Sewage treatment Plant (STP) Certificate Standard</li> </ul>	10	
	design document	10	
	<ul> <li>Handover document of Sewage treatment Plant</li> </ul>	18	
	Warranty certificate of Sewage treatment plant	19	
2.2	Rainwater harvesting		
	Rainwater harvesting plan	20	
	Rainwater harvesting completion certificate	21	
2.3	Ringwell and Borewell		
	Permission for existing borewell for flushing and	22	
	gardening purpose, MCB, Public health dept.		
	Approved Quotation for ring well	23	



Hashu Advani Complex, Near Collector's Colony, Chembur (E) Mumbai 400074.

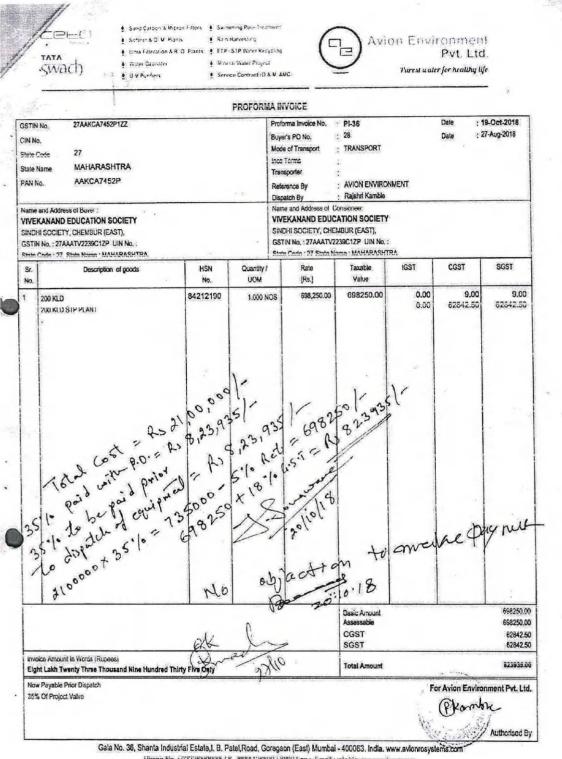
#### Bills for the Purchase of Equipment's for The Facilities Created under This Metric

#### Sewage Treatment Plant (STP) Equipment Payment Receipt





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Phone No.: 02226868885 / 6 , 8655126600 / 8800 Fax : Email : Info@avionrosystems.com

Dr. (Mrs.) Suprisa S. Shidhaye: PRINCIPAL Vivekanand Education Society's : College of Pharmacy HAMC, Behind Collector Colony, Chembur, Mumbai - 400 074.

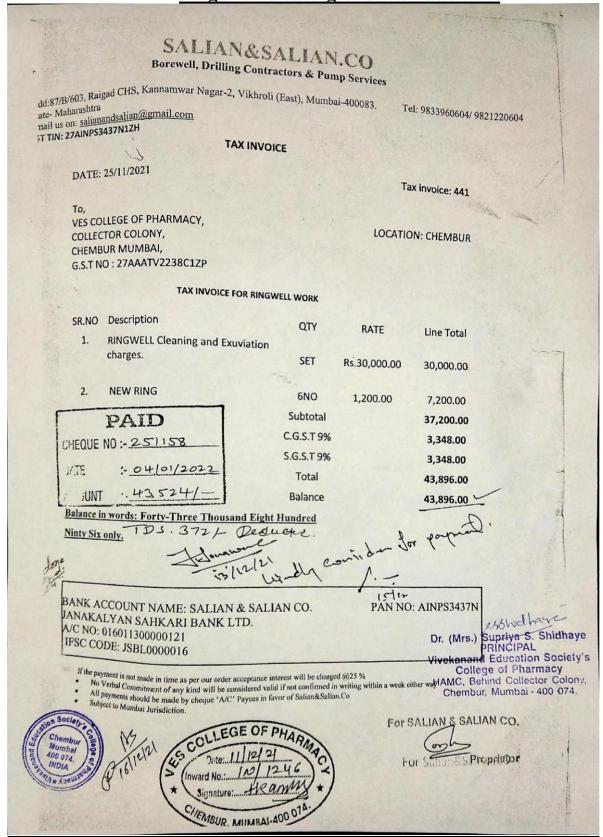
Page 1 of 1



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## RINGWELL AND BOREWELL

**Ring Well Cleaning And Exuviation Bill** 



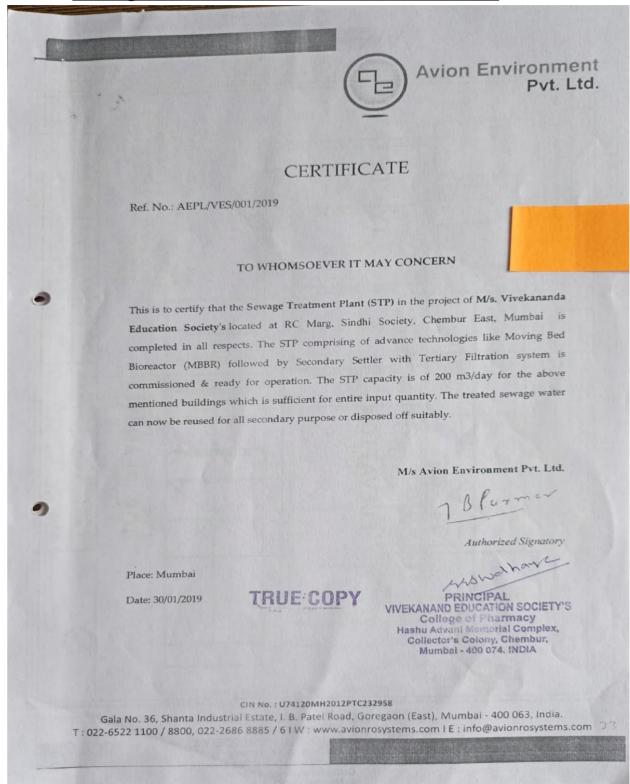


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#### **Any Other Relevant Proof for The Selected Options**

## **Sewage treatment Plant (STP)**

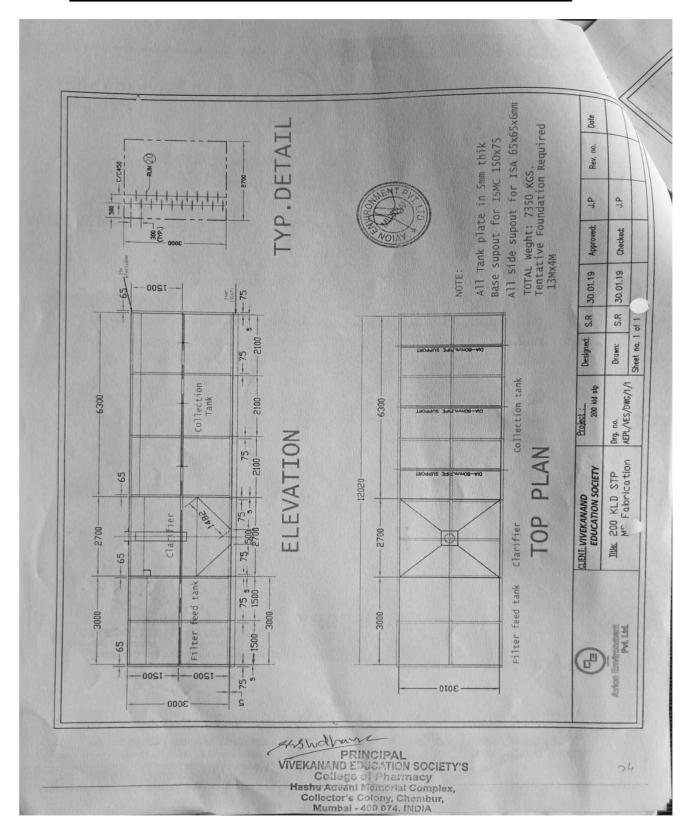
## Sewage treatment Plant (STP) Certificate



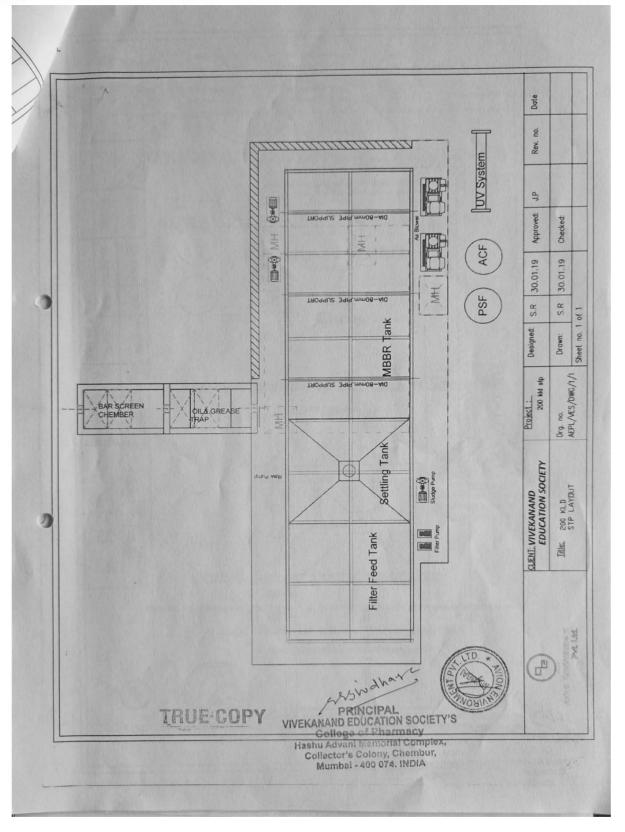


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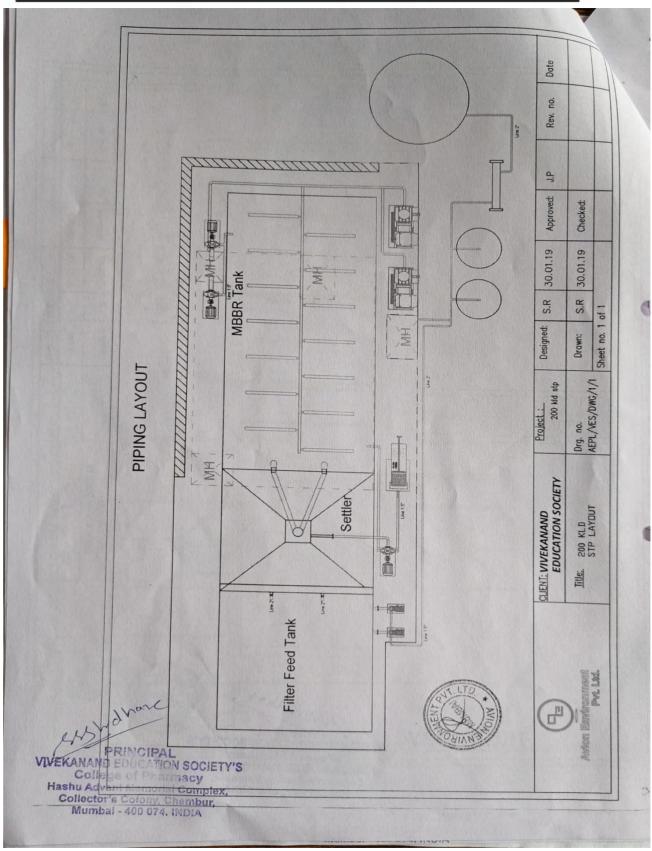
## **Sewage Treatment Plant Plan and Piping Layout**







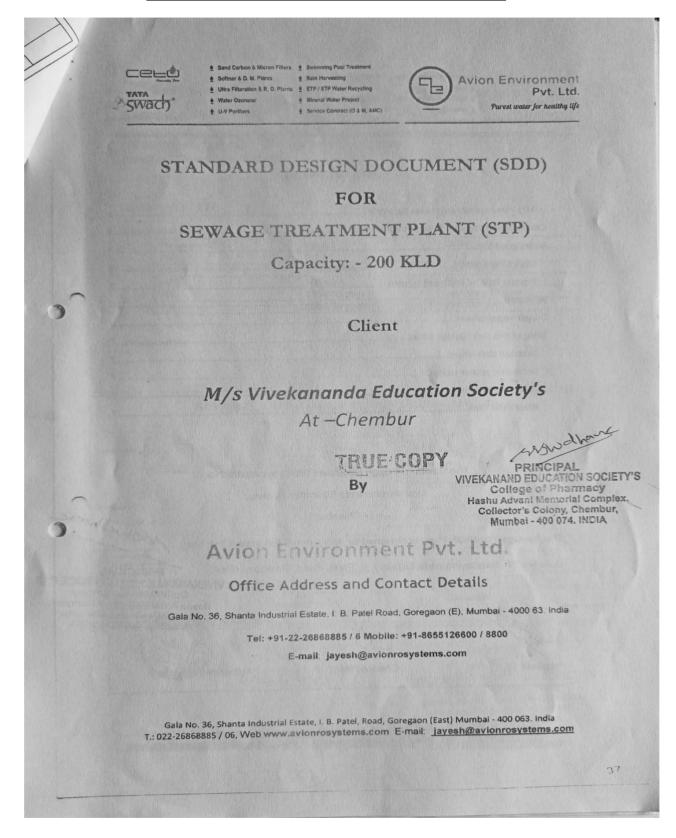






Hashu Advani Complex, Near Collector's Colony, Chembur (E) Mumbai 400074.

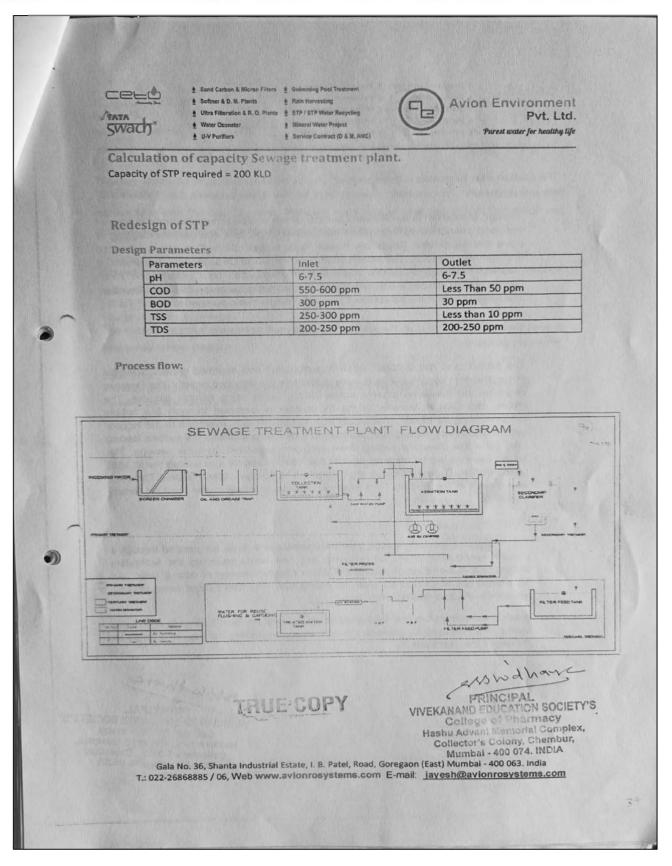
## **Standard Design Document of STP**





	SCATA SWACH  SWACH  SWACH  SWACH  SWACH  SWACH  SWACH  SWACH  SOuth Record Water Project  Mineral Water Project  Service Contract (O & M. AAC)  Service Contract (O & M. AAC)  Avion Environment Pvt. Ltd.  Purest water for healthy life
	Table of Contents
	M/s Vivekananda Education Society's1
	Calculation of capacity Sewage treatment plant
	Redesign of STP3
	Design Parameters
	Process flow: & Tretment Schame
	BOD Load
	Sizing of the tank (Design Basis)
	Aeration tank sizing
	Secondary settler sizing
	Collection tank sizing
	Filter Feed Tank
TO SALE	
	The Standard Design Document (SDD) is prepared for
	M/s. Vivekananda Education Society.
	Chembur  The Sewage Treatment Plant is designed by M/s Avion Environment Pvt. Ltd,
	The Sewage Treatment Plant is designed by M/s Avion Environment Pvt. Ltd,
	Gala No. 36, Shanta Industrial Estate, I. B. Patel, Road, Goregaon (East)
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	Gala No. 36, Shanta Industrial Estate, I. B. Patel, Road, Goregaon (East) Mumbai - 400 063. India  T.: 022-26868885 / 06, Web www.avionrosystems.com E-mail: jayesh@avionrosystems.com







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. Sand Carbon & Micron Filters Softner & D. M. Plants

Ultra Filteration & R. O. Plants & ETP / STP Weter Recycle

6 Mineral Water Project Service Contract (D & M. ANC Avion Environment Pvt. Ltd. Purest water for healthy life

Treatment Scheme

The sewage shall be treated in three stages:

Primary treatment:

Sewage is received in Bar Screen chamber where coarse screen is placed to prevent inorganic coarse solids and debris from entering the tank and prevent clogging of pipes and equipment. Solids like Plastic bags, bottles, Bottle Cap etc. are trapped and removed manually. Bar screen chamber Overflow to Oil & Grease Trap where oil removed manually. O&G trap overflow to the collection cum Equalization Tank. Coarse bubble diffuser will be provided for Equalization tanks to mix the wastewater. The sewage from the equalization Tank will be submersible pumped to MBBR Tank.

#### Secondary treatment:

The MBBR tank has a combination of suspended and attached growth biological mass. Random floating media is used to facilitate the attached growth. The biomass degrades the dissolved organic matter (BOD/ COD) using aerobic process. The mixing and Oxygen transfer in the bio reactor is provided through fine bubble diffusers using air blower. The MLSS from the MBBR tank overflows to the Hopper bottom Secondary settling tank provided to tube media increase the surface loading rate. Here the bio-solids settles down and gets separated from the sewage. The settled biomass will be recycled back to the MBBR Tank for maintaining the MLVSS concentration. Excess biomass shall be taken to Sludge collection tank. The clear supernatant of the Settling Tank shall overflow to an Intermediate Tank for tertiary treatment.

#### Tertiary treatment:

This biologically treated sewage from intermediate tank shall be pumped through a pressure sand filter (PSF) for removing any fine solids escaping the secondary settling tank & then through Activated Carbon filter for removal of odor & color. An inline dose of NaOCI shall be given for disinfection. The final treated water shall be collected in the final treated water tank.

Treated water from the final tank shall be partly used for filter backwash and major quantity may be used for gardening or floor washing/ flushing purpose or overflow to drainage / disposal system.

> 385 walhare PRINCIPAL VIVEKANAND EDUCATION SOCIETY'S

College of Pharmacy Hashu Advani Mamorial Complex,

Gala No. 36, Shanta Industrial Estate, I. B. Patel, Road, Goregaon (East) Mumbai MORIGGA -India 074. INDIA T.: 022-26868885 / 06, Web www.avionrosystems.com E-mail: jayesh@avionrosystems.com



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- Water Ozonater
- € Uttra Filteration & R. O. Plants & ETP / STP Water Recyclin Mineral Water Project
- **♦** U-V Purifiers # Service Contract (O & M. AMC)

Avion Environment Pvt. Ltd.

Purest water for healthy life

Pressure Sand Filter& Activated Carbon Filter:

The clarified and collected water will be feed through pressure sand filter and activated carbon filter with the help of pump. Pressure sand filter will remove suspended solids and activated carbon filter will remove color and odour from sewage water.

UV System:

Filtered water will feed / mix / introduce with UV for the disinfection of the treated sewage water. UV light is generated by the UV tube system.

Sludge separation process

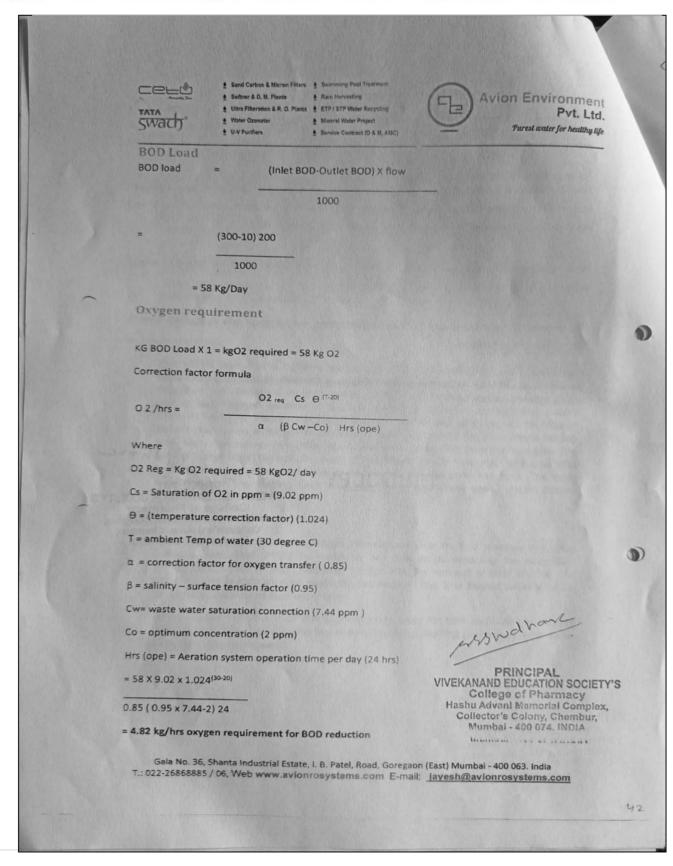
The excess / surplus bio-sludge from secondary settler will be taken into sludge will feed to filter press for the filtration.

The filter press will separate the sludge (into the tray under periodic cleaning) and lechate will recycle back to collection tank.

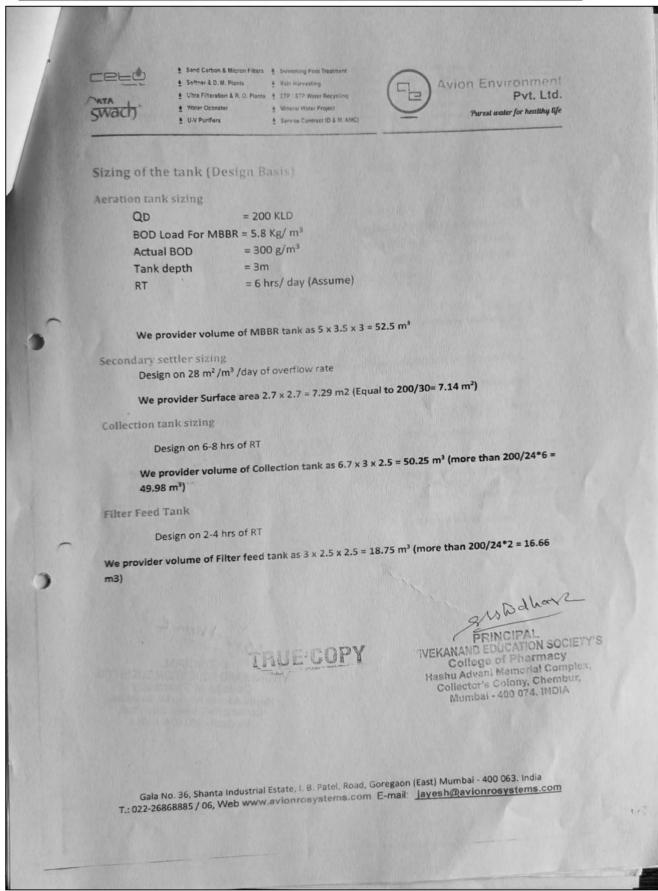
essibahanc PRINCIPAL VIVEKANAND EDUCATION SOCIETY'S College of Pharmacy Hashu Advani Memorial Complex, Collector's Colony, Chembur, Mumbal - 400 074, INDIA

Gala No. 36, Shanta Industrial Estate, I. B. Patel, Road, Goregaon (East) Mumbai - 400 063. India T.: 022-26868885 / 06, Web www.avionrosystems.com E-mail: jayesh@avionrosystems.com

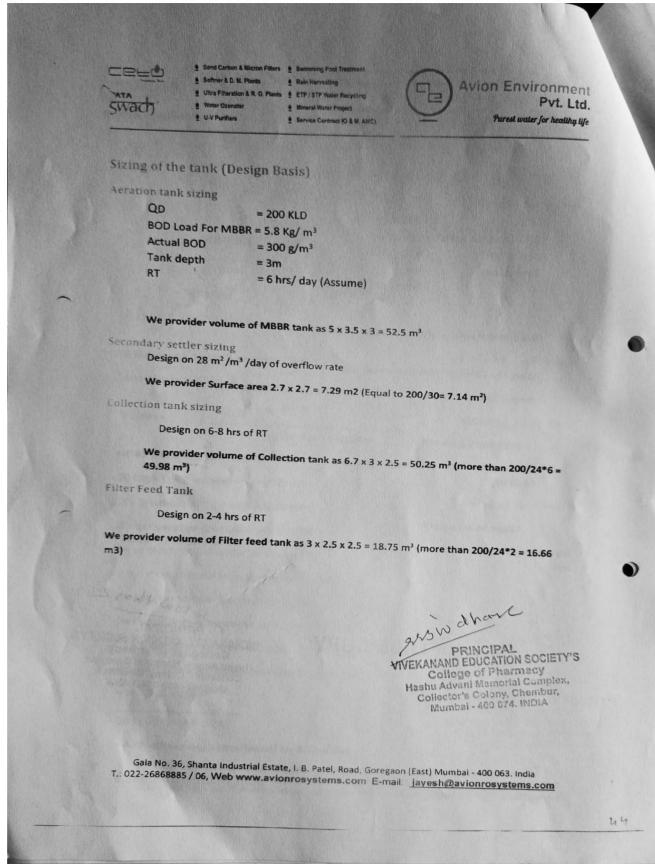














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#### **Handover Document of Sewage Treatment Plant**



Avion Environment Pvt. Ltd.

Date: 11.02.19

M/s Vivekananda Education Society's

RC Marg, Sindhi Society, Chembur East, Mumbai

SUBJECT: HANDOVER THE SEWAGE TREATMENT PLANT 200 M3/DAY PROJECT.

Dear Sir,

We refer to above mentioned subject here inform you that, we have completed entire system for erection & commissioning of STP unit. In the presence of Vivekananda Education Society's & Avion Representative.

Kindly request you, handover the entire STP unit.

Thanking you,

For Avion Environment pvt.ltd

Avion Representative

Some system out the free from the sound.

Chembur Chambur Chambur Chembur Chambur Chambu

VES Representative

Dr. (Mrs.) Supriya S. Shidhaye PRINCIPAL Vivekanand Education Society's College of Pharmacy HAMC, Behind Collector Colony, Chembur, Mumbai - 400 074.

CIN No.: U74120MH2012PTC232958

Gala No. 36, Shanta Industrial Estate, I. B. Patel Road, Goregaon (East), Mumbai - 400 063, India.
T: 022-6522 1100 / 8800, 022-2686 8885 / 6 | W: www.avionrosystems.com | E: info@avionrosystems.com



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#### **Warranty Certificates**

1

Date: 11.02.19

M/s. Vivekananda Education Society's RC Marg, Sindhi Society, Chembur East, Mumbai

#### WARRANTY CERTIFICATE

We hereby certify that Pre-fabricated Sewage Treatment plant (STP) capacity 200 cum/day as per your purchase order has been successfully designed, Installed & commissioning by us at <u>Vivekananda Education Society'</u>

Any equipment / system subjected to normal use, if found defective during warranty period will be repaired / replaced by us. The warranty does not cover failure or damage due to negligence, accident, abuse, improper operation & abnormal conditions of temperature, moisture, dirt of corrosive matter. Equipment which has been in any way tampered with or repaired altered by anyone other than our authorized representative shall also not be covered under warranty. Our liability on warranty shall not in any event exceed cost of correcting defects or replacement with good equipment. Warranty is applicable only if written notice of any such defects is promptly given to Avion Environment. & provided it is established that the equipment was being operated, maintained stipulated in the operation & maintenances manual.

The warranty of plant will be valid :- One Year form the date of Hanover (operation & maintenances in client scope)

Thanking You.

For, Avion Environment pvt.ltd.

Jayesh Parmar

Director

Chembur Solley S

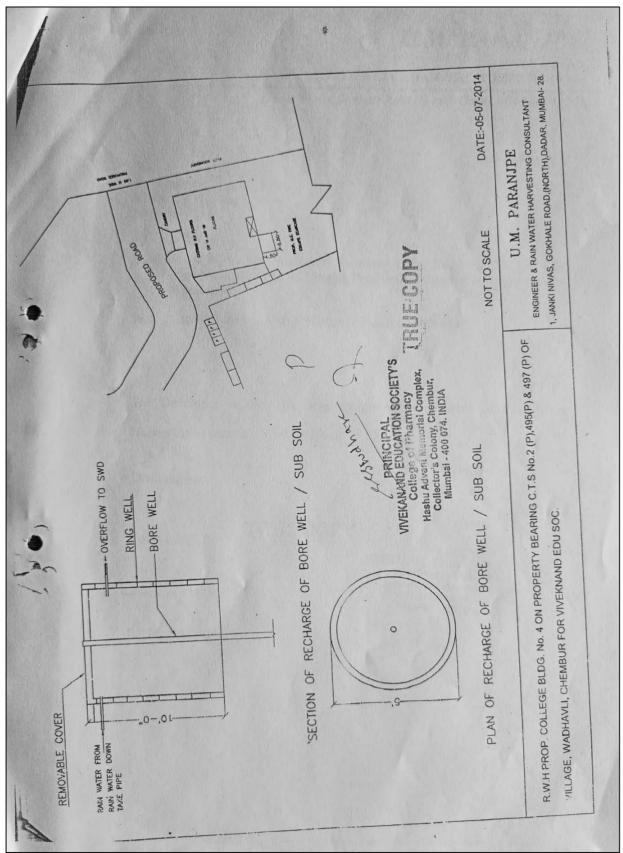
Dr. (Mrs.) Supriya S. Shidhaye PRINCIPAL Vivekanand Education Society's College of Pharmacy HAMC, Behind Collector Colony, Chembur, Mumbai - 400 074.



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#### **RAINWATER HARVESTING**

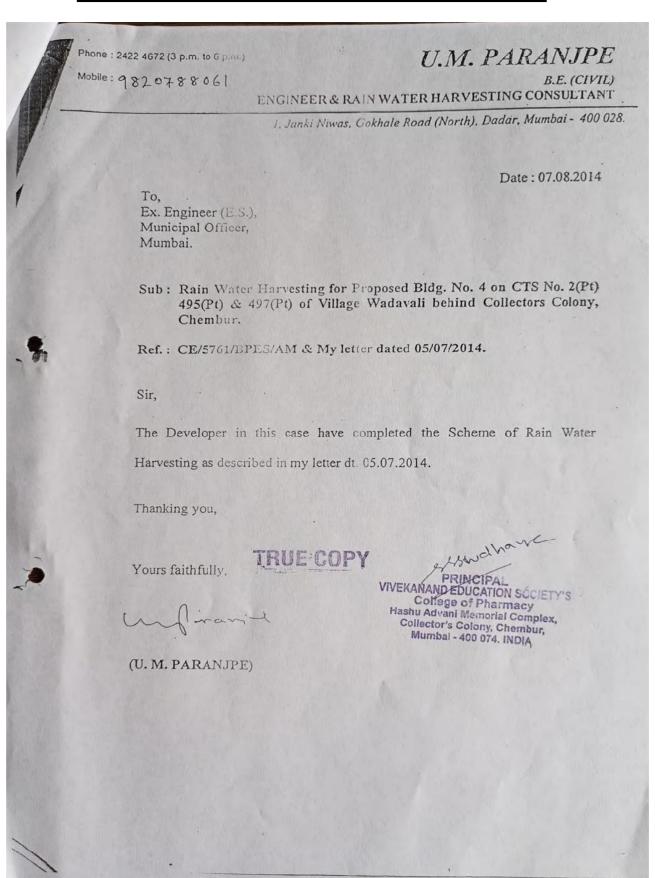
## Rainwater Harvesting Plan





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## **Rainwater Harvesting Completion Certificate**

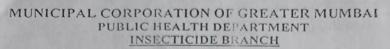




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#### RINGWELL AND BOREWELL

## Permission for existing borewell for flushing and gardening purpose, MCB, Public health dept.



No : PCO/367/MW/SR Date: 8/8/2014

To.

Vivekanand Education Society 1<sup>st</sup> Floor, Trust Office, Sindhi Society, Chembur, Mumbai-400071.

Sub: - Permission for existing Bore Well at 'Vivekanand Education Society', Bldg No.04, Plot CTS No.02 (Pt), 495 (Pt) and 497 (Pt) of Village Chembur, Mumbai for Flushing and Gardening purpose.

Ref: -1) An undertaking submitted by you and dated.05.08.201
2) Sanctioned Vide o. IO / /SR/

Sir,

Permission for existing Bore well and the use of water from the Bore

Flushing and Gardening purpose at the above place is hereby granted to you subject to the compliance with the conditions mentioned in the memo of conditions duly signed by you. A board prohibiting the use of the well water for drinking, bathing, cooking purpose shall be exhibited at a conspicuous place.

The permission is liable to be summarily revoked, if any of the conditions in the memo of conditions is not found to have been complied with or breached, in that case you will be liable to legal action as provided under Mumbai Municipal Corporation Act.

TRUE COPY

VIVEKAHAND EDUCATION SOCIETY'S College of Pharmacy
Hashu Advani Memorial Complex,
Collector's Colony, Chembur,
Mumbal - 400 074, INDIA

Ashahan

Pest Control Officer M/West Ward



Hashu Advani Complex, Near Collector's Colony, Chembur (E) Mumbai 400074.

## **Approved Quotation for ring well**

