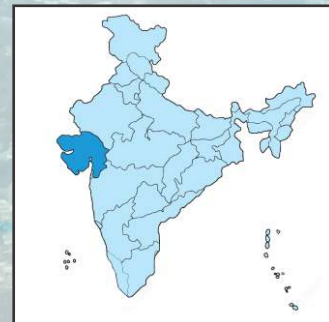


# Rajkot City Water Supply

Rajkot is the 4<sup>th</sup> largest city in the state of Gujarat & is the center of the Saurashtra region of Kathiawar peninsula of Gujarat with a population of more than 1.8 million (as of 2018).

**It is the 2<sup>nd</sup> Cleanest city in India & is the 22<sup>nd</sup> Fastest Growing city in the world (as of July 2019).**

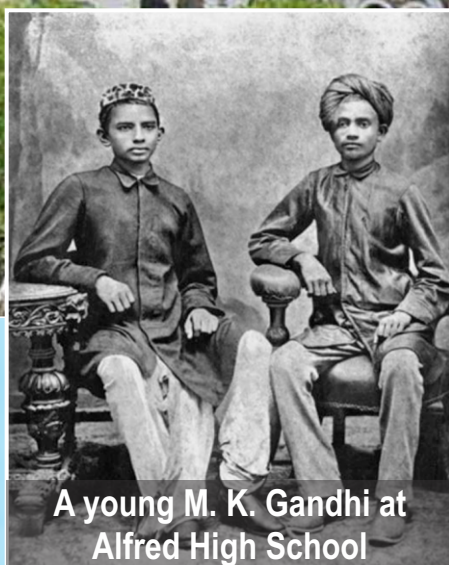


It is an Industrial center active in jewellery, silk embroidery, watch parts; bearings, diesel engines, kitchen knives, watch parts, automotive parts, forging industry, casting industry, machine tools & CNC machines.



RMC is doing a sterling job of supplying 135mld water to the city (in this otherwise water scarce region) aiding it's rapid growth as an Industrial centre





A young M. K. Gandhi at Alfred High School

Rajkot is also famous for providing education to Mahatma Gandhi (*Gandhiji*), at the Alfred High School (*now the Mahatma Gandhi Museum*).

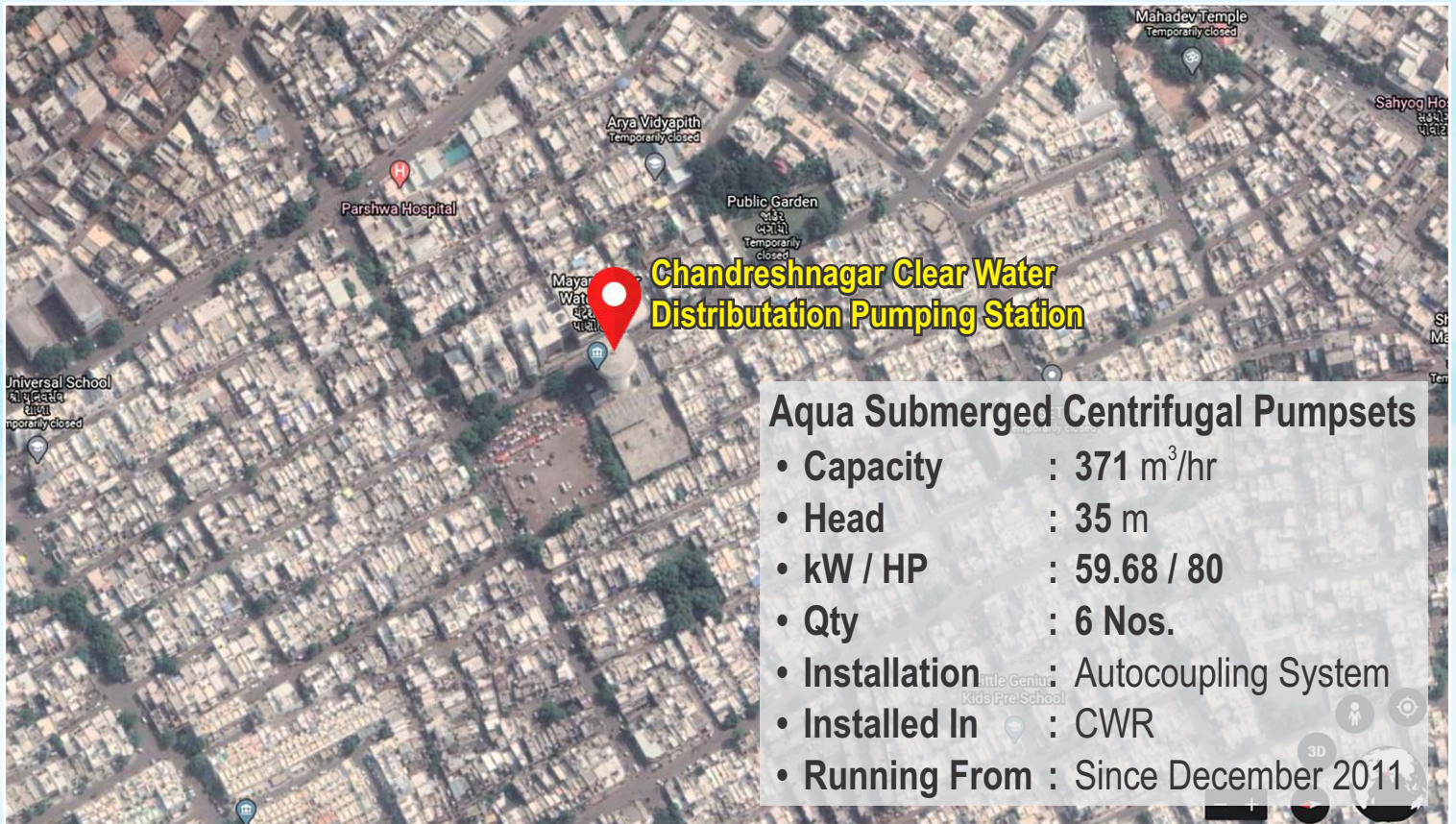
Spread over an area of 170 km<sup>2</sup>, at an average elevation of 128m; it is the highest city of the Kathiyawar peninsula & located on the banks of Rivers Aji & Nyari River.

RMC draws water from various surface reservoir viz. Nyari-I, Nyari-II, Aji-III, Bhadar, Lalpari and Randarda lake along with some borewells drilled in Wankaner region. However, being an arid region; as summer approaches it becomes increasingly dependent on Narmada waters supplied by GWIL + GWSSB.

There are 4 filtration plants viz. Ribda, Aji, Nyara and Ghanteshwar with total filtration capacity of **135mld**.

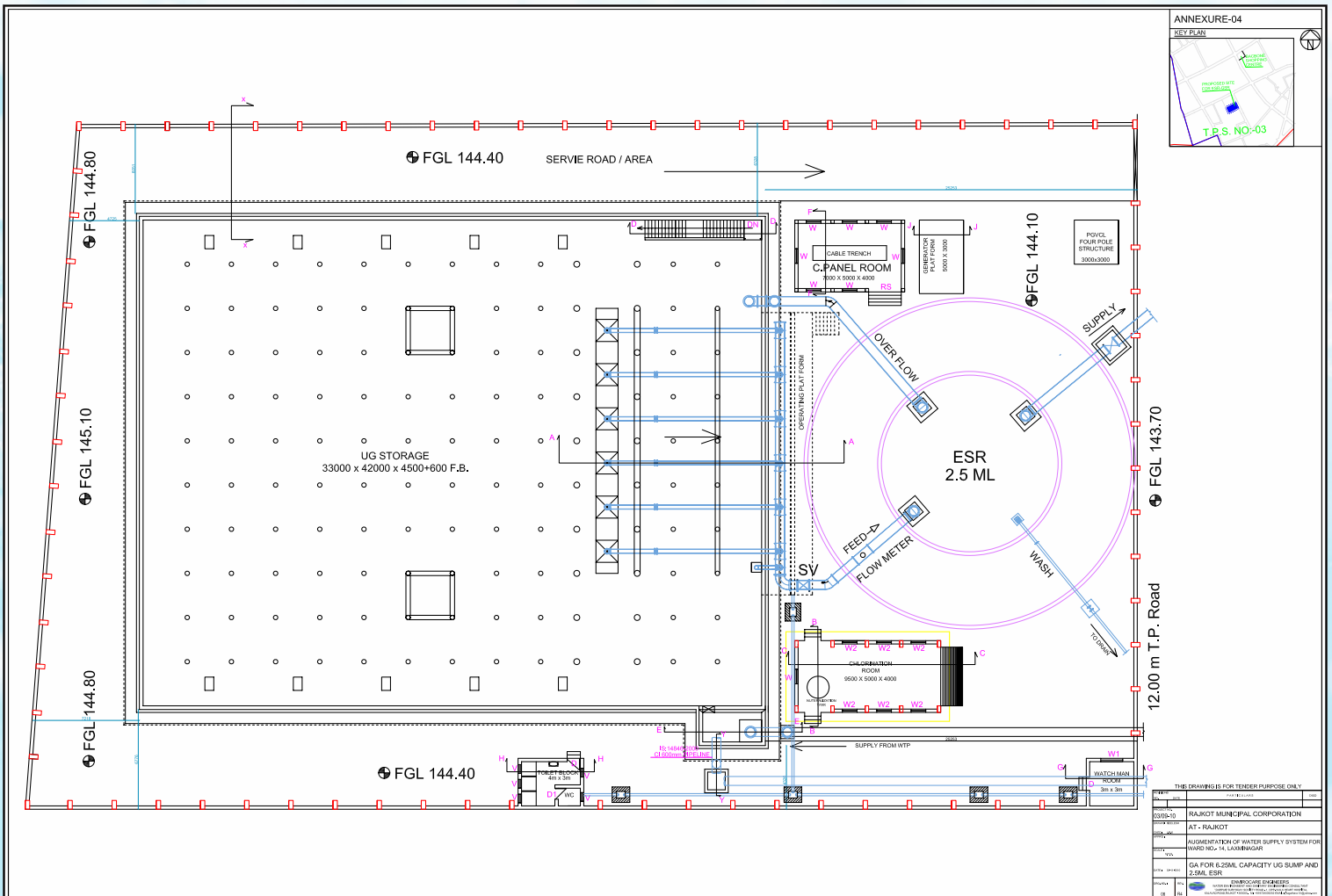
The water supply distribution system is divided into 4 zones viz. Jubilee, Gurukul, Nyari and Aji.

# Chandreshnagar Clear Water Distribution Pumping Station



## Aqua Submerged Centrifugal Pumpsets

- Capacity : 371 m<sup>3</sup>/hr
- Head : 35 m
- kW / HP : 59.68 / 80
- Qty : 6 Nos.
- Installation : Autocoupling System
- Installed In : CWR
- Running From : Since December 2011



ANNEXURE-04  
KEY PLAN

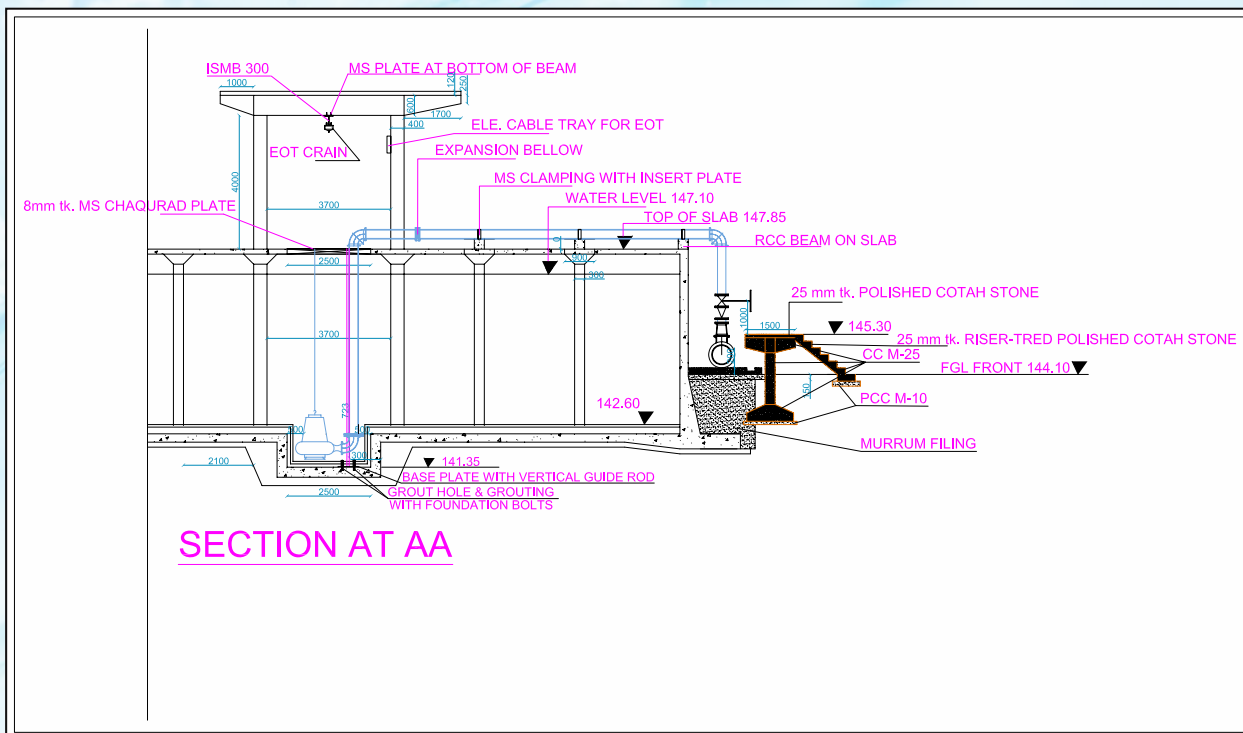
T.P.S. NO-03

THE DRAWINGS ARE FOR TENDER PURPOSE ONLY

NO.	REVISION
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02	FOR APPROVAL
03	FOR APPROVAL
04	FOR APPROVAL
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RAJKOT MUNICIPAL CORPORATION  
AT - RAJKOT  
AUGMENTATION OF WATER SUPPLY SYSTEM FOR  
WARD NO. 11, LAUNIBAGAR  
SCALE: AS SHOWN  
DATE: 15/08/2011  
PROJECT NO: RAJKOT/2011/01/001  
DRAWING NO: RAJKOT/2011/01/001/01

# Chandreshnagar Clear Water Distribution Pumping Station



*We are using "Aqua" make Submerged Centrifugal pumpsets (since 2011) for Clear as well Raw water applications.*

*In our experience, as compared to HSCF or VT pumps; Submerged CF pumps require Lesser Maintenance & yet are Equally Energy Efficient "*

**- C B Mori, DE, Water Supply Department, RMC**

## AJI 1 Clear Water Distribution Pumping Station

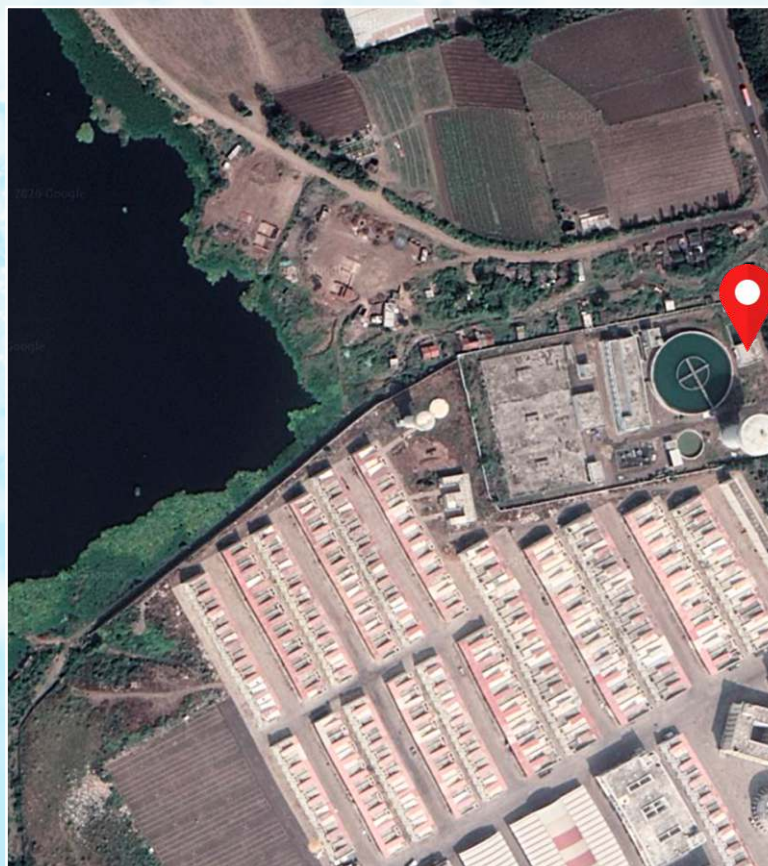


### Aqua Submerged Centrifugal Pumpsets

- Capacity : 1150 m<sup>3</sup>/hr,
- Head : 30 m
- HP : 170
- Qty. : 4 Nos.
- Running From : Since 2016



## Bedi Water Pumping Station

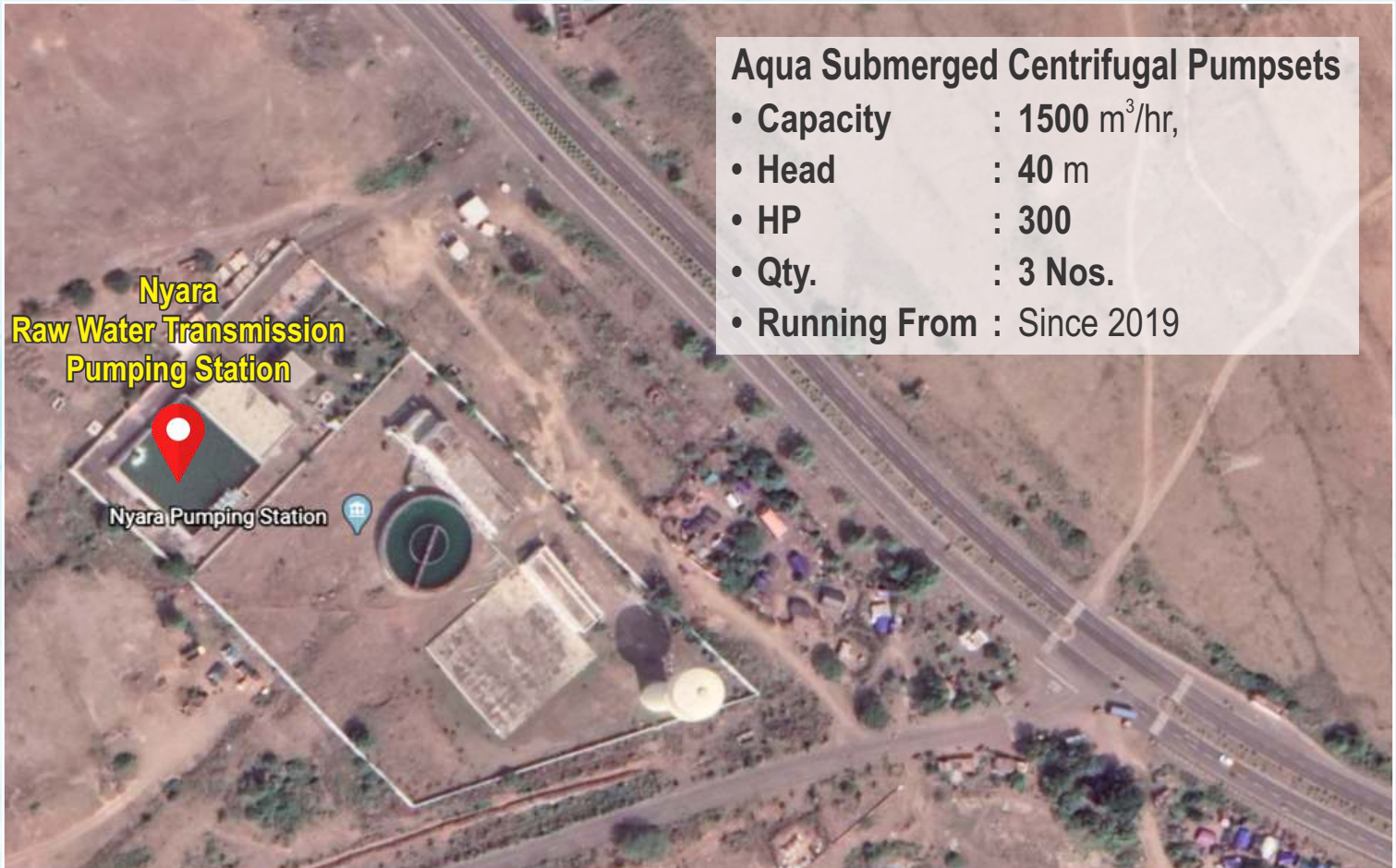


### Bedi Water Pumping Station

### Aqua Submerged Centrifugal Pumpsets

- Capacity : 835 m<sup>3</sup>/hr, 1250 m<sup>3</sup>/hr
- Head : 38 m, 10 m
- HP : 160, 65
- Qty. : 3, 3 Nos.
- Running From : Since July 2015

# Nyara Raw Water Transmission Pumping Station



**Submerged Centrifugal Pumps can be easily be bottom rested (without any RCC works) at any one side of the existing sump (without shutdown).**



### Substantial Savings

Reduction in Pump House Space, Construction cost & Suction piping Manifold complexity.



### Low Energy Cost

Due to Elimination of Suction Losses, Coupling Losses & Auxillaries; Wire to Water efficiency is slightly better than HSCF pumps.



### Low Life Cycle Costs (LCC)

Zero Consumables, Minimal maintenance & good efficiency.



### Robust & Reliable

No breakdown even in high silt levels. Over-safe Design & Smart Protection Systems result in high Reliability.



### User Friendly

- No risk of cavitations.
- No damage due to Flood or Rains.
- No Priming.
- No Alignment.



### Maintenance Free

Requires No Consumables or Routine maintenance, like :

- Oiling,
- Greasing,
- Gland Rope Tightening & Replacement,
- Shaft Sleeve Replacement
- Shaft Alignment,
- Dewatering of Gland / Leakage or Seepage into the Dry Pump room etc.



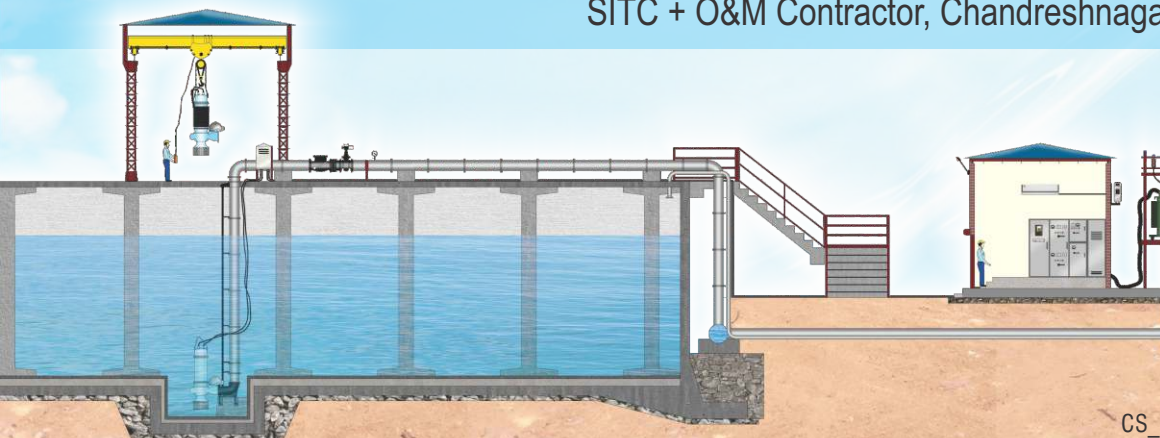
### Minimal Noise, Vibration & Heat Emission



*We are using "Aqua" make Submerged Centrifugal pumpsets (from 2011 to 2016).*

*In our experience, as compared to HSCF or VT pumps; Submerged CF pumps don't require any Oiling, Greasing, Gland Tightening, Alignment Checking, etc & yet are almost equally Energy Efficient"*

**- P N Patel, Contractor, Riddhi Engineers  
SITC + O&M Contractor, Chandreshnagar PS**





# Rajkot Municipal Corporation

Water works branch, Room no. 12, West Zone Office, Bf. Big Bazar,  
150 ft Ring Road, Rajkot - 360 005

Dt: 19.04.2014

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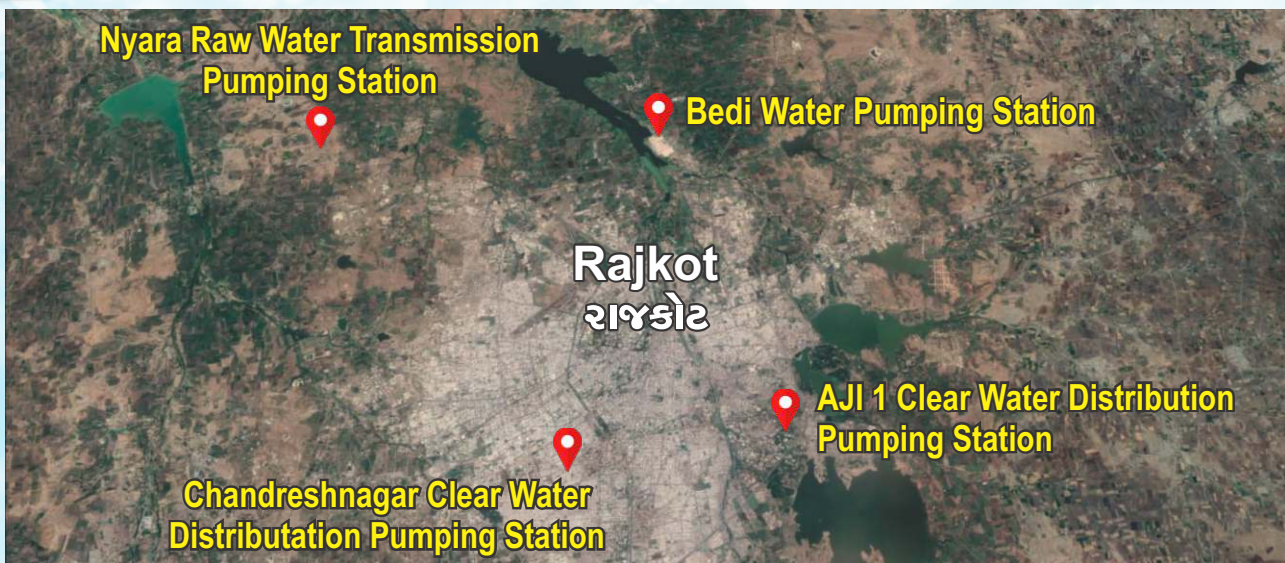
## CERTIFICATE

To whom so ever it may concern

This is certify that, we are using AQUA make Submerged Centrifugal Pump sets of motor rating 80 HP, with duty point of 371 m<sup>3</sup>/hr - 35 mtr head, Qty 6 Nos. at Chandreshnagar pumping station of water works, since Dt:25.12.2011 to till today and these pump sets are running satisfactorily without any maintenance or repairing. We recommended for the application of these pump sets as alternative energy efficient pumping machinery with HSCF or VT pump sets.



Dy Executive Engineer  
Water works  
Rajkot Municipal Corporation



## Aqua Machineris Private Limited

[www.aquapumps.com](http://www.aquapumps.com)

Registered Office & Manufacturing Plant

Survey No. 504/1-2, 442/2, Near Haridarshan Estate, Near Express Highway, Ramol, Ahmedabad-382 445. Gujarat, India.

[marketing@aquapumps.com](mailto:marketing@aquapumps.com)