

WATER CONSERVATION FACILITIES IN BIT DURG

The water conservation facilities available in the Institution includes: -

1. Borewell in BIT Durg

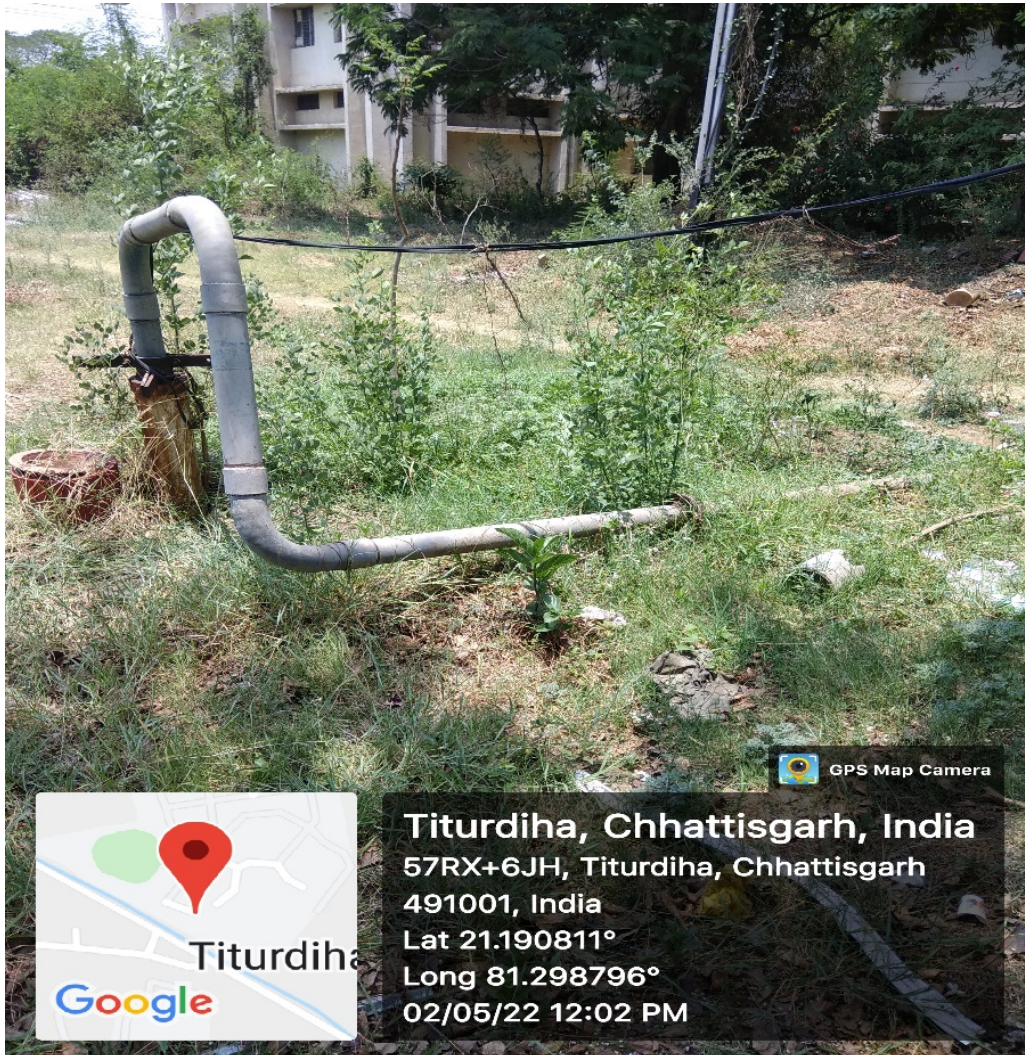


Fig. 7.5HP Pump 1



Fig. 7.5 HP Pump 2



Fig. 1 HP Pump

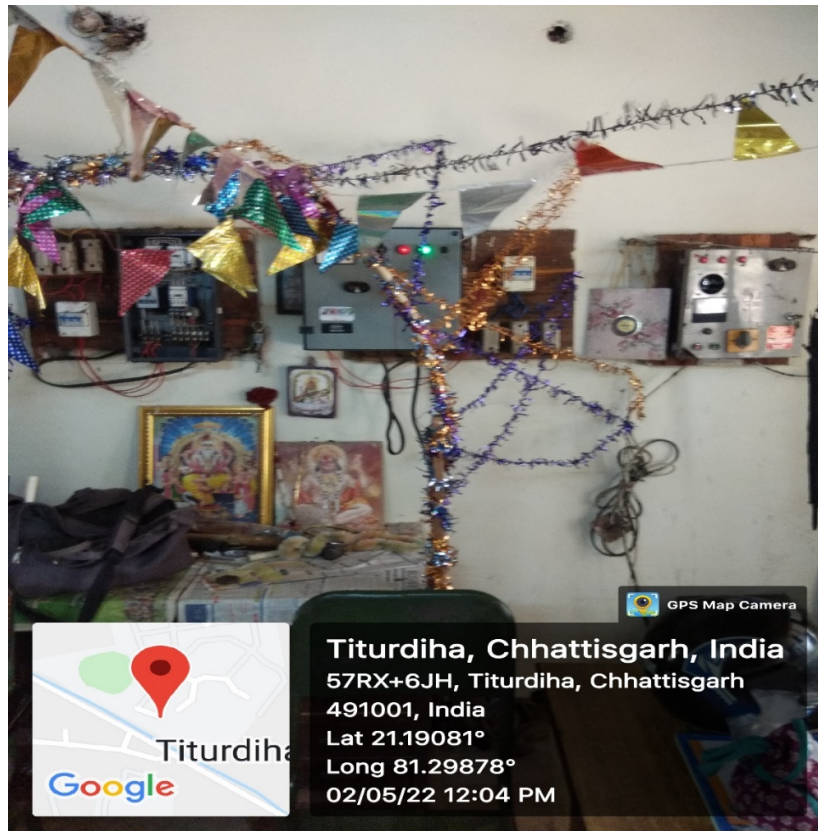


Fig. Pump Operation Office

2. Water Distribution System in BIT Durg

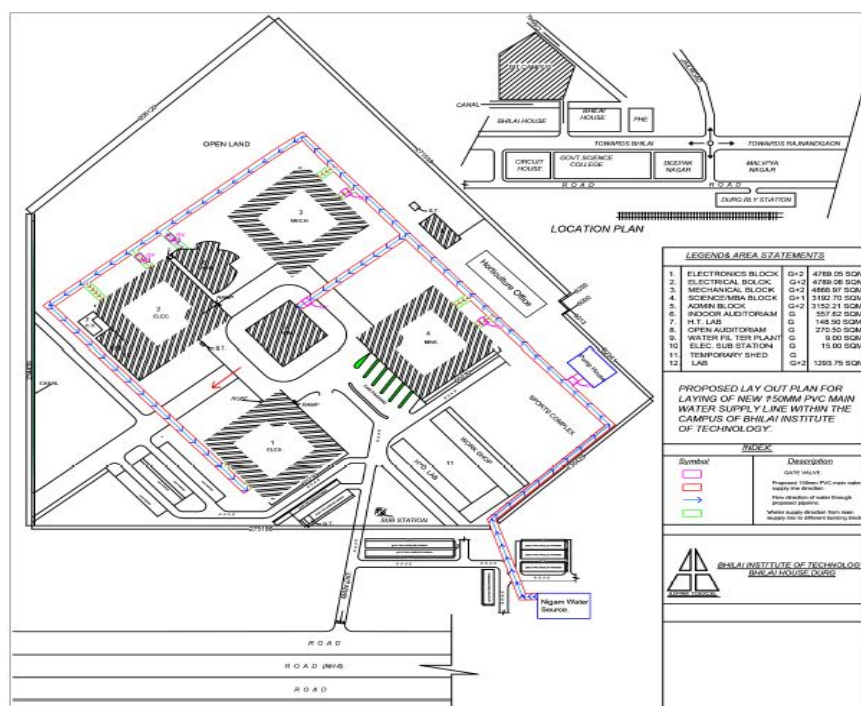


Fig. Water Distribution System in BIT Durg

3. Rainwater Harvesting in BIT Durg

"SAVE WATER, SAVE EARTH"

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GEOPHYSICAL & GROUND WATER EXPLORES
SPECIALISTS IN DELINEATION OF HYDROPOTENTIAL
ZONE AND FIXATION OF BEST TUBE WELL SITES.

FACILITY AVAILABLE :- ♦ Ground Water Survey
♦ Rain Water Harvesting ♦ Chemical Treatment of Bore
♦ Balasting Point of Bore ♦ Mineral Prospecting
♦ Geophysical Investigation.

RESIDENCE - H. NO. 54/1223, SHANTIVIHAR COLONY, DAGANIYA, RAIPUR (C.G.) CONT. NO.: 98279-09351

Ref. No. *BIT/PCS/VAS/RAH/19/16-17*

Date *24/10/16*

रेनवाटर हारवेस्टिंग प्रमाण पत्र

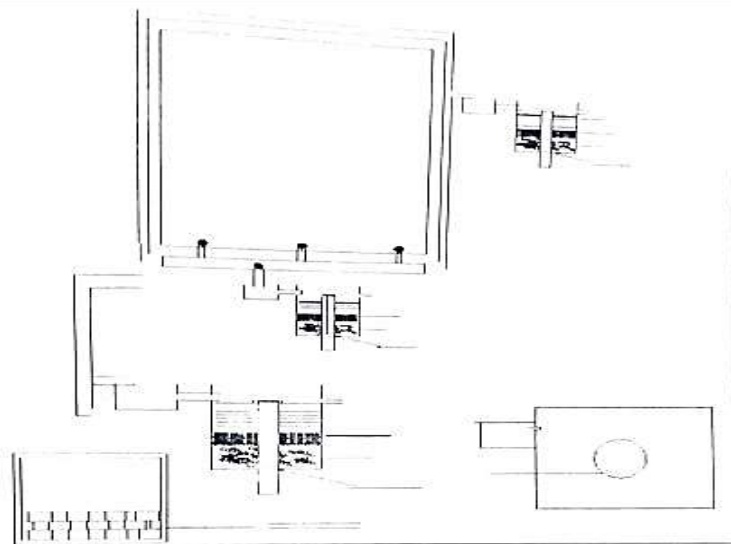
प्रमाणित किया जाता है कि *Bhilai Institute of Technology* के कॉलेज परिसर नगर निगम क्षेत्र दुर्ग, जिला - दुर्ग (छ.ग.) में स्थित है। आज दिनांक 05/10/2016 को *Roof Top "Rectangular Recharge PIT Method"* (Surrounding Borehole 2 No.) के द्वारा रेनवाटर हारवेस्टिंग का कार्य संपन्न किया गया। जल बचाओं एवं जल कमाओ की महान प्रक्रिया में सम्मिलित होने पर मैं आपको सादर धन्यवाद देता हूँ। कृपया बताये अनुसार इस व्यवस्था का रख रखाव करें।

कृपया छतों को साफ रखें एवं नालियों के मुँह पर जालियाँ लगाएं।

Virendra Sahu
हस्ताक्षर एवं सील

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Hydrogeologist
Member I.A.H., Licence No. 456/2014-15

Fig. Certificate for Rain Water Harvesting System



Filter Size- 2 mt x 2mt x 3mt = 12cub.mt.
 Filter material -
 Bottom Layer - 2x2x1 {mt} = 4 cum.
 Middle Layer - 2x2x1 {mt} = 4 cum.
 Top Layer - 2x2x1 {mt} = 4 cum.
 Chamber size-
 1x1x0.5 mt {RCC Casting- 1:2:4}



Fig. Dimensions of Pit for Rain Water Harvesting System

WATER AUDIT REPORT

We observed the average rainfall for Bhilai Institute Of Technology Durg, Bhilai Region is 1000 mm throughout the rainy season.

Area covered by roof top of constructed buildings is 1500 Sq. Meter.

So, $1500 \times 1 = 1500 \text{ cum}$
 $1500 \times 1000 \text{ Ltrs.} = 15,00,000 \text{ Ltrs.}$ (A)
 Total water available for harvesting and conservation
 15,00,000Ltrs.

Total water available is 15,00,000Ltrs. This water will flow from the roof top and premises to the building. If we construct a structure which we suggested and the drawing attached herewith. The total available water will pass through our structure and around 60% water will absorb in earth soil due to the system.

60% quantity of flowing water = 9,00,000 Ltrs.

We assume that near about 9,00,000 lacs ltrs. Flowing water will absorb in earth soil through our 3 number of filter media system. As per our drawing.



Fig. Water Audit Report

4. Sewage Waste Disposal in BIT Durg

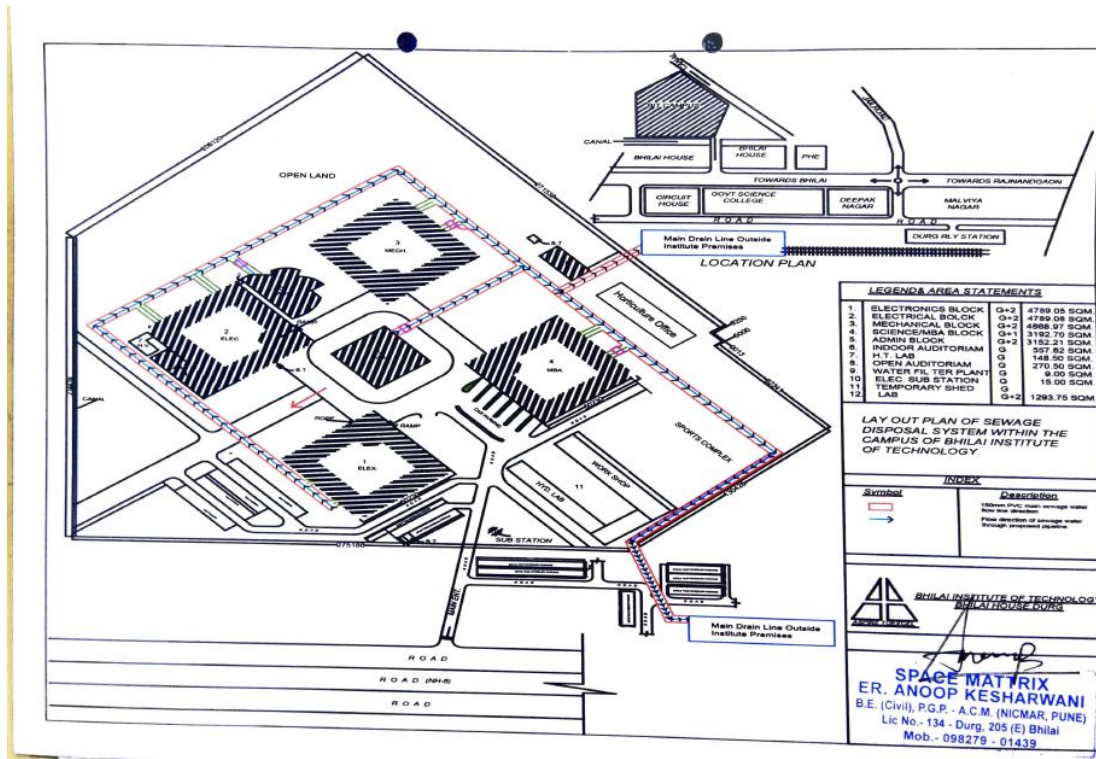


Fig. Sewage Waste Disposal in BIT Durg