Report on

Technical Visit to statue of unity & Sardar Sarovar Dam

Site – Kevadia Colony, 22-01-2020

4TH SEMESTER

Department of Civil Engineering

A.Y.DADABHAI TECHNICAL INSTITUTE, KOSAMBA

Civil Engineering Department of A.Y.DADABHAI TECHNICAL INSTITUTE,KOSAMBA a technical visit on 22TH JANUARY,2020 which 69 students and 6 faculty members visited Statue of unity & Sardar Sarovar Dam Site, Kevadia colony. Sardar Sarovar Project is considered as a lifeline of Gujarat state. The technical visit was planned to understand the multipurpose river valley project, its components and important features and current status of ongoing activities on the site.

The journey to the project site started early in the morning around 6 am by a private bus. Students visited the statue of unity dam site viewpoints Top of the dam, HR of main canal, cactus garden, butterfly garden, statue of unity, ten city, jungle safari ,valley of flower.

The statue is designed by Ram V. Sutar. The total amount for the project is US $430 million. The statue stands 182 metres high, making it the tallest monument in the world.

The Statue of Unity is at Sadhu Bet Island. A 12 km square lake will create the atmosphere of equality and diversity. A special trust called as "Sardar Vallabhbhai Patel Rashtriya Ekta Trust" has been created for to manage the place. The statue is made with steel frame and reinforced concrete. For durability, the statue has been given bronze plating.

The statue has a 153 m high viewing deck able to hold 200 visitors. It has a panoramic view of the Sardar Sarovar Dam.

It has been designed to withstand winds of velocity of 60 metres/second, and is also claimed to be earthquake resistant. A total of 22,500 tons of cement forms the core structure of this monument. The iron used in the construction was collected from old farm equipment throughout India. A team of 700 Indian workers worked on the smelting and casting.

SSNNL management team & its engineers have built one of the tallest concrete gravity dams in the world and an irrigation system, which is one of the top irrigation networks of the world.

The Sardar Sarovar Project is one of the largest water resources project of India covering four major states - Maharashtra, Madhya Pradesh, Gujarat and Rajasthan. Dam's spillway discharging capacity (30.7 lakhs cusecs) would be third highest in the world. With 1133 cumecs (40000 cusecs) capacity at the head regulator, and 532 km. length, the Narmada Main Canal would be the largest irrigation canal in the world.

The dam will be the third highest concrete dam (163 meters) in India

Narmada Main Canal is a contour canal. It is the biggest lined irrigation canal in the world. It is about 458 km. long up to Gujarat -Rajasthan border. It has a capacity to flow 1133 cumecs (40000 cusecs) at its head-at kevadia and reducing to 71 cumecs (2500 cusecs) at the Gujarat - Rajasthan border. there are 598 Structures on the Narmada Main canal. Out of this 236 structures are cross drainage structures, comprising of 5 Aqueducts, 15 canal syphons, 182 drainage syphons, 33 canal crossing and one super passage. There are 89 Regulating structures comprising of 1 Main HR, 44 Branch HR, 32 Cross Regulators and 12 Escapes.