



G H Patel College of Engineering & Technology, V. V Nagar



Department of Civil Engineering

Report on

Visit to “Construction site of Stone Masonry, Piplag, Nadiad”

Department of Civil Engineering, GCET has organized one day (21/7/17) educational visit to “Construction site of Stone Masonry, Piplag, Nadiad”. 44 students and 2 faculty member participated in educational visit.

About the construction site: The site is located at Piplag, near Nadiad. The stone masonry work is under construction of Temple. Total 1500 tonnes of stones will be used for the entire project. The site is constructed on Black cotton soil. The Raft foundation of 12 feet depth is used for the construction of massive structure. Two floors of the temple is going to be constructed. Currently, they are working for the first floor. We have observed the ground floor construction. Light pink colour sedimentary stones were used. These stones, after carving bought from Rajasthan. For carving, designs are printed on butter paper and butter papers are then stick to the stones. Dressing of the stones was done and adjustment of the parts was done first. After that, the stones are sent for polishing. There are three stages of polishing. First two stages include polishing the stones without any liquid and due to which white powder is produced. The third stage includes polishing stones with water. The tool used for polishing these stones is called “Embry”. We saw different sizes of embry. Further, we were shown the parts of Beams and Ceiling. These parts are joined with the help of KEY JOINTS. There are female and male keys of these parts and are joined together. Beams are placed on slabs and then different parts of Jhummar are placed with the help of key joints. The width of the Slab for this temple was 250mm-300mm. We have observed the parts of one pillar, from bottom to top: Bhit-Kumbha-Pillar-Theki-Bharni-Bhetasar-Beam and prepared separated and then joined to make one column. There were some temporary brick masonry columns which help for supporting the building ceiling and after construction of ceiling these temporary structures will be removed. The site has concealed wires for electricity, water pipes, etc. Composite masonry is used for the construction of the temple. Two types of Scaffolding: Single Scaffolding and Double Scaffolding were observed. Single Scaffolding is used during the outer construction of building and is attached to the building. While Double Scaffolding is used during construction of inner structure and can be moved from one place to another.

Aim of Visit:

The main aim of visit is to observe the construction stone masonry work. The students learnt about the instruments used, various processes of carving, dressing, finishing etc. in stone masonry.