

Field Visit Report

Date : 11/09/2015 **Time** : 03:30pm

Location : New boys hostel,
CGPIT Campus,
Bardoli.

Monitored by : Asst. Professor Shyam Doshi

Class : B.Tech 5th semester Division:-A

Objectives of the field visit:

1. To gather information about construction work going on
2. To prepare study of scaffolding

Equipments & tools Used:

1. Concrete mixer
2. Tractor
3. Vibrator
4. Steel rod cutter
5. Trolley

Materials used:

1. Cement (ultratech, ambuja & ACC) 53 grade both OPC & PPC
2. Aggregate
3. Sand:
 - Black sand: From Timba
 - White sand: Bodeli
4. Steel reinforcements for footing jail: 12 to 10mm
5. Steel reinforcements for column: 12 to 25mm
6. Ply, planks, cover blocks, shuttering clamp etc.
7. Size of brick is 22.75 X 10.8 X 7.8 cm.

Material Propositions:

1. Concrete M 25(1:1:2) grade
2. Masonary (1:6)
3. Plaster (1:3 to 1:4)

Finding during visit:

1. Shuttering removed:
 - For slab: 7 days after casting
 - For beam bottom: 14 days after casting
 - For beam side: Next day after casting
 - For column: Next day after casting
2. Thickness of single coat plaster = 0.8cm to 1cm.
3. Thickness of double coat plaster = 1cm to 1.2 cm.
4. Joints in brick masonry are 0.8 to 1cm.
5. Plumb bob used in line and leveling for plastering and masonry alignment.
6. Size of brick is 22.75 X 10.8 X 7.8 cm.
7. Diameter of needle is 25mm use in vibrator.
8. While dismantling of shuttering Honeycombing is negligible.
9. Mortar proportion is 1:1:2 for concrete, 1:3 for plaster, 1:6 for masonry in uniform color.
10. Water cement ratio is maintain approximately as per IS:456 (2000).
11. In black sand gravel is minimum.

Issues found during visit:

1. Yellow soil found at 2.44m. depth, which insufficient for land filling so ordered yellow soil for leveling & filing.

Suggestion(s) for the field visit:

1. Black sand shall be ordered from Vyara instead of Timba, Kamrej.
2. Light weight block may be used instead of bricks.
3. Fly ash brick may be used in compound wall construction instead bricks because its strength is nearby to traditional brick and cost is less than to traditional brick.
4. White sand may be used for single coat plaster also.