

(Affiliated To Visvesvaraya Technological University, Belgaum, Approved By Aicte, New Delhi) 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru – 560 057

Department Of Civil Engineering

Department of Civil Engineering Staffs and students of Sapthagiri College of Engineering Went to Kaivara for Survey camp, ChintamaniTaluk, ChikkabalapurDistrict on 2nd February to 12th February 2019 for the Academic Year 2018-19

Within the duration of 11 days the 71 students Completed 5 surveying projects like

- New tank project(NTP) under the guidelines of Prof Pramod K R,Assistant Professor.
- Old tank project(OTP) under the guidelines of Prof. Rajiv T, Assistant Professor.
- Highway project under the guidelines of Prof. Akshay J, Assistant Professor.
- Water supply and Sanitation, village mapping project under the guidelines of Prof.Dhruvaraj M S,Assistant Professor.
- Town planning project under the guidelines of Prof. Raghavendra R, Assistant Professor.

Sapthagiri College of Engineering 14/5, Chikkasapera, Hesaraghatta Main Road Bengaluru - 560 057



#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560 057 Web: www.sapthagiri.edu.in Phone: 080-28372800/1/2

DEPARTMENT OF CIVIL ENGINEERING

Old tank project

Objective:

- 1. Reconnaissance survey for selection of site and conceptualization of project.
- 2. Detailed survey required for project execution like contour survey, center line allignment, cross section amd longitudinal section
- 3. Rejuvenation of old tank.

Outcome:

- 1. Iincreaseing of bund hight as per requerement.
- 2. Iincreaseing of top bund width as per requerement.
- 3. Incresae in water storage capacity of tank as per requerement.
- 4. Design of all elements and preparation of drawing with report as per regulations.

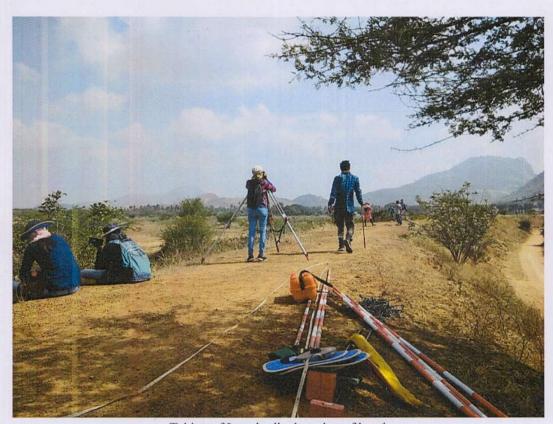


Tracing of capacity contour by using total station

Sapthagiri Coll se of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057

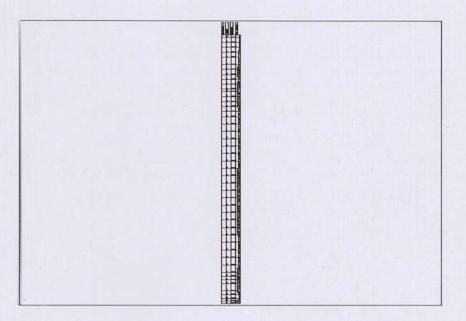


Taking of cross section of bund

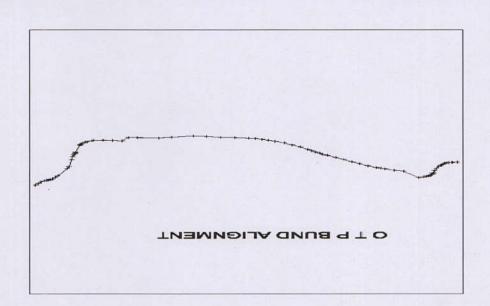


Taking of Longitudinal section of bund

Sapthagiri College of Engineering 14/5, Chikkasanda, Hesaraghatta Main Road Bengaluru - 560 057



Longitudinal section of bund



Sapthagiri College of Engineering
14/5, Chikkasandra, Hesaraghatta Main Read
Bengaluru - 580 057



(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057 Phone:080-28372800/1/2 www.sapthagiri.edu.in Fax: 080-28372797

NEW TANK PROJECT

SYNOPSIS:

New ranks are constructed to provide water for multipurpose irrigation purpose. Tanks and reservoirs requires very careful planning, design and operation for which certain observations relating to selection of site, relative merits of different types of tanks, storage capacity, optimum yield coordinated uses of storage for different purposes etc, are to be studied in detail.

The irrigation reservoir is primarily meant to store the excess water during the period of large supply and release it gradually for irrigation as and when required.

AIM AND OBJECTIVES OF THE PROJECT

Objectives:

In view of acquiring a sound knowledge of both theory and practical situations and also difficulties that would be encountered during field survey work, an extensive survey project camp is usually arranged for civil engineering students.

Following are the technical aims and abilities:

- (a) To impart training in the use of surveying instruments and to acquire comprehensive idea of the project, along with designs, drawings and estimations.
- (a) To train the students in real and difficult situation of project surveying.
- To develop team spirit in practical situation.
- To impart and develop the self-confidence in the management of project survey.

Aim of the Project:

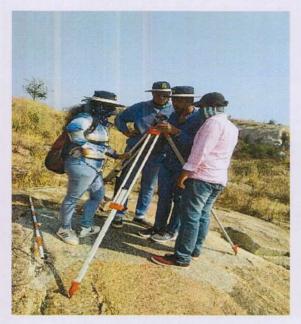
- Longitudinal Section for the New Tank.
- > Cross Section for the New Tank
- Capacity Contour.
- Block Levelling at Waste Weir.
- Canal Alignment.

Sapthagiri College of Engineering 14/5, Chikkasardra, Heseraghatta Main Road Bengaluru - 560 057



(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057 Fhone:080-28372800/1/2 www.sapthagiri.edu.in Fax: 080-28372797



Students Working with dumpy level at NTP site



Students discussion about project





Students Working with dumpy level at NTP site

Sapthagiri College of Engineering 14/5, Chikkasandra, Hasaraghatta Main Road Bengaluru - 560 057



(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)

#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru – 560057
Phone:080-28372800/1/2 www.sapthagiri.edu.in Fax: 080-28372797

Outcome

The outcome of survey works are as follows:

- 1. Reconnaissance.
- 2. Fly levelling.
- 3. Longitudinal sections and cross sections of Bund.
- 4. Capacity Contour tracing.
- 5. Block levelling at sluice point, Deepest bed level and waste weir site.
- 6. Cana alignment.
- 7. Longitudinal sections and cross sections of canal.
- 8. Mother valley Tracing

DRAWING SCALE:

LONGITUDINAL SECTION OF BUND: 1:250 H AND 1:200 V

CROSS SECTION OF BUND: 1:200 H AND 1:200 V

TYPICAL CROSS SECTION OF BUND: 1:50

BLOCK LEVELING: 1:100

LONGITUDINAL SECTION OF CANAL: 1:100

CROSS SECTION OF CANAL: 1:250 H AND 1:200 V

MOTHER VALLEY: 1:250

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057



#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560 057 Web: www.sapthagiri.edu.in Phone: 080-28372800/1/2

DEPARTMENT OF CIVIL ENGINEERING

WATER SUPPLY AND SANITARY PROJECT

Objective:

- 1. Reconnaissance survey for selection of site and conceptualization of project
- Examination of sources of water supply, Calculation of quantity of water required based on existing and projected population.
- 3. Preparation of village map

Outcome:

- 1. Survey work required for lying of water supply and UGD
- 2. Location of sites for water tank
- 3. Selection of type of water tank to be provided (ground level, overhead and underground)
- 4. Design of all elements and preparation of drawing with report



Students performing water supply project

Sapthagiri College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057



#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560 057 Web: www.sapthagiri.edu.in Phone: 080-28372800/1/2

DEPARTMENT OF CIVIL ENGINEERING

HIGHWAY PROJECT

Objective:

- 1. Reconnaissance survey for selection of site and conceptualization of project
- 2. Preliminary and detailed investigations to align a new road (min. 1 to 1.5 km stretch) between two obligatory points
- 3. The investigations shall consist of topographic surveying of strip of land for considering alternate routes and for final alignment

Outcome:

- Report should justify the selected alignment with details of all geometric designs for traffic and design speed assumed.
- 2. Drawing shall include key plan initial alignment, final alignment, longitudinal section along final alignment, typical cross sections of road.



Students aligning longitudinal section in Highway Project

Sapthagiri College of Engineering 14/5, Chikkasandra, Heseragharta Main Road Bengaluru - 560 057



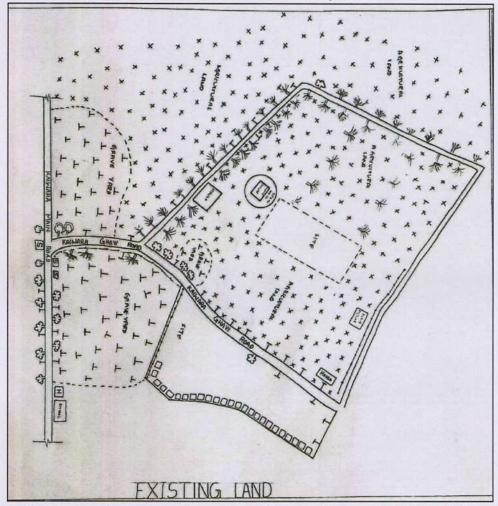
#14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru– 560 057 Web: www.sapthagiri.edu.in Phone: 080-28372800/1/2

DEPARTMENT OF CIVIL ENGINEERING

Town Planning

Objective:

- 1. Reconnaissance survey for selection of site and conceptualization of project.
- 2. Detailed survey required for project execution like contour surveys

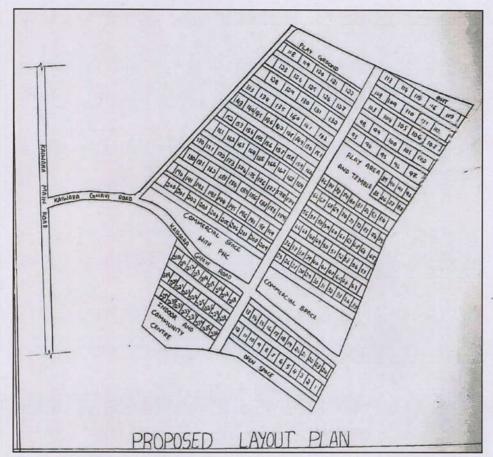


Plan of existing land for town planning project at Kaiwara, Chintamani Tq, Chickaballapur Dt.

Sapthagiri Codege of Engineering 14/5, Chikkasandra, Hesaragnetta Main Road Bengaluru - 560 357

Outcome:

- 1. Preparation of layout plans as per regulations
- 2. Centerline marking-transfer of centre lines from plan to ground
- 3. Design of all elements and preparation of drawing with report as per regulations



Plan for Layout as per regulation



Layout plan Center line alignment with bricks

Sapthag ri College of Engineering 14/5, Chikkasendra, Hesaraghatta Main Road Bengaluru - 560 057