



# SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY

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SHRIDEVI

EDUCATION

Email: info@shrideviengineering.org, principal@shrideviengineering.org | Website: www.shrideviengineering.org



Approved by AICTE, New Delhi, Recognised by Govt. of Karnataka and Affiliated to Visvesvaraya Technological University, Belagavi

Ref: SIET CV/INT//2022-2023/ 26

Date: 29/08/2022

To,

Mr. Saravana  
Contractor  
GR Project Management  
Bangalore 560 020

**Subject:** Permission to carry out internship reg...

Dear sir,

At the outset, we express our heartfelt thanks for permitting the following student to complete the internship at your esteemed organization.

Sl. No	Name of the Student	USN	Mobile No.	Email
1	Nandan C R	1SV19CV017	9148708036	nandancraj.nandi@gmail.com

In this regard, I am happy to permit the above student to carry out his internship from 22/08/2022 to 10/09/2022 in your esteemed organization & seek your co operation in completing his/her internship successfully.

Thanking you & looking forward to your continuous support.

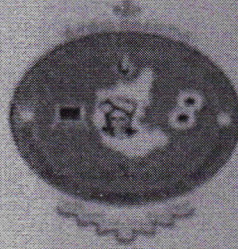
Yours

*[Signature]*  
PRINCIPAL

*[Signature]*  
PRINCIPAL  
SIET, TUMKUR.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"JNANASANGAMA", MACHHE, BELAGAVI-590018, KARNATAKA



2022-2023

Internship Report

on

**"GEF HALL-2 BUILDING CONSTRUCTION**

Carried out in

**BHAGIRATH CONSTRUCTION COMPANY**

Submitted in fulfillment for the award of degree

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

Submitted by:

NANDAN C R

(1SV19CV017)

Under the guidance of:

Internal Guide:

Mr. Manogna H N

Assistant Professor

Dept. of Civil Engineering

SIET, Tumakuru

External Guide:

Mr. Raghavendra

Site Engineer

Bhagirath Construction

Company, Bangalore



SHRIDEVI  
EDUCATION

DEPARTMENT OF CIVIL ENGINEERING

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

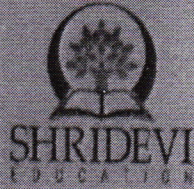
(Affiliated to Visvesvaraya Technological University, Belagavi)

Sira Road, Tumakuru-572106 KARNATAKA

*Manogna H N*  
PRINCIPAL  
SIET, TUMKUR.

SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY  
(An ISO 9001:2000 Certified Institution)

Sira Road, Tumakuru - 572106.



DEPARTMENT OF CIVIL ENGINEERING

CERTIFICATE

Certified that a Internship project report on entitled " GEF HALL-2 BUILDING CONSTRUCTION " has been successfully carried out by NANDAN C R (ISVI9CV017), student of Shridevi Institute of Engineering and Technology, Tumakuru-572106, in partial fulfillment of internship project for the award of Bachelor of Engineering in Civil Engineering of the Visvesvaraya Technological University, Juana Sangama, Belagavi -590018 during the academic year 2022-2023. It is certified that all corrections and suggestions indicated for internal assessment have been incorporated in the report deposited in the Department library. There port has been approved as it satisfies the academic requirement in respect of project on current topic prescribed for B.E Degree.

Signature of the Guide  
Mr. Manogna H N  
Assistant Professor  
Dept. of Civil Engineering  
SIET, Tumakuru

Signature of the HOD  
Dr. G Mahesh Kumar  
Professor and Head  
Dept. of Civil Engineering  
SIET, Tumakuru.

Signature of the Principal  
Dr. Narendra Viswanath  
Principal  
SIET, Tumakuru.

External Viva

Name of the Examiners

1. Manogna H N
2. S.N. Fathima

PRINCIPAL  
SIET, TUMKUR.

Signature with date

23/8/23

# BHAGIRATH CONSTRUCTION COMPANY

CIVIL ENGINEERS - CONSULTATIONS - DESIGNS - CONSTRUCTIONS

No. 43, Old No. 240/A, 3rd Floor, 57th Cross, 3rd Block, Rajajinagar, BENGALURU - 560 010  
Tel. Office : 23140355 / 56 / 57 Resi : 23303192 E-mail : bhagirathcon@gmail.com / bhagirathcon.66@gmail.com

**ATUL GOPINATH, M.E.,**

Managing Partner

No. : BCC/

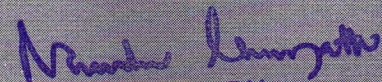
DATE

24.09.2022

## TO WHOM IT MAY CONCERN

This is to certify that Mr. Nandan CR (USN: 1SV19CV017), a student of B.E in Civil at Shridevi Institute of Engineering and Technology, Tumkur has done a full time summer Internship Project at Gokula on the Topic "GEF Hall-2 Building Construction". The duration of his project work was from 22.08.22 to 17.09.22 (27days).

He has completed his internship satisfactorily. We wish him success in life

  
PRINCIPAL  
S.I.T. TUMKUR.

For BHAGIRATH CONSTRUCTION COMPANY

  
ATUL GOPINATH

MANAGING PARTNER

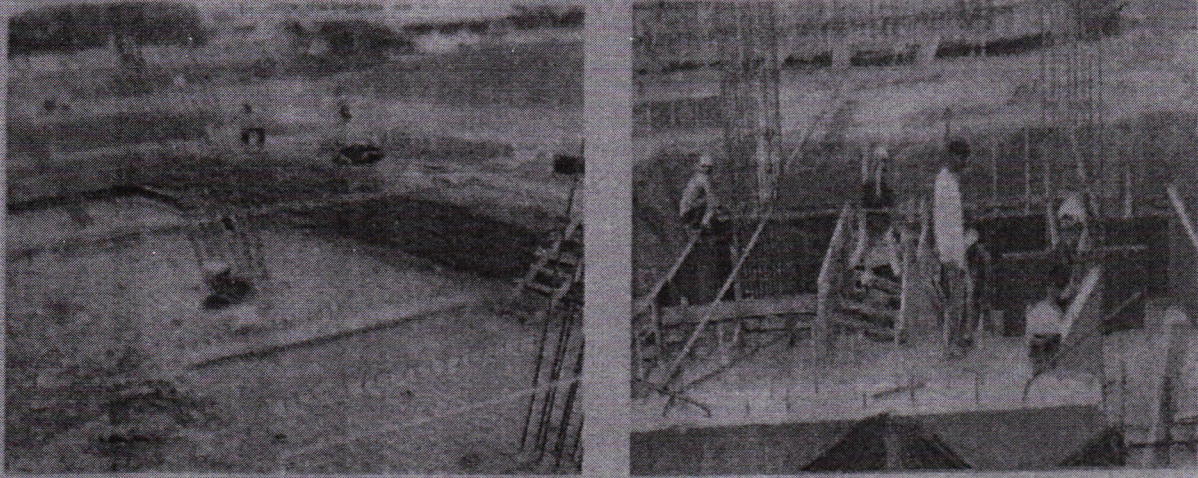


Fig10. Isolated stepped Footing

*M. Srinivas Kumar*  
PRINCIPAL  
SIET, TUMKUR.

#### 4.6.6.2 Rectangular Combined Footing

1. PCC is laid according to the dimensions for both footings which are to be combined.
2. Footing and column are marked with the help of total station by surveyor
3. Footing mat is tied according to drawing with suitable spacing and particular diameter of steel bars and laid.
4. Columns are erected according to design given in drawing.
5. Longitudinally, the footing acts as an upward loaded beam spanning between columns and cantilevering beyond. Using statics, the shear force and bending moment diagrams in the longitudinal direction are drawn. Moment is checked at the faces of the column. Shear force is critical at distance 'd' from the faces of columns or at the point of contra flexure. Two-way shear is checked under the heavier column.
6. The footing is also subjected to transverse bending and this bending is spread over a transverse strip near the column.
7. The first step for any concrete construction starts with the construction of foundation. Foundation can be for columns or walls. So, based on type of structural member, the shape and size of footing are designed. Thus formwork size and shape depends on the type and dimension of the footing.



Fig12. Rectangular Combined Footing

4. **Backfilling and Compaction:** Backfill the area behind the retaining wall in layers, using suitable granular material and compacting each layer thoroughly. Proper compaction is crucial to provide stability and prevent soil movement.
5. **Drainage and Waterproofing:** Install drainage measures as per the engineer's design to prevent water accumulation behind the retaining wall. This may include weep holes, perforated pipes, or other drainage systems. Consider applying waterproofing solutions to protect the wall and prevent water infiltration if necessary.
6. **Coordination with Building Construction:** Coordinate the construction of the building with the retaining wall construction process to ensure proper sequencing and integration of the two structures. Follow local building codes and regulations throughout the process.

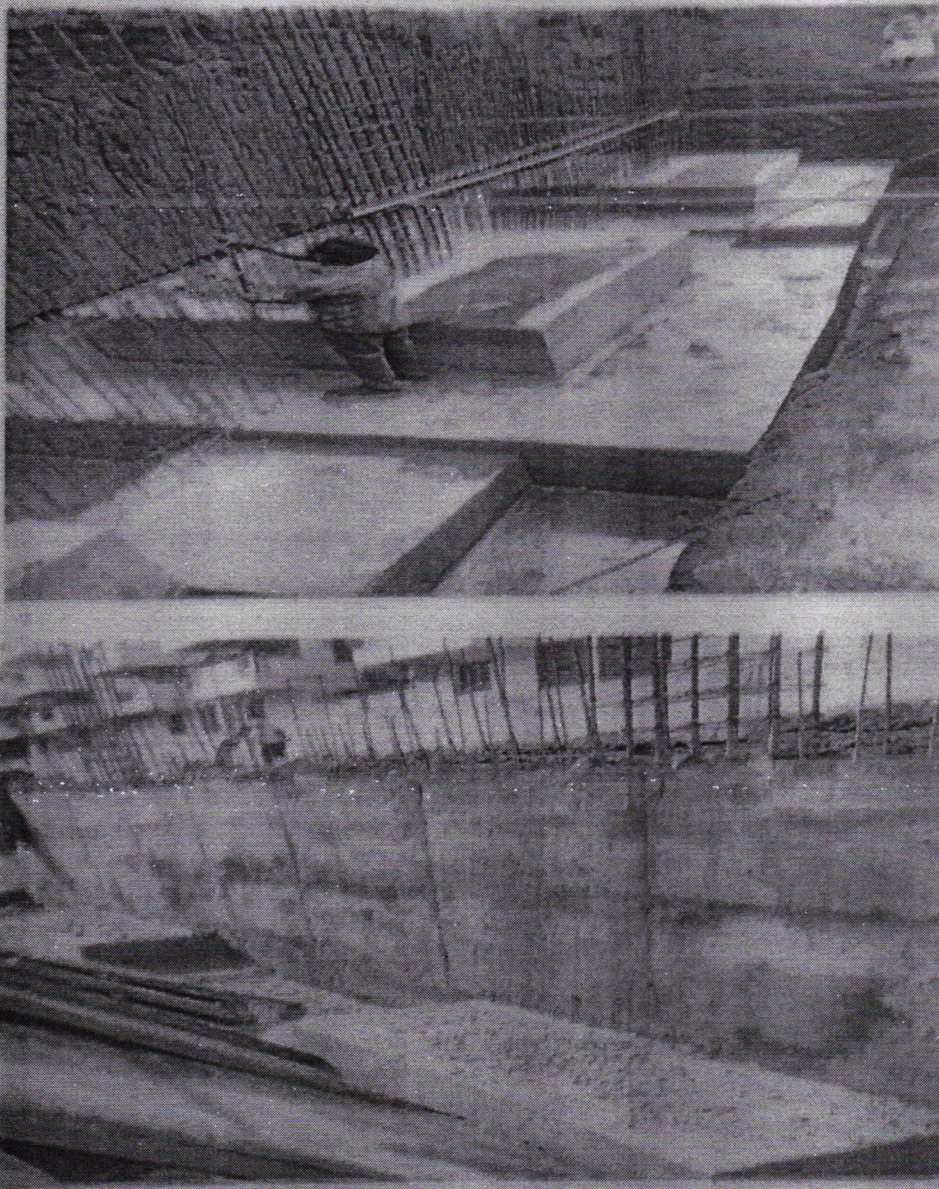


Fig16.Retaining Wall

*M. Srinivas Kumar*  
PRINCIPAL  
SIET, TUMKUR.