SUMMER INTERNSHIP REPORT

ON

GREEN BUILDING, FLYOVER ROR PROJECT AND PERMANENT WAY

FROM

SOUTH EAST CENTRAL RAILWAY BILASPUR

A report submitted in partial fulfilment of the requirements of the award of degree of

BACHELOR OF TECHNOLOGY

in

CIVIL ENGINEERING



DEPARTMENT OF CIVIL ENGINEERING GURU GHASIDAS VISHWAVIDYALAYA BILASPUR CHATTISGARH

Submitted by

HEMA

ROLL No. 21024110





SOUTH EAST CENTRAL RAILWAY



Office of the Chief Administrative Officer/Con/BSP

No. DCE/C/BSP/Internship/2024/41

Date: - 01/07/2024

The Head Department of Civil Engineering G.G.V. Bilaspur.

Sub: - Internship for the undergraduates of Engineering and Management studies:

Ref:-1). Sr. DPO's/BSP's letter No. E/PB/Misc./Summer-Internship/2024 date. 22.05.2024.

Ref:-2). Office of Sr. Divl.Engineer(Co-Ord)/BSP letter No. SECR/BSP/ENGG/Gen/522/Summer-Training/Pt-II/53 date. 22.05.2024

Respected Sir,

As per above subject, it is inform to you that the following02 Nos. students of your reputed G.G.V. Bilaspur, taken successfully 01 month Summer Internship Training in prestigious Green Building project and 1st BSP-USL Flyover ROR project of S.E.C. Pallyay. The attendance and performance during training was <u>VERY GOOD</u>.

The Students are as mentioned below-

SI. No.	Name of Student	Collage
01	Ku. Hema	G.G.V. Bilaspur
02.	Ku. Nivedita	

We wish to their all success, well place and bright future in life.

(Rakesh Kumar Divya)

Dy. Chief Engineer/Construction

S.E.C. Railway Bilaspur उप.मुख्य अभियंता (निर्माण) Dy.Chiof Engineer (Con) दपूम रत्वे, विलासपुर SEC Railway, Bilaspur

ABSTRACT

GREEN BUILDING

This report explores the principles, benefits, and implementation strategies of green building practices. Green buildings are designed to reduce the overall impact on human health and the natural environment through efficient use of resources, minimizing waste and pollution, and creating healthier indoor environments. This report reviews various sustainable materials, energy-efficient technologies, and innovative construction methods that contribute to green building.

It highlights case studies of successful green buildings, examines the economic and social advantages, and addresses the challenges and future directions in the field. The findings underscore the critical role of green buildings in promoting environmental sustainability and enhancing the quality of life for occupants.

PERMANENT WAY

This report details the experiences and findings from a summer internship focused on the permanent way of railway systems. The internship provided hands-on exposure to the design, construction, maintenance, and management of railway tracks. Key activities included site inspections, track alignment assessments, and the application of modern techniques for track stability and safety. The report highlights the importance of precision in track laying, the challenges encountered during maintenance operations, and the innovative solutions implemented to address these issues. Through a combination of theoretical knowledge and practical application, the internship reinforced the critical role of the permanent way in ensuring the efficiency and safety of railway transportation. The insights gained offer valuable perspectives on current industry practices and future advancements in railway infrastructure.

RAIL OVER RAIL

This report summarizes the experiences and insights gained during a summer internship focused on rail over rail infrastructure. The internship involved comprehensive exposure to the design, construction, and maintenance of rail over rail systems, where one railway line crosses over another. Key activities included site assessments, structural analysis, and the implementation of engineering solutions to enhance the efficiency and safety of these intersections. The report highlights the technical challenges encountered, such as load distribution, vibration management, and alignment precision, as well as the innovative methods used to address them. Through a blend of theoretical study and practical application, the internship provided a deep understanding of the complexities involved in rail over rail projects. The findings underscore the importance of meticulous planning and advanced engineering techniques in the successful execution of these critical infrastructure elements, offering valuable perspectives for future developments in railway engineering.