



**MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION,
MUMBAI**

GOVERNMENT POLYTECHNIC KARAD

THIRD YEAR DIPLOMA COMPUTER ENGINEERING (I-SCHEME)

PART [A]

MICRO-PROJECT PROPOSAL

“STUDY ON CONSTRUCTION WASTE”

UNDER THE SUBJECT

ENVIRONMENTAL STUDIES (22447)

SUBMITTED BY

Sr.no	Roll No	Enrollment No	Name of Team Member
1.	2234	2100100032	Sarthak Arvind Bhoj
2.	2236	2100100035	Ayush Annaso Kadam
3.	2268	2200100660	Junaidali Altaf Shaikh

UNDER THE GUIDANCE

Smt. K.K.GAIKAWAD

(DEPARTMENT OF COMPUTER ENGINEERING)

2023-24



**MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION,
MUMBAI.**

Certificate of completion

Of Micro-project Assessment at the end of Semester

This is to certify that,

Sr.no	Roll No	Enrollment No	Name of Team Member
1.	2234	2100100032	Sarthak Arvind Bhoj
2.	2236	2100100035	Ayush Annaso Kadam
3.	2268	2200100660	Junaidali Altaf Shaikh

Has successfully completed “Study on Construction Waste ” Micro-project of the Fifth semester Diploma in Computer Engineering of subject Environmental Studies (22447) from Government Polytechnic Karad. Institute with Institute code (0010).

Prof. K .K. Gaikwad
(Project Guide)

Prof. S. B. Patil
(Head of the department.)

Dr. R. K. Patil
(Head of Institute)



ACKNOWLEDGEMENT

We take this opportunity to thank all those who have directly and indirectly inspired, directed and assisted us towards successfully completion of this project report.

We express our sincere thanks to Dr R. K. Patil Principal of Government Polytechnic, Karad and the Head of Department Prof. Patil S.B, for having us allowed to submit this report as a part of our academic learning.

We express our sincere thanks to Prof. K .K. Gaikwad Lecturer in Computer Engineering, Govt. Polytechnic, Karad for encouragement throughout the project report and guideline in designing and working out this project. We are also grateful to team of project

Place: Government polytechnic Karad

Date:

Yours Sincerely,

2234-Sarthak Arvind Bhoj

2236-Ayush Annaso Kadam

2268-Junaidali Altaf Shaikh

➤ **RATIONALE:**

Construction waste refers to the discarded materials, debris, and byproducts generated during construction, renovation, demolition, and other building-related activities. Studying construction waste is essential due to its significant environmental, economic, and social impacts. Construction and demolition waste contribute to a substantial portion of the total waste generated worldwide. Improper disposal of such waste can lead to environmental degradation, including soil and water pollution, air quality issues, and habitat destruction. Investigating construction waste helps identify sustainable waste management strategies to minimize its negative environmental effects. In this project, we are going to collect all information regarding to Construction Waste.

In this project, we will do following tasks:

- Visit to demolition place (Kolhapur naka).
- To study the Construction waste on construction site.

➤ **AIM AND BENEFITS:**

1. To analyze working of Construction Waste .
2. To address importance of proper Construction Waste Management.
3. To analyze why Construction Waste Management is most important issue in India.

➤ **COURSE OUTCOMES:**

- c)Conserve Ecosystem and biodiversity.
- d)Apply techniques to reduce Environmental Pollution.
- e)Mange social issues and environmental ethics as life long learning.

➤ LITERATURE REVIEW:

1) We referred following link:

- i) <https://awionline.org/content/list-endangered-species>
- ii) <https://blog.finology.in/Legal-news/extinct-endangered-species>

➤ ACTUAL PROPOSED METHODOLOGY:

- 1) Engaging in a thorough discussion on the designated topic was the first step in our project journey. This allowed us to establish a strong foundation for our work.
- 2) The next crucial task was the selection of a capable leader who would guide the team and ensure a smooth distribution of responsibilities among the members.
- 3) To gather the necessary information for our project, we diligently utilized various resources, including books, online articles, and interviews with experts in the field.
- 4) Following data collection, we embarked on the vital process of analyzing the acquired information, aiming to extract valuable insights and trends.
- 5) Subsequently, we compiled all our findings and efforts into a comprehensive report, which served as a documentation of our project's progress and outcomes.
- 6) Thorough quality checks were carried out to ensure the accuracy and completeness of all the materials created for our microproject.
- 7) With our project well-prepared and documented, we presented our findings and progress to our project guide, seeking valuable feedback and guidance.
- 8) Finally, after incorporating any necessary revisions, we submitted our completed project to our guide.

➤ ACTUAL RESOURCES REQUIRED:

Sr.no	Name of Resources	Specification	Quantity
1.	Computer system	Laptop i5 Processor 11 th Generation	1
2.	Ms Word	Microsoft Word 2021 MSO 64 bit	-
3.	Internet	4G, Wi-Fi	-

➤ OUTPUT OF MICROPROJECT:

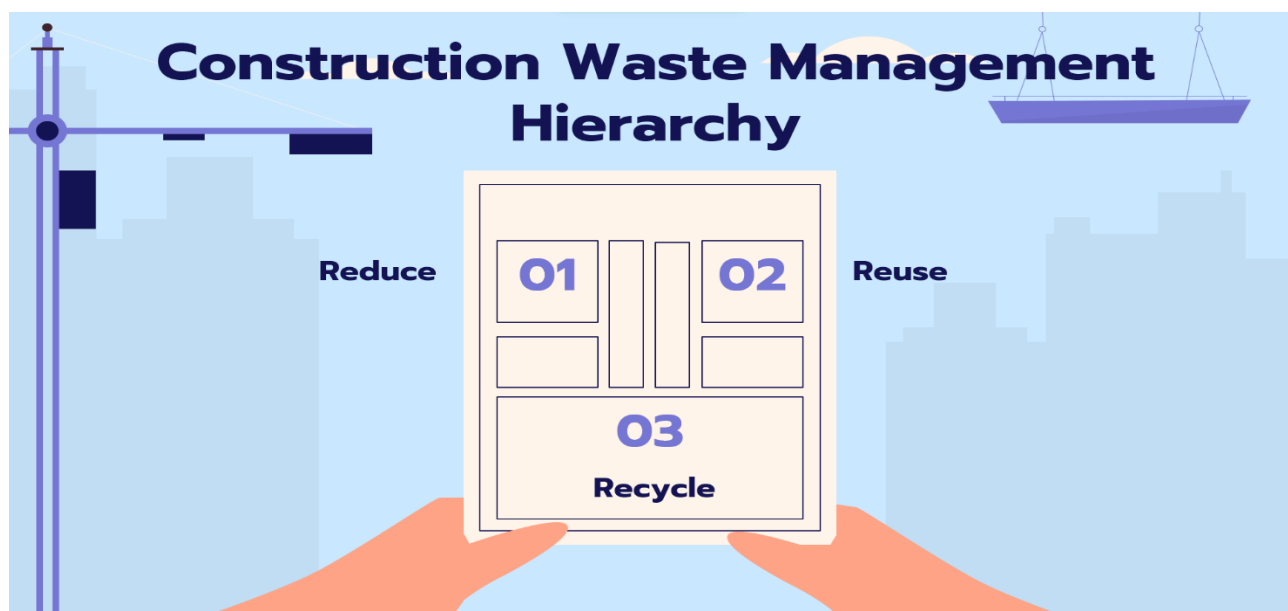
Visit on Construction Site

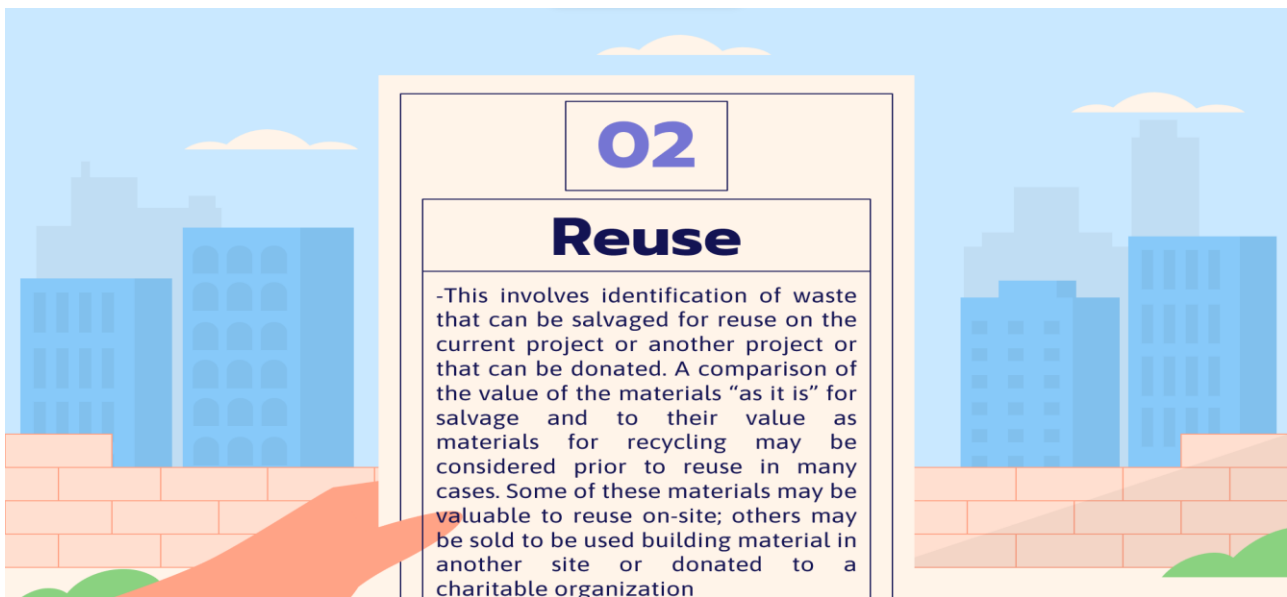
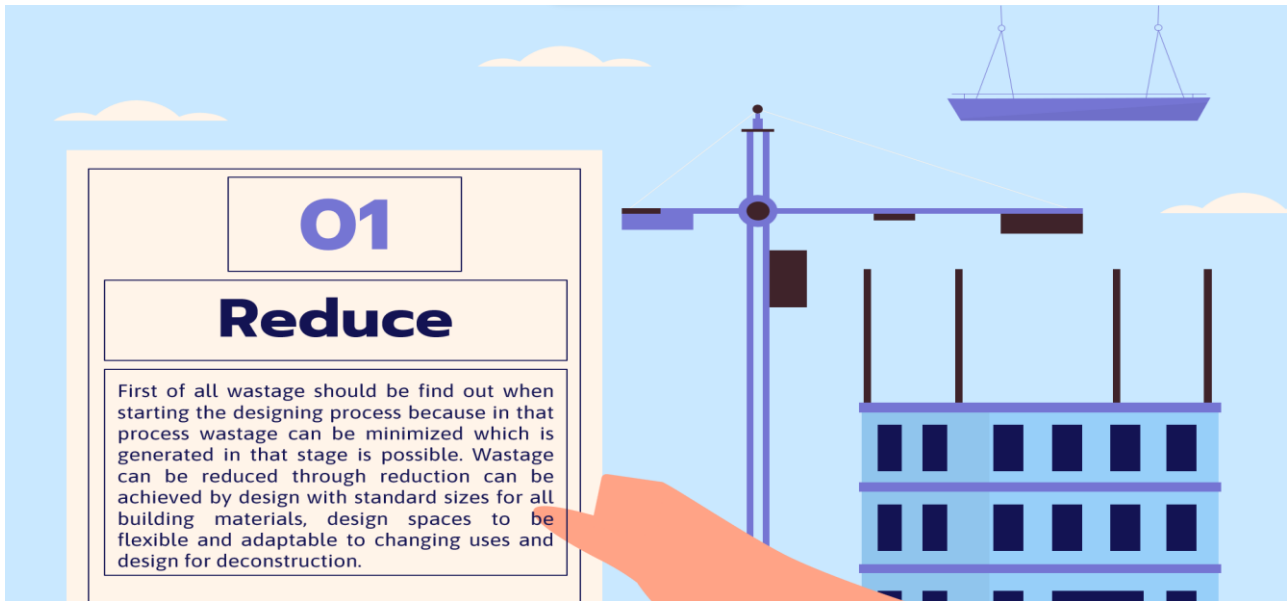


The Effect of Construction Activities

Construction activities generate a large amount of waste compared to other industries. In EC countries, about 200 to 300 million tons of construction and demolition waste is produced annually, which translates to roughly a 400 km² area covered with demolition debris one meter high. In the United States alone, about 136 million tons of construction waste is generated (US Green Building Council, 2001).

Construction Waste Management Hierarchy





Need of construction waste Management

The need for construction waste management has never been more urgent in our rapidly growing world. Construction activities generate a significant portion of non-biodegradable waste, including concrete, metals, plastics, and hazardous materials, which, if not managed properly, can pollute soil, water and air, posing serious health risks to communities. Ultimately, construction waste management is essential for the preservation of our environment, the well-being of communities, and the sustainable development of our societies.

Benefits of Construction Waste Management

Effective construction waste management offers a wide range of benefits to both the environment and society, making it a critical practice in the construction industry. Construction waste management offers a multitude of benefits that extend far beyond the construction site. Primarily, it significantly contributes to environmental preservation by conserving natural resources and reducing pollution. Through the recycling and reuse of materials, it lessens the burden on finite resources and minimizes energy consumption, leading to a notable decrease in greenhouse gas emission

➤ CONCLUSION OF MICROPROJECT:

In conclusion, construction waste management is not just a practical solution; it is an ethical imperative and a commitment to the well-being of our planet. As we face increasing challenges related to resource scarcity, environmental degradation, and climate change, responsibly managing construction waste has become paramount. It represents a fundamental shift towards sustainable practices, where waste is not seen as a burden but as a valuable resource.

➤ References:

- 1) We referred book, Bokk Name is Construction, Demolition And Disaster Waste Management
- 2) We referred following link:
 - i) <https://www.sciencedirect.com/topics/engineering/construction-waste-management>
 - ii) <https://www.safetystratus.com/blog/waste-management-on-construction-sites-tips-to-reduce-waste-disposal/>

