ACHARYA'S NRV SCHOOL OF ARCHITECTURE

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PROJECT TITLE

RECYCLING NEIGHBOURHOOD CENTRE (THESIS) – 2025-26

Submitted in partial fulfillment of the Requirements for the "Bachelor of Architecture" Degree Course

Submitted by : Deekshitha N V
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Guide : Ar. Neha Sahay

A project report submitted to

VISVESHWARAYA TECHNOLOGICAL UNIVERSITY

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CERTIFICATE

This is to certify that this thesis report titled Recycling Neighborhood Centre by Deekshitha N V of X SEMESTER B. Arch, USN No. 1AA21AT014, has been submitted in partial fulfillment of the requirements for the award of under graduate degree **Bachelor of Architecture (B.Arch)** by Visveshwaraya Technological University VTU, Belgaum during the year 2025- 26.

Guide: Ar. Neha Sahay

Principal

Examined by :

1)Internal Examiner :

2)External examiner 1 :

3)External examiner 2 :

DECLARATION

This thesis title "Recycling Neighbourhood Centre", submitted in partial fulfillment of the requirement for the award of the under graduate of Bachelor of architecture is my original work to the best of my knowledge.

The sources for the various information and the data used have been duly acknowledged.

The work has not been submitted or provided to any other institution/ organization for any diploma/degree or any other purpose.

I take full responsibility for the content in this report and in the event of any conflict or dispute if any, hereby indemnify Acharya's NRV School of Architecture and Visveshwaraya Technological University, Belagavi, and its official representatives against any damages that any raise thereof.

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ABSTRACT

This thesis proposes the development of a Neighbourhood-Level Community Recycling Centre as a future-oriented urban solution to decentralized waste management. The centre is envisioned not only as a functional recycling facility but also as a community hub that fosters environmental responsibility, civic participation, and circular economy principles at the grassroots level. By localizing recycling activities within neighbourhoods, the centre ensures that daily household waste is processed and recycled on-site, drastically reducing the volume of waste sent to landfills and lowering the carbon footprint associated with transportation.

Architecturally, the project integrates multi-functional spaces that include sorting and processing zones and upcycling workshops, and community engagement areas. The centre encourages resident participation, supporting behavioural change toward segregation and reuse, while also creating dignified employment opportunities for informal waste workers.

This thesis aims to demonstrate that recycling centres can be aesthetically integrated, socially inclusive, and ecologically impactful when designed at the neighbourhood scale. The proposed model serves as a replicable prototype for urban areas, particularly in rapidly growing cities like Bengaluru, where waste management is a critical environmental challenge.

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LIST OF TABLES