ACHARYA'S NRV SCHOOL OF ARCHITECTURE

SOLADEVANAHALLI, BENGALURU -560107

PUNARNAVA – ALCOHOL DE-ADDICTION CENTRE

ARCHITECTURE DESIGN PROJECT (THESIS) – 2025 - 2026

Submitted in partial fulfillment of the Requirements for the

"Bachelor of Architecture" Degree Course

Submitted by	: Bipin Achappa N M
USN	: 1AA21AT012
Guide	: Ar. Harsha P Haribal

A project report submitted to

VISVESHWARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Machhe, Belgaum – 590018

ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ - ೫೯೦೦೧೮

CERTIFICATE

This is to certify that this thesis report titled "PUNARNAVA – ALCOHOL DE-ADDICTION CENTRE" by BIPIN ACHAPPA N M of X SEMESTER B. Arch, USN No. 1AA21AT012, 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. Harsha P Haribal

Principal

Examined by :

1)Internal Examiner :

2)External examiner 1 :

3)External examiner 2 :

DECLARATION

This thesis title "**PUNARNAVA – ALOCHOL DE-ADDICTION CENTRE**", submitted in partial fulfillment of the requirement for the award of the under graduate degree 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.

BIPIN ACHAPPA N M

1AA21AT012

Acharya's NRV School of Architecture, Bangalore

Certificate of Plagiarism Check for Thesis

Author Name	Mr. Bipin Achappa N M
Course of Study	B. Arch.
Name of Guide	Ar. Harsha P Haribal
Department	Architecture
Acceptable Maximum Limit	25
Submitted By	parasappavajjaramatti@acharya.ac.in
Paper Title	PUNARNAVA – ALCOHOL DE-ADDICTION CENTRE
Similarity	7%
Paper ID	4727767
Total Pages	66
Submission Date	2025-11-24 09:52:22

Signature of Student **Signature of Guide**

Librarian **Principal**

* This report has been generated by DrillBit Anti-Plagiarism Software

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to the people who have supported and guided me during my Architecture Undergraduate Thesis project. First and foremost, I would like to thank my thesis advisor, Ar. Harsha, for their unwavering support, encouragement, and constructive feedback. Their guidance has been invaluable, and I am grateful for the time and effort they have invested in my project. I would also like to extend my thanks to Dr. Sapna Papu, Principal of the institution, for providing a conducive academic environment that nurtured my skills and contributed to the success of my project. Additionally, I would like to acknowledge the support of my family who have provided me with emotional support and encouragement throughout this challenging process. I am grateful for their patience, understanding, and motivation. Finally, I would like to express my appreciation to all my friends who have helped me in any way during this project and my architectural college life. Your contribution has been valuable, and I am thankful for your assistance.

TABLE OF CONTENTS

ABSTRACT

1.INTRODUCTION----------01

1.1 Aim
1.2 Objective
1.3 Scope
1.4 Limitations
1.5 Justification
1.6 Design Methodology

2.LITERATURE STUDY----------08

2.1 Introduction and Background Study

3.CASE STUDIES----------10

3.1 ST. John's Rehabilitation Hospital, Canada
3.2 Rehabilitation Centre Groot, Klimmendaal
3.3 Muktangan Rehabilitation Centre, Pune
3.4 SDM De-Addiction Centre, Nada

4.COMPARATIVE ANALYSIS----------35

5.SITE ANALYSIS----------37

6.DESIGN PROCESS----------45

7.FINAL DRAWINGS----------52

8.CONCLUSION----------54

9.BIBLIOGRAPHY----------55

TABLE OF FIGURES

Figure 1.1: Rehabilitation Centre----------01

Figure 1.2: Location of the site----------04

Figure 1.3: Views of the site----------05

Figure 1.4: Flow Chart----------06

Figure 1.5: Flow Chart----------07

Figure 1.6: Bar Graphs----------08

Figure 1.7: Statistics----------09

Figure 3.1: Front View of St. John's Rehabilitation Hospital----------10

Figure 3.2: Site Plan----------11

Figure 3.3: Zoning----------11

Figure 3.4: Floor Plan----------13

Figure 3.5: Section at A-A'----------13

Figure 3.6: Materials & components----------13

Figure 3.7: Landscape View----------14

Figure 3.8: Key Strategies----------15

Figure 3.9: Patient Centric Design ----------15

Figure 3.10: View----------16

Figure 3.11: Site Plan----------17

Figure 3.12: Ground floor plan ----------17

TABLE OF FIGURES

Figure 3.13: First floor plan----------18

Figure 3.14: Second floor plan----------18

Figure 3.15: Third floor plan----------19

Figure 3.16: Explanation----------19

Figure 3.17: Materials & Components ----------20

Figure 3.18: Curtain walls---------- 21

Figure 3.19: Well-lit Aisles----------21

Figure 3.20: Skylights---------- 21

Figure 3.21: Exterior Views----------21

Figure 3.22: Front view----------22

Figure 3.23: Site plan----------23

Figure 3.24: Zoning----------24

Figure 3.25: Ground Floor plan----------24

Figure 3.26: First Floor plan----------24

Figure 3.27: Second floor plan----------25

Figure 3.28: Typical Section----------25

Figure 3.29: Building Section----------26

Figure 3.30: Material & Components----------26

Figure 3.31: Statistics----------27

TABLE OF FIGURES

Figure 3.32: Area programs----------27

Figure 3.33: Key Features----------28

Figure 3.34: Courtyard View----------28

Figure 3.35: Entrance Porch----------28

Figure 3.36: Views----------29

Figure 3.37: Site plan----------30

Figure 3.38: Area Program----------3

Figure 3.39: Ground Floor plan ----------31

Figure 3.40: First Floor plan----------32

Figure 3.41: Typical section & Layout----------32

Figure 3.42: Landscape Views----------33

Figure 3.43: Material Components----------33

Figure 4.1: Comparative Analysis----------35

Figure 5.1: Site Plan----------37

Figure 5.2: Site Plan----------38

Figure 5.3: Neighbourhood Context----------39

Figure 5.4: Land use Map----------40

Figure 5.5: Sun path diagram----------41

Figure 5.6: Road Network diagram----------41

TABLE OF FIGURES

Figure 5.7: Sensory diagram----------42

Figure 5.8: Vegetation map----------42

Figure 5.9: Wind diagram----------43

Figure 5.10: Site Counter----------43

Figure 5.11: Views of the Site----------44

Figure 6.1: Concept Development----------45

Figure 6.2: Development Sketches----------45

Figure 6.3: Views of the Site----------46

Figure 6.4: Views of the Site ----------47

Figure 6.5: Area Program----------48

Figure 6.6: Zoning/ Bubble Diagram----------49

Figure 6.7: Massing view----------50

Figure 6.8: Chart table ----------51

Figure 7.1: Site Plan----------52

Figure 7.2: Isometric view----------52

Figure 7.3: Rendered site plan----------53

Figure 7.4: 3D View----------53

ABSTRACT

Alcohol addiction has become a serious public health concern in India, especially in metropolitan cities like Bengaluru, where rapid urbanization, stress, and changing lifestyles have led to an increase in alcohol abuse. Most existing rehabilitation centres focus only on detoxification and short-term therapy, often neglecting emotional recovery, social reintegration, and vocational empowerment which are essential for long-lasting healing and relapse prevention.

This thesis explores how architecture can act as a medium for holistic recovery by creating spaces that heal the mind, body, and spirit. The proposed Alcohol De-addiction Centre integrates architectural design, therapeutic programs, and vocational training to form an environment that nurtures individuals and supports their journey toward self-sufficiency and confidence. The design incorporates therapeutic landscapes, hydroponic farming, sports, and community spaces that encourage physical, emotional, and social rehabilitation.

Through hydroponic therapy, patients participate in nurturing activities that promote responsibility, mindfulness, and skill development, creating opportunities for post-recovery employment. The architectural approach focuses on healing through natural light, openness, greenery, and sensory experiences that promote psychological well-being and community connection.

The project envisions a new model of rehabilitation that moves beyond institutional treatment, emphasizing emotional healing, skill-building, and sustainable reintegration into society. It aims to demonstrate how thoughtful architecture can play a transformative role in restoring balance, dignity, and purpose in the lives of recovering individuals.