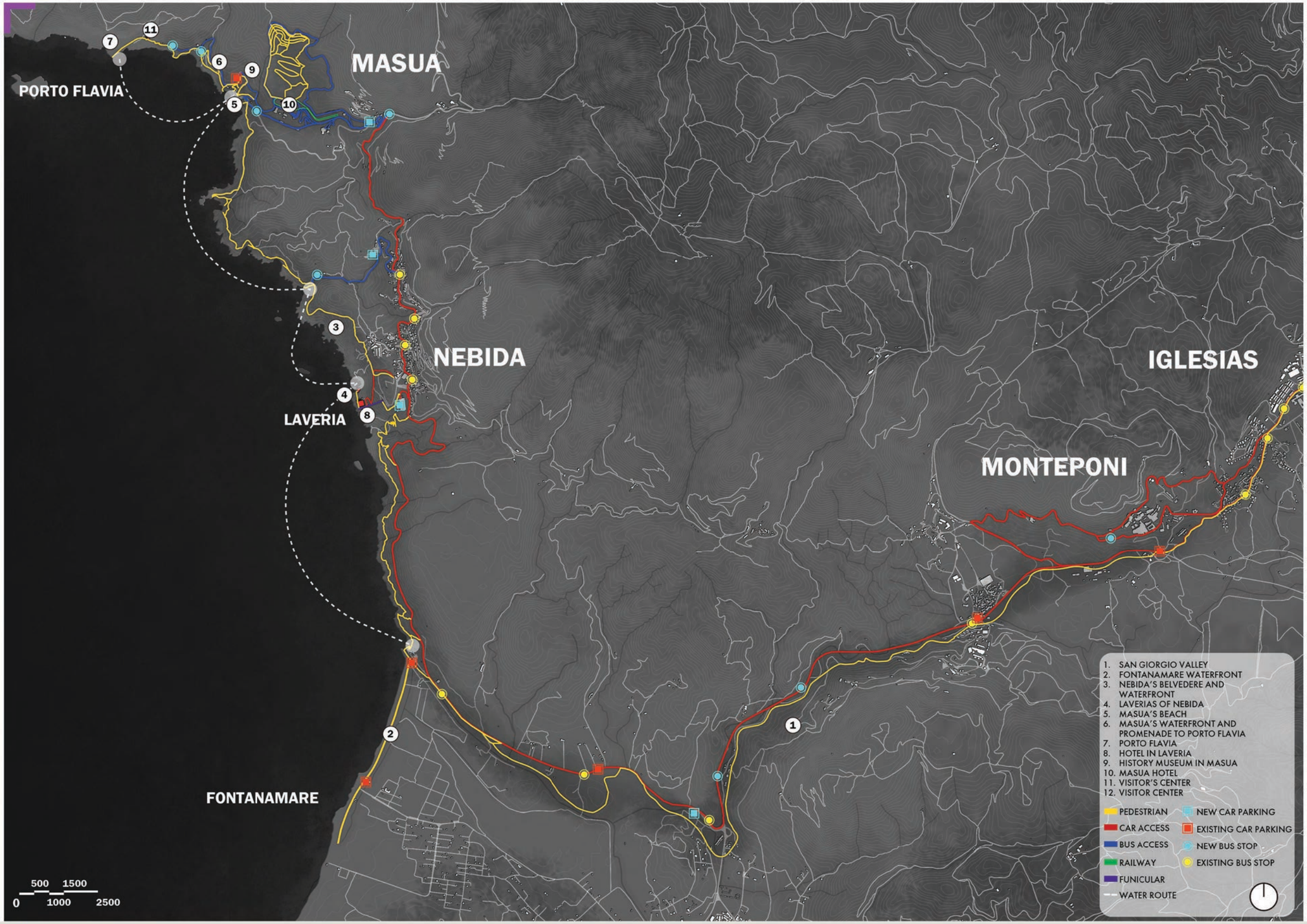
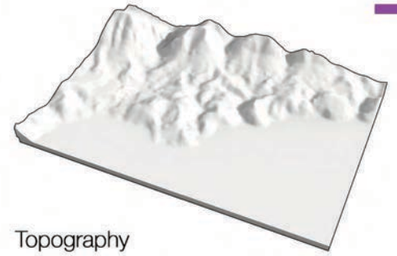
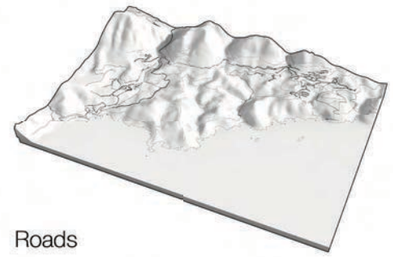
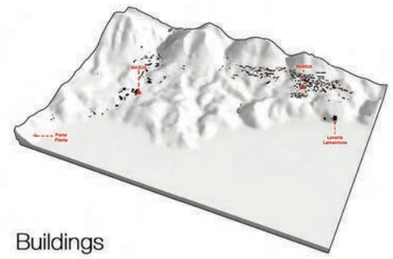




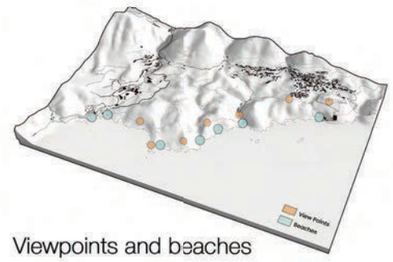
Topography



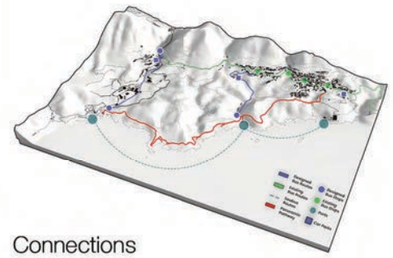
Roads



Buildings



Viewpoints and beaches



Connections

Country/City	Italy / Piacenza
University / School	Politecnico di Milano
Academic year	2024 - 2025
Title of the project	Nebida Panoramic Pathway
Authors	Davut Ayhan, Tomas Tirinato, Mehmet Uzunokur, Yibo Gao

TECHNICAL DOSSIER

Title of the project	Nebida Panoramic Pathway
Authors	Davut Ayhan, Tomas Tirinato, Mehmet Uzunokur, Yibo Gao
Title of the course	Architectural Design Studio 1
Academic year	2024 - 2025
Teaching Staff	Prof. Arriola Madorell Andreu , Prof.ssa Pandolfi Alessandra Maria, Sergio Salazar
Department / Section / Program of belonging	Sustainable Architecture and Landscape Design
University / School	Politecnico di Milano

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Written statement, short description of the project in English, no more than 250 words

The Nebida Panoramic Pathway is a scenic 6 kilometer coastal route designed to connect two of Sardinia's most iconic heritage sites: Laveria Lamarmora and Porto Flavia. Integrating both pedestrian and bicycle lanes, the path traces the coastline, offering direct access to several beaches and spectacular views of the Mediterranean landscape. It is part of a broader sustainable mobility strategy for the Municipality of Iglesias, which seeks to enhance coastal connectivity between Monteponi, Fontanamare, Laveria Lamarmora, and Porto Flavia.

To encourage slow tourism and promote accessibility, the path includes bicycle parking and shaded rest areas placed at key viewpoints. These spots allow users to pause, take in the view, and experience the area's rich geological and cultural heritage. The route adapts to the rugged terrain through a combination of flat and elevated segments that follow the natural topography.

The pathway is constructed from prefabricated reinforced concrete modules with a timber deck surface, providing a lightweight yet durable solution. Corten steel railings run along the seaward side for safety, while biomats on the inland edge support natural revegetation. The 3-meter-wide path is stabilized by micropilotis, which are effective in both sandy and fractured rocky conditions.

Accessible by a new public bus line with three strategic stops, the project aims to reduce car dependency and promote eco-friendly transport options. The pathway reflects a thoughtful integration of landscape, heritage, and sustainable infrastructure.

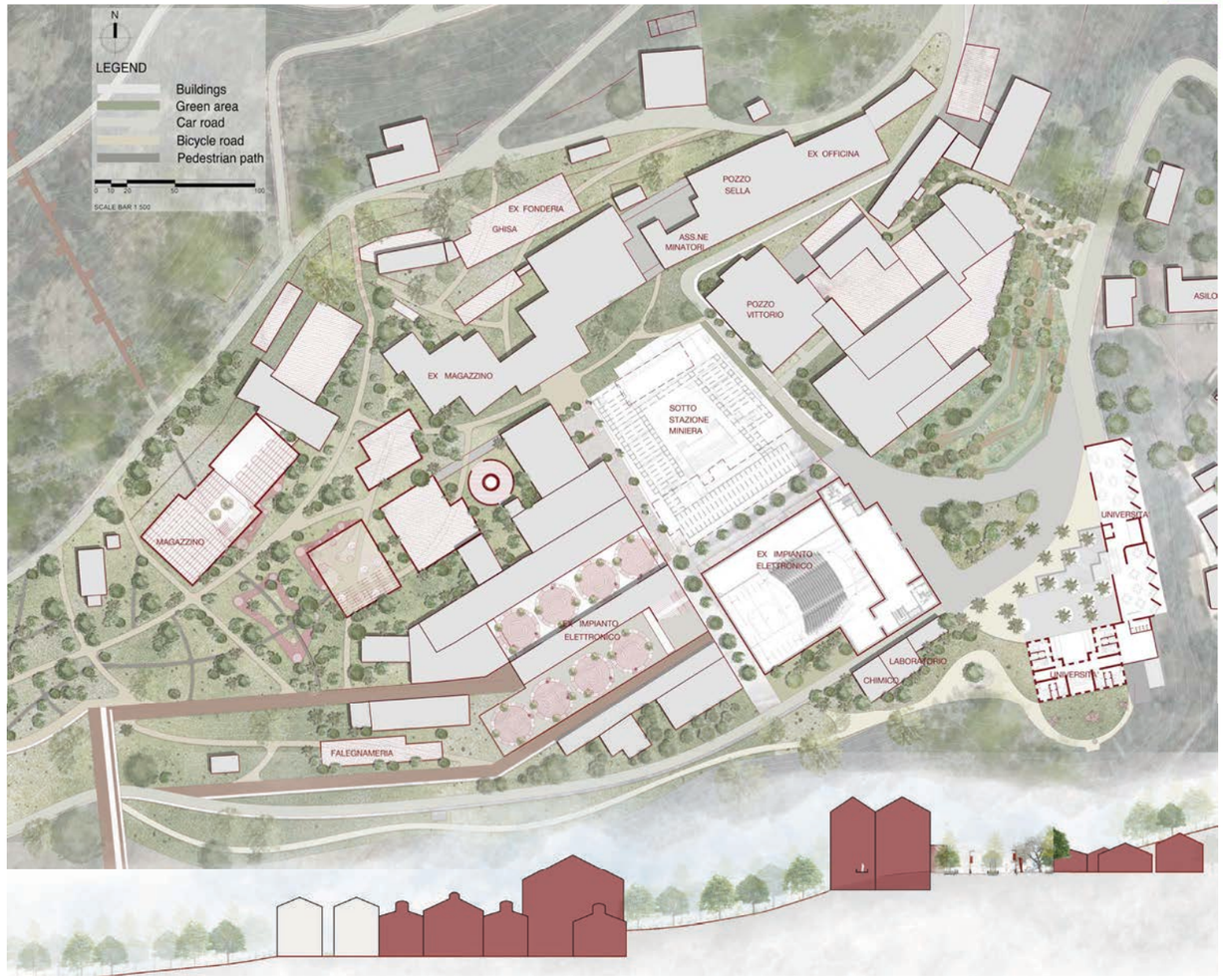
Transportation hubs, including parking lots, train stations, and bus stops. Private cars are not allowed on the way to Masua; only public transportation is permitted.

Shuttle buses provide round trips to the seaside beach and the ferry terminal.

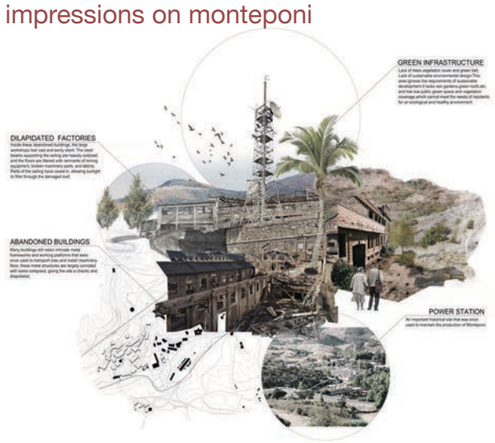
The ferry terminal offers sea tour routes.

masterplan for 4 different approaches to existing buildings and general landscape approach

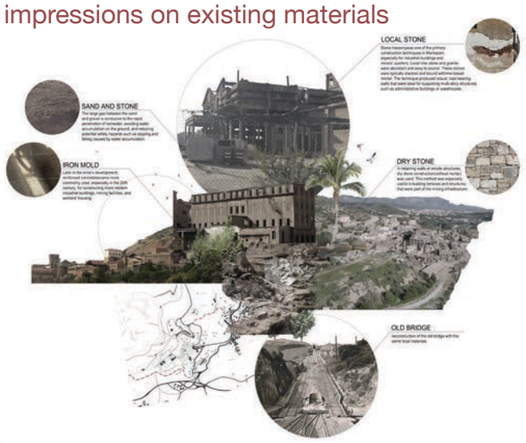
masterplan for materials and landcape details



impressions on monteponi



impressions on existing materials



landscape interventions illustration

Monteponi: From Ruin to Renewal
This project reimagines Monteponi as a renewed landscape—an “island” reconnected to its surroundings through a network of historic and new paths. By reconstructing ancient routes, we restore links between the site, Iglesias, and the wider mining territory.

A new visual identity rebrands Monteponi as a place of meaning and possibility, while replanting native flora revives the site’s ecological richness.

Monteponi becomes a new kind of neighborhood—open, inclusive, and rooted in community. Through adaptive reuse, shared spaces, and cultural programming, it transforms into a living landscape where history and contemporary life meet.

Country/City	Italy / Piacenza
University / School	Politecnico Di Milano
Academic year	2024 - 2025
Title of the project	Reconnecting Monteponi
Authors	Şevki Yapıcı - Ceyda Coşar - Peng Peilin - Jiang Winjing

TECHNICAL DOSSIER

Title of the project	Reconnecting Monteponi
Authors	Sevki Yapıcı - Ceyda Coşar - Peng Peilin - Jiang Winjing
Title of the course	Reconnecting Monteponi
Academic year	2024 - 2025
Teaching Staff	Anderu Ariolla - Sergio Martin Salazar Abecasis
Department / Section / Program of belonging	School of Architecture and Urban Planning
	Sustainable Architecture and Landscape Design
University / School	Politecnico Di Milano

reusing the existing buildings as a workshop

reusing the existing buildings as a bazaar area

reusing the existing space to give back the identity

creating a new branding for monteponi

Written statement, short description of the project in English, no more than 250 words

"Reconnecting Monteponi" is a landscape and urban regeneration project focused on revitalizing the historic Monteponi mining complex near Iglesias, in southwest Sardinia. Once a vital industrial site, Monteponi now exists as a fragmented and neglected landscape. This project positions Monteponi as a pilot intervention within a broader regional strategy linking key heritage sites like Porto Flavia and Nebida, with the aim of transforming post-industrial ruins into active cultural and community spaces.

The vision reframes Monteponi's abandoned structures not as relics, but as a cultural archive capable of supporting contemporary life. The design addresses accessibility first, improving circulation across the sloped site with barrier-free paths that connect key structures, open areas, and nearby settlements.

A neglected area on the western edge was reimagined as a civic and ecological threshold—blending Sardinia's natural landscape with Monteponi's industrial core through topographic adjustments and native vegetation.

Architectural interventions focused on adaptive reuse and selective preservation. Stable buildings, such as the former hospital and school, were converted into community hubs and cultural spaces. In contrast, more deteriorated structures were stabilized and transformed into open-air museums or gardens, maintaining their material integrity while offering new functions.

The landscape was reinforced with native flora and modular, industrial-inspired furniture to encourage informal use and reflection. A key component of the project was the rebranding of Monteponi with a cohesive visual identity—through signage, wayfinding, and storytelling tools—to invite both locals and visitors to engage with the site's layered history and future potential.

Barcelona International Landscape Biennial

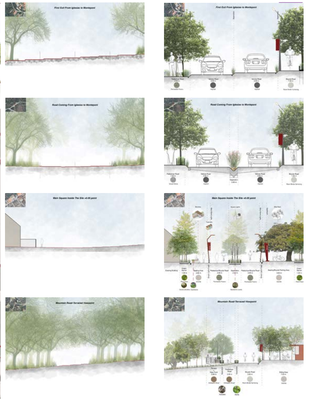
Contact via email:
biennaladm@coac.net

Venue:
COAC - Col·legi Oficial d'Arquitectes de Catalunya
Carrer Arcs 1-3, 08002 Barcelona - Spain

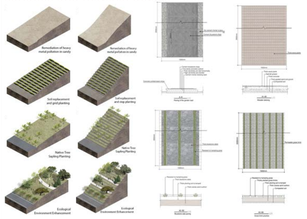
zoom in plan showing re-creation of library area

zoom in plan showing landscape furniture and reuse of open building

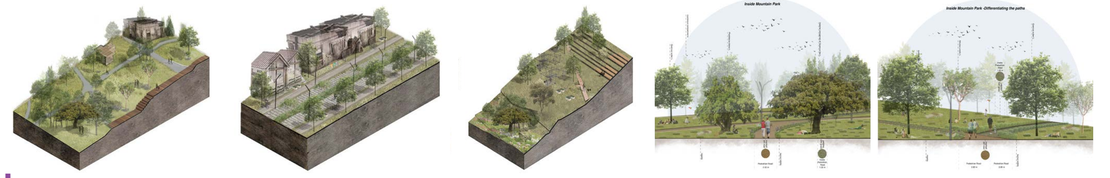
before - after sections of roads and pathways



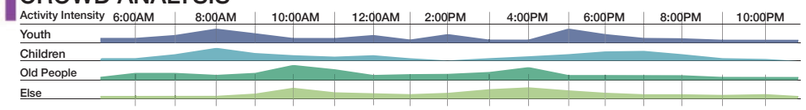
strategies for planting trees on flat and sloped surfaces and material details

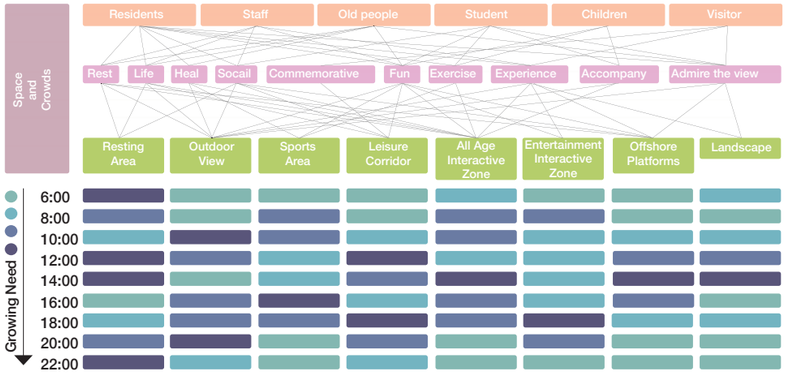


axonometric illustration and sections showing the interventions and general atmosphere of new design areas and monteponi with the materials used



CROWD ANALYSIS

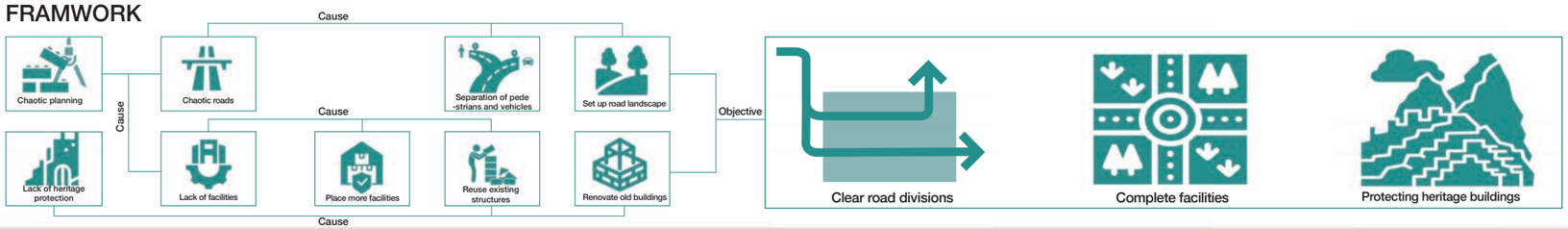




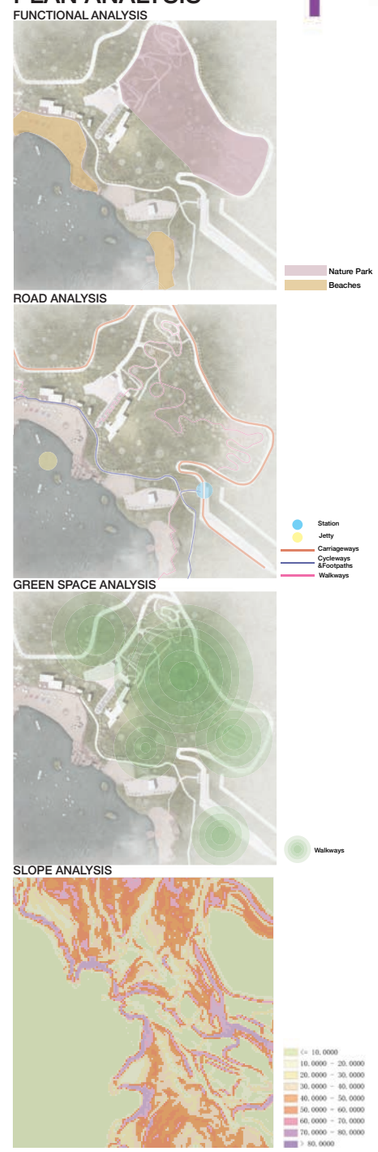
STRATEGY

MASTER PLAN

FRAMWORK



PLAN ANALYSIS

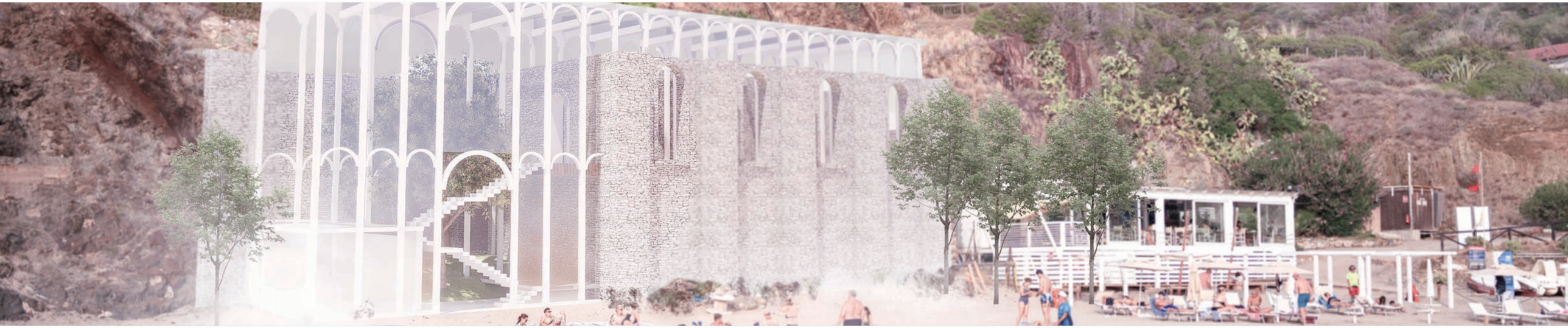


Country/City	Piacenza, Italy
University / School	Polytechnic University of Milan
Academic year	2024/2025
Title of the project	Masua beach sustainable retrofit design
Authors	Zheng Jiayu , Xu Yingjie , Jiang Jiawei , Wang Zengchen

TECHNICAL DOSSIER

Title of the project	Masua beach sustainable retrofit design
Authors	Zheng Jiayu , Xu Yingjie , Jiang Jiawei , Wang Zengchen
Title of the course	ARCHITECTURAL DESIGN STUDIO 1
Academic year	2024/2025
Teaching Staff	Pro. ARRIOLA MADORELL ANDREU, Pro. PANDOLFI ALESSANDRA MARIA
Department / Section / Program of belonging	Sustainable architecture and landscape design - Architecture-
	School of Architecture Urban Planning Construction Engineering
University / School	Polytechnic University of Milan

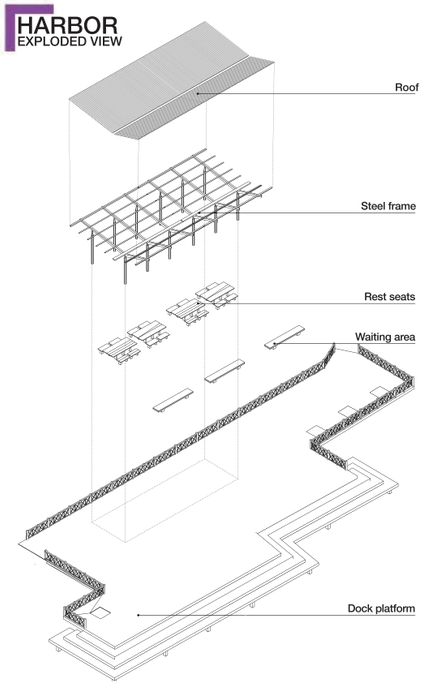
13



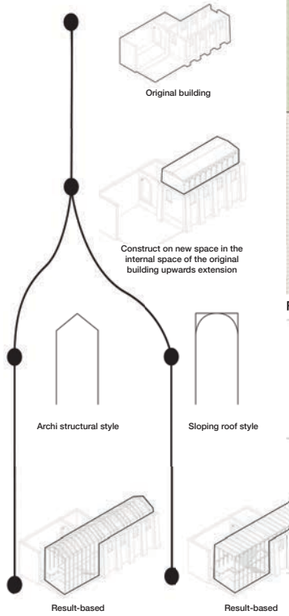
Written statement, short description of the project in English, no more than 250 words

This project addresses the sustainable revitalization of coastal landscapes in Sardinia, Italy, through a design strategy that integrates ecological restoration, cultural heritage preservation, and experiential tourism. Using multi-criteria analysis, four sites were evaluated—Masua Beach, Porto Cauli, Porto Corollo, and Porto Ferru—revealing pressing issues such as limited accessibility, lack of facilities, and ecosystem degradation. The proposal introduces a multi-layered intervention plan that respects the local topography and historical buildings while enhancing public usability. New elements include pedestrian-friendly walkways, ecological shading structures, restored ruins, and modular cultural spaces. Sustainability is embedded in the system through passive design techniques, geothermal heating, rainwater recycling, and the use of native drought-tolerant plants to ensure biodiversity and erosion control. Referencing international case studies like the Living Water Park (Chengdu) and Boston College Campus (USA), the project aims to balance global best practices with local identity. The final masterplan creates a resilient, inclusive, and culturally vibrant coastal environment, providing a model for adaptive reuse and climate-responsive design in heritage landscapes.

HARBOR
EXPLODED VIEW



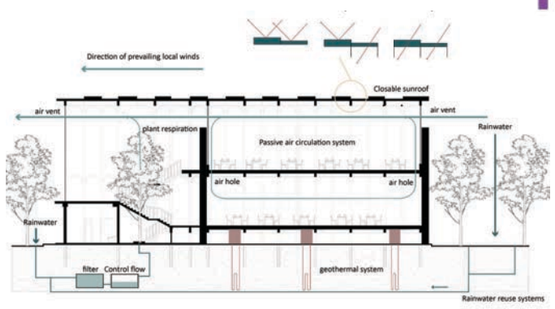
RUIN
GENERATE ANALYSIS



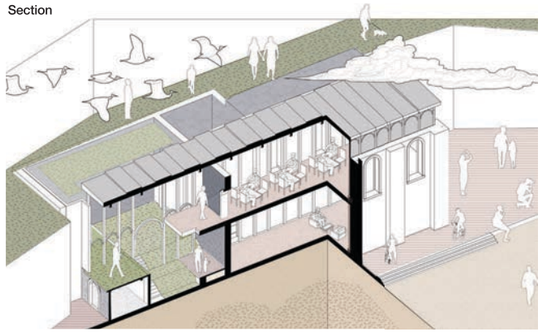
GROUND FLOOR PLAN

FIRST FLOOR PLAN

Section

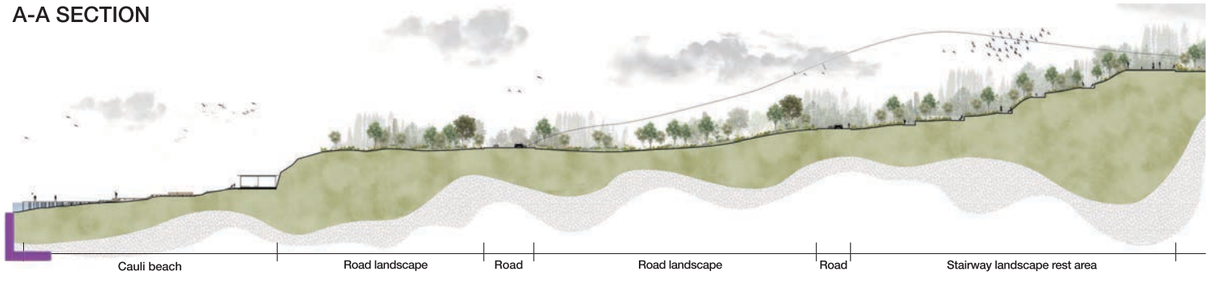


Section

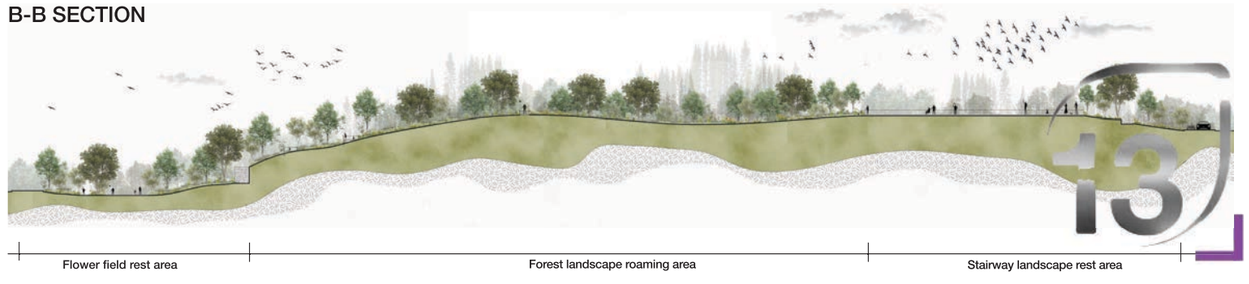


Rendering

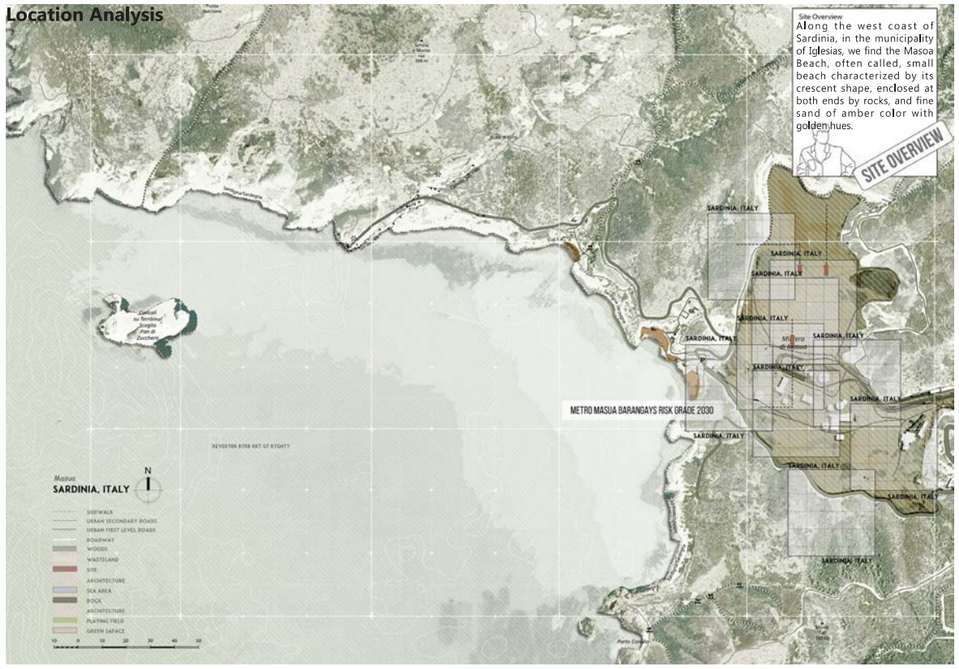
A-A SECTION



B-B SECTION

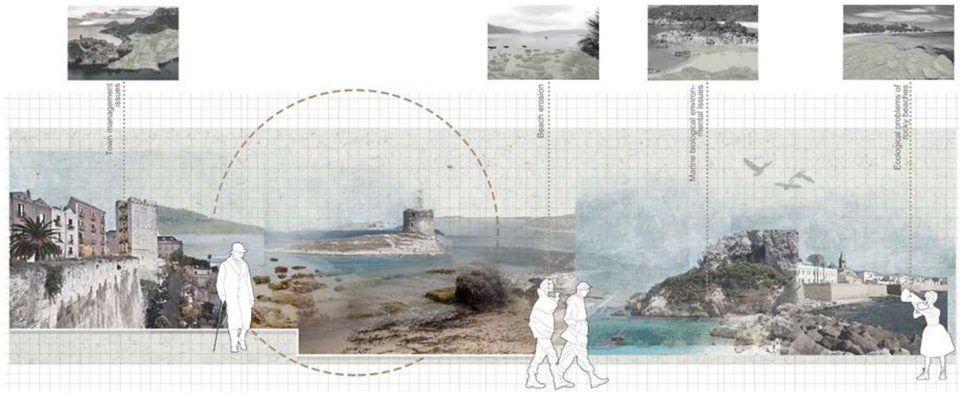


Location Analysis



SITE STATUS ANALYSIS

Site Status



Site Problem Description

Town Management

Masua town has a large number of immigrants and residents, and the town management is relatively inadequate.

There are many reefs near Masua Beach, so the reef beach, as a feature of this area, needs to be reconsidered how to protect it.

Coastal Ecosystem

Coastal Ecosystem

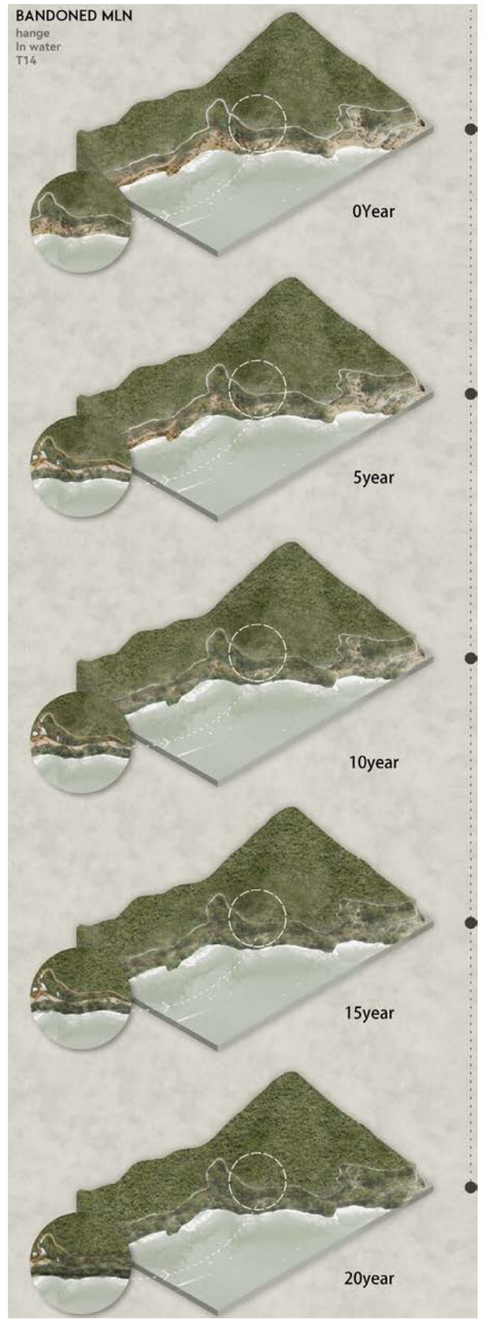
The ecosystem near Masua Beach is affected by seawater. It is necessary to re-study the plants that are suitable for growth in this area and re-establish a complete ground ecosystem.

With the increase in tourists and the development of tourist areas in recent years, the protection of marine ecology has become particularly important.

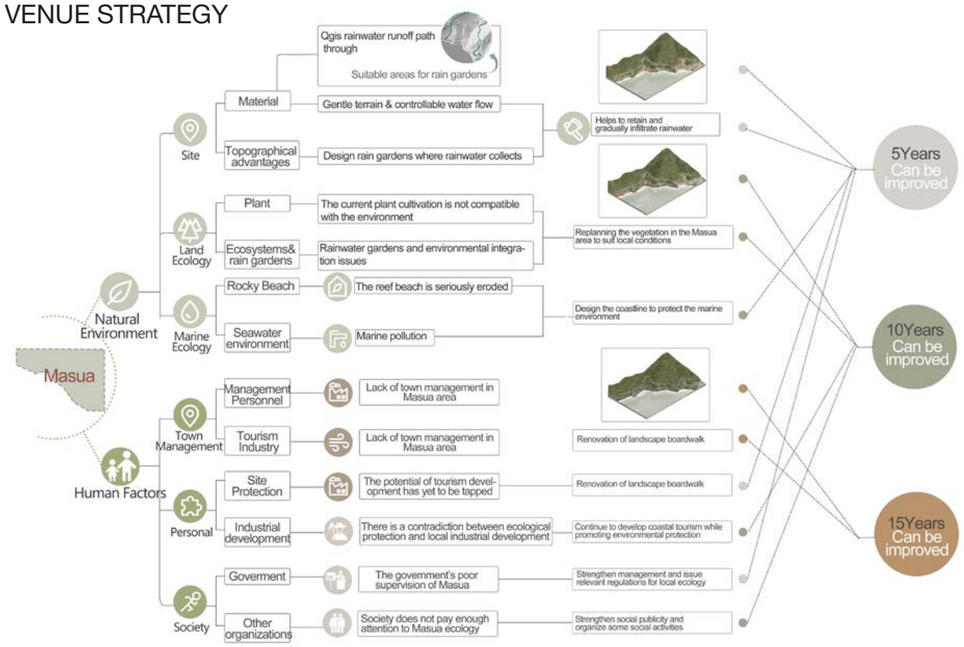
Marine protection

BANDONED MLN

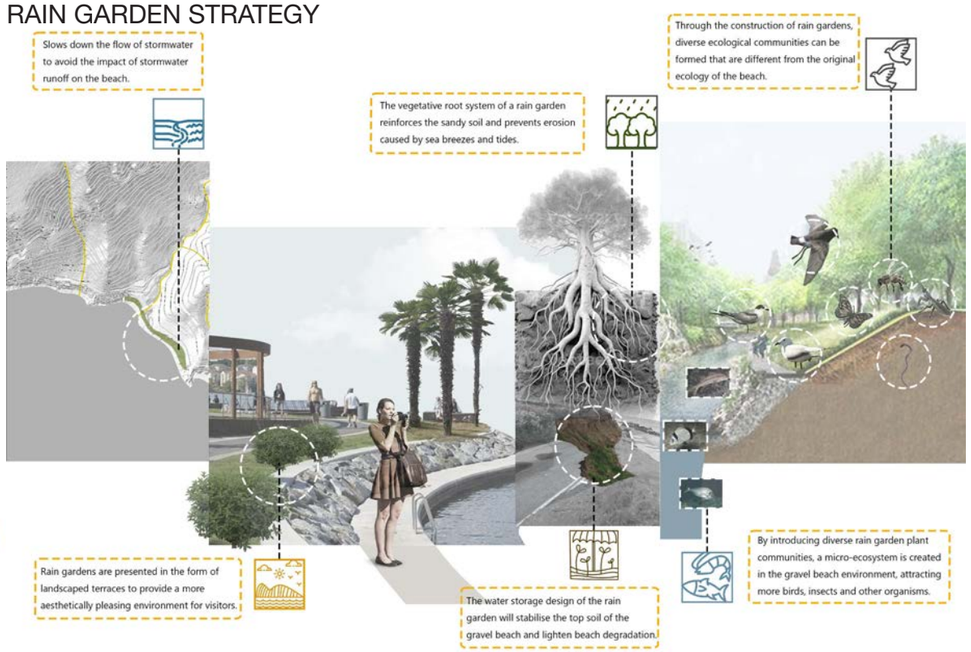
hange
In water
T14



VENUE STRATEGY



RAIN GARDEN STRATEGY



Please provide a 250-word text explaining the selection criteria used to choose the five projects representing the school in the Ribas Piera Prize. Detail the aspects evaluated, such as conceptual quality, innovation, thematic relevance, technical resolution, or any other criteria considered in the selection process with a single image, characteristic of the academic process, to accompany the text.

MASTERPLAN

Legend

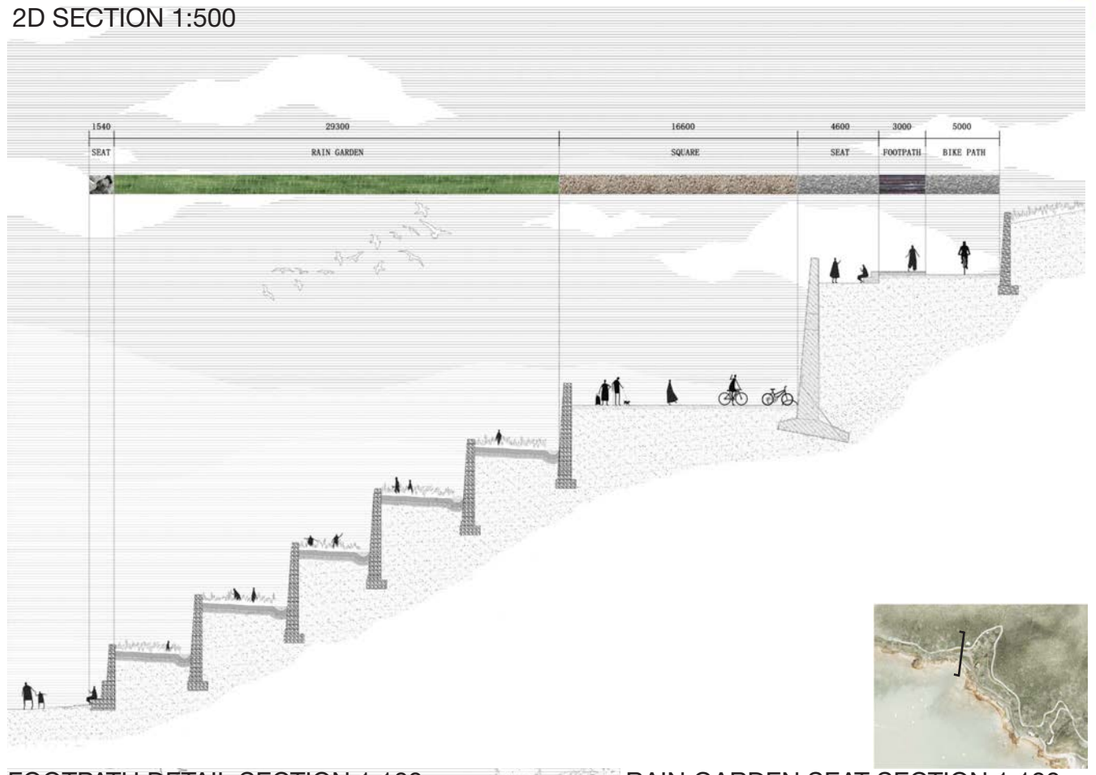
1. The gate of Porto Flavia
2. Viewing Steps
3. Observation Desk
4. Bus Station
5. Landscape Planting Platform
6. Bicycle Parking
7. Tower
8. Bar
9. Camping Base
10. Toliet&Service
11. Bicycle Path
12. Foot Path
13. Original Road

N

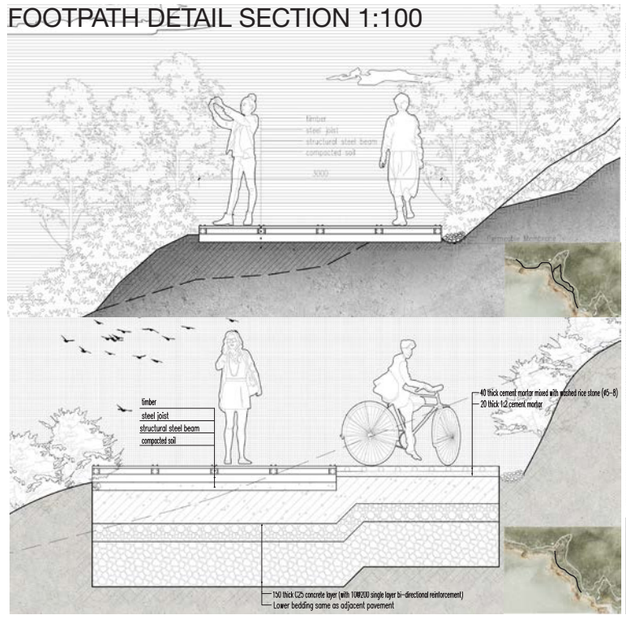
0 20 60 80

A3@1:1000 Master Plan

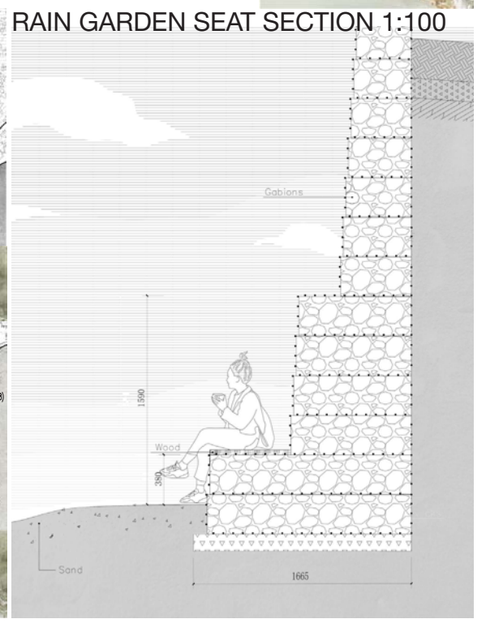
2D SECTION 1:500



FOOTPATH DETAIL SECTION 1:100



RAIN GARDEN SEAT SECTION 1:100



Country/City	China
University / School	Polytechnic University of Milan
Academic year	2024/2025
Title of the project	MASUA TRANSITIONS
Authors	DAI YUANBEI LIU ZIHAN WANG ZHIHAN ZHENG XUYUN

TECHNICAL DOSSIER

Title of the project	MASUA TRANSITIONS
Authors	DAI YUANBEI LIU ZIHAN WANG ZHIHAN ZHENG XUYUN
Title of the course	ARCHITECTURAL DESIGN STUDIO 1
Academic year	2024/2025
Teaching Staff	Pro. ARRIOLA MADORELL ANDREU, Pro. PANDOLFI ALESSANDRA MARIA
Department / Section / Program of belonging	Sustainable architecture and landscape design - Architecture-School of Architecture Urban Planning Construction
University / School	Polytechnic University of Milan

13

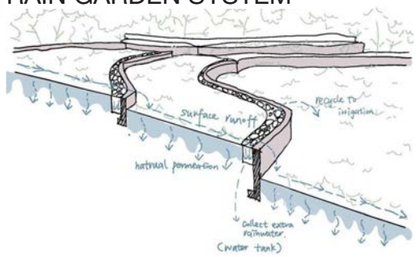
Written statement, short description of the project in English, no more than 250 words

This project reimagines Masua Beach, Sardinia, as a resilient and immersive coastal destination. Its core strategy is a 20-year phasing of rain gardens to reduce erosion, improve biodiversity, and regenerate native vegetation. Terraced and planted systems restore ecological function while enhancing beach access.

A layered mobility system combines shared buses, redesigned footpaths, and a dedicated cycle lane. Visitors arrive via public transport, minimizing ecological impact. In the first zone, a three-tier rain garden manages runoff and provides access. The second zone preserves native plants and improves public amenities like bike parking and service points. Due to steeper terrain, the final stretch becomes a pedestrian trail leading to Porto Flavia.

The project integrates ecological restoration with inclusive circulation to foster long-term resilience and a meaningful relationship between people and place.

RAIN GARDEN SYSTEM

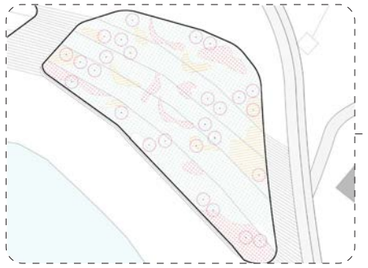


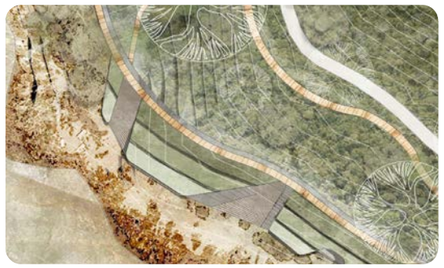
1.DRAFTS
Groupings of the same plant

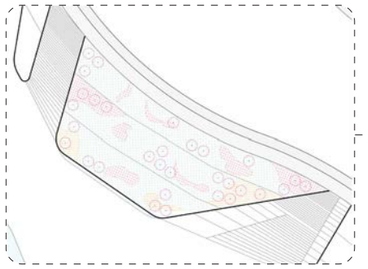
2.FOCAL POINT
Arrange plants around a focal point

3.LINE UP
Make 3 straight rows

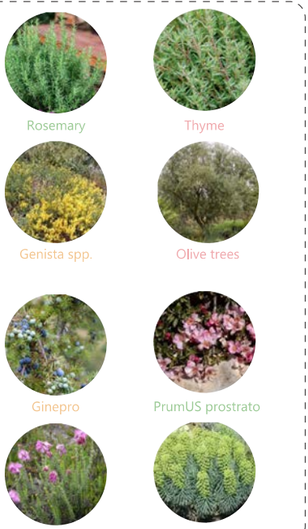
4.WEAVE
Weave plants in and out of rows







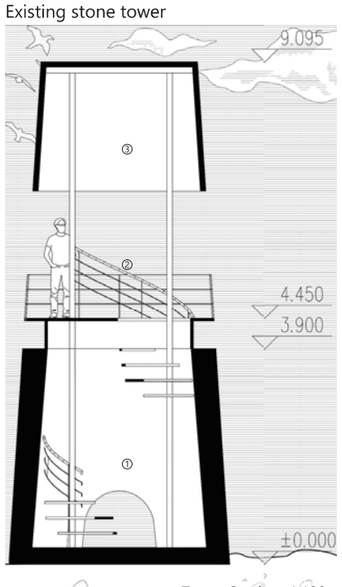
PLANT SELECTION



EXISTING BUILDING RENOVATION

Exiting building renovation plan1:500

Existing stone tower

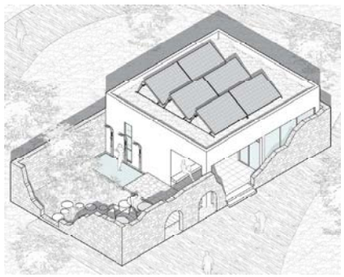


① exhibit ② lookout ③ shading

This tower is an old structure related to industrial use, most likely connected to local mining or metal processing activities. the primary function of this tower was as an ore furnace or roasting kiln. The arch-shaped structure at the base of the tower was once part of a roasting kiln used to heat ore and extract valuable metals. Such structures were common in mining areas during the 19th and early 20th centuries, particularly in resource-rich regions like Sardinia.

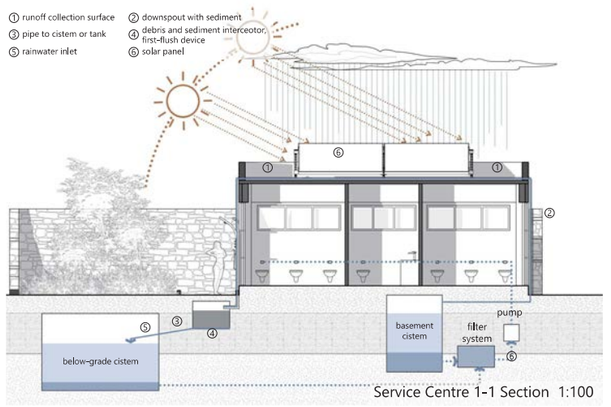
EXISTING BUILDING RENOVATION

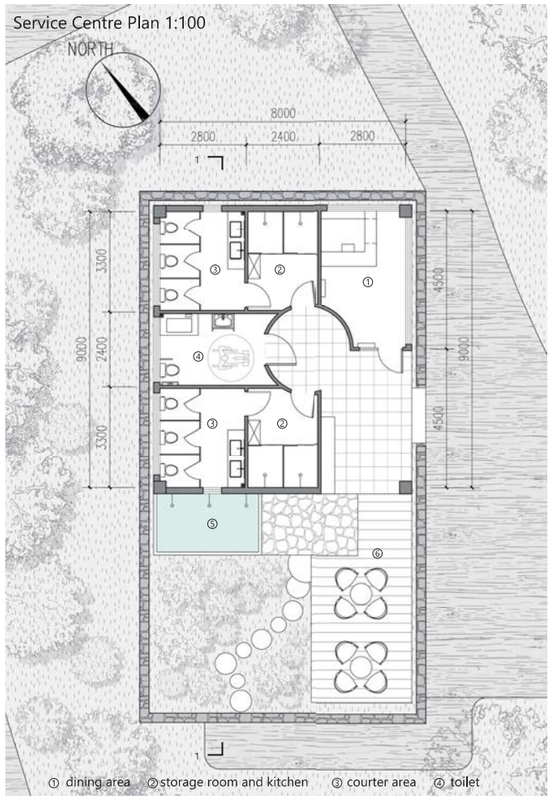
Service Centre



This renovation preserves the original broken stone walls as a historical feature while integrating modern functionality. A new public restroom with showers and retail spaces is built within the walls, and an open courtyard is designed to allow visitors to experience the preserved ruins and appreciate the site's heritage.

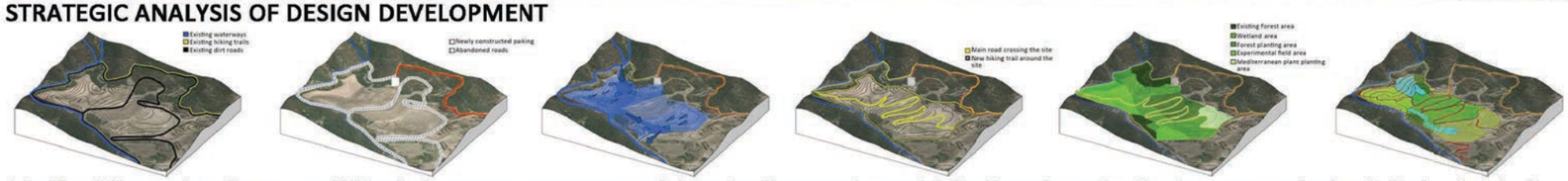
Rainwater Harvesting And Solar Energy





SITE STATUS ANALYSIS

STRATEGIC ANALYSIS OF DESIGN DEVELOPMENT



Identify existing roads, waterways, and hiking trails; remove unnecessary roads to restore the ecosystem;and define the water system.Develop a new road network, finalize the planting plan, and generate the final model.

AGRICULTURAL SUSTAINABILITY ANALYSIS

QGIS-ROCK LITHOLOGY ANALYSIS | QGIS-HYDROLOGICAL SYSTEM ANALYSIS | QGIS-ELEVATION ANALYSIS | QGIS-SLOPE ANALYSIS | QGIS-RIVER IRRIGATION CAPACITY ANALYSIS | QGIS-AGRICULTURAL BENEFIT ZONE ANALYSIS | QGIS-COMPREHENSIVE EVALUATION

Country/City	Italy - Milan
University / School	Polytechnic University of Milan
Academic year	2024/2025
Title of the project	Ecological Farm Park On Waste Rock
Authors	Prof. Arriola Madorell Andreu / Student’ s group : Ou ZiYang, Zhang ZiLing, Wu YiXuan

TECHNICAL DOSSIER

Title of the project	Ecological Farm Park On Waste Rock
Authors	Prof. Arriola Madorell Andreu / Student’ s group : Ou ZiYang, Zhang ZiLing, Wu YiXuan
Title of the course	ARCHITECTURAL DESIGN STUDIO 1 - Sustainable Architecture and Landscape Design
Academic year	2024/2025
Teaching Staff	Arriola Madorell Andreu, Pandolfi Alessandra Maria, Sergio Martin Salazar Abecasis
Department / Section / Program of belonging	ARCHITECTURAL DESIGN STUDIO 1 - Sustainable Architecture and Landscape Design - Master course (1st year)
University / School	Polytechnic University of Milan - Italy, Campus of Piacenza

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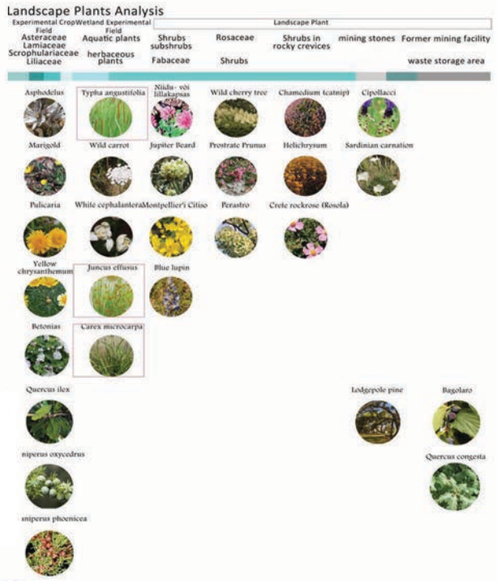
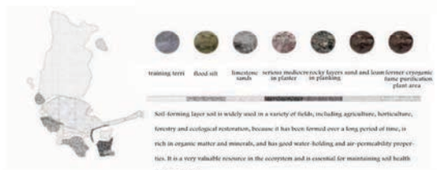
Written statement, short description of the project in English, no more than 250 words

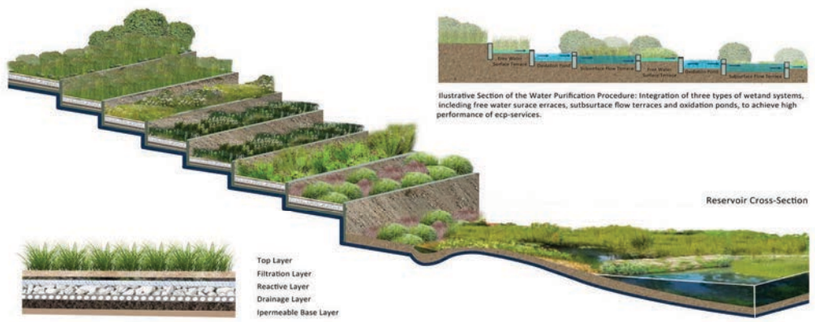
This project transforms a former mining site in Masua, Sardinia, into an ecological farm park. Once degraded by decades of extraction, the land is reimagined as a resilient space for restoration, education, and recreation.
The masterplan includes a Mediterranean botanical garden, wetlands, experimental plots, and rice paddies, all shaped by the site's natural topography. Phytoremediation, sustainable farming, and water restoration help reverse soil degradation and biodiversity loss.
A network of paths links features such as the visitor center, observation deck, climbing area, and research base —promoting exploration and community use. Educational farming zones and ecological experiment areas engage locals and students in the recovery process.
By reconnecting the site to Masua Beach and Port Flavia through slow mobility trails, the project supports ecotourism while honoring local memory. It offers a new model for regenerating damaged landscapes: productive, inclusive, and nature-based.

ECOLOGICAL ANALYSIS





WATER PURIFICATION SYSTEM ANALYSIS



Ilustrative Section of the Water Purification Procedure: Integration of three types of wetand systems, incleding free water surace erraces, sutbsurtace flow terraces and oxidation ponds, to achieve high performance of ecp-services.

Master Plan