

05 SARNO ADVANCED DESIGN STUDIO

edited by/a cura di Adriana Bernieri



Master's Program in Architecture
University Federico II Napoli
A.Y. 2022-23

Sarno Laboratorio di Sintesi Finale
Corso di Laurea Magistrale 5UE in Architettura
Università degli Studi di Napoli Federico II
A.A. 2022-23

05 SARNO ADVANCED DESIGN STUDIO

edited by/a cura di Adriana Bernieri

Napoli: FedOAPress, 2024

(ADS - Advanced Design Studio; 5)

288 pp.; 21x29,7 cm

Access to the electronic version *Accesso alla versione elettronica*

<http://www.fedoabooks.unina.it>

ISBN: 978-88-6887-325-7

DOI: 10.6093/978-88-6887-325-7

ADS - Advanced Design Studio

Book Series *Collana editoriale*

FedOAPress - Federico II University Press

Director *Direttore*

Pasquale Miano (DiARC-Unina)

Scientific Committee *Commissione Scientifica*

Fabrizio Ascione (DII-Unina)

Eduardo Bassolino (DiARC-Unina)

Alessandra Capuano (DiAP-Sapienza)

Maria Cerreta (DiARC-Unina)

Attilio De Martino (Dist-Unina)

Bruna Di Palma (DiARC-Unina)

Laura Lieto (DiARC-Unina)

Paulo Providencia (DARQ-Universidade de Coimbra)

Juan Domingo Santos (ETSA-Granada)

Editorial Committee *Comitato redazionale*

Adriana Bernieri, Francesca Coppolino (coordination/coordinamento)

Chiara Barone

Marilena Bosone

Vincenzo Valentino

Sara Verde

Graphic Project *Progetto grafico*

Adriana Bernieri, Francesca Coppolino

Layout *Impaginazione*

Adriana Bernieri con la collaborazione di Ludovica Grillo

Cover Image *Immagine in copertina*

Adriana Bernieri

The publication collects the results of the work carried out during the 2022-2023 academic year.

La pubblicazione raccoglie i risultati del lavoro svolto durante l'anno accademico 2022-2023.

Faculty *Docenti* Pasquale Miano, Libera Amenta, Eduardo Bassolino, Margherita Mastellone, Roberto Tartaglia,

Domenico Tirendi

with *con* Adriana Bernieri, Rosaria Iodice, Vincenzo Valentino

Images Credits (when not specifically mentioned) *Autori delle immagini (quando non specificatamente indicato)*

Images in the Projects section are attributed to the respective authors of the project.

Le immagini della sezione Progetti sono da attribuire ai rispettivi autori del progetto.

Urbanità dei centri medi. Una ricerca nei comuni della Campania con meno di 70.000 abitanti

Ricerca finanziata nell'ambito del Bando della Regione Campania, Assessorato al Governo del Territorio La qualità dell'architettura

- Linea 1 / Promozione della cultura, della ricerca e dell'innovazione dell'architettura moderna e contemporanea in Campania.

Progetto realizzato con il contributo della Regione Campania - Direzione Generale Governo del Territorio ai sensi della Legge Regionale 19/2019

Accordo quadro per attività di collaborazione scientifica e didattica

tra il Comune di Sarno e il Dipartimento di Architettura dell'Università degli Studi di Napoli Federico II

© 2024 FedOAPress - Federico II University Press

Università degli Studi di Napoli Federico II

Centro di Ateneo per le Biblioteche "Roberto Pettorino"

Piazza Bellini 59-60

80138 Napoli, Italy

<http://www.fedoapress.unina.it>

Published in Italy

Prima edizione: dicembre 2024

Gli E-Book di FedOAPress sono pubblicati con licenza

Creative Commons Attribution 4.0 International

Federico II University Press



fedOA Press



dipartimento di architettura
università degli studi di napoli federico II
dipartimento di eccellenza 2023-2027
Laurea magistrale
in Architettura a.c.u.



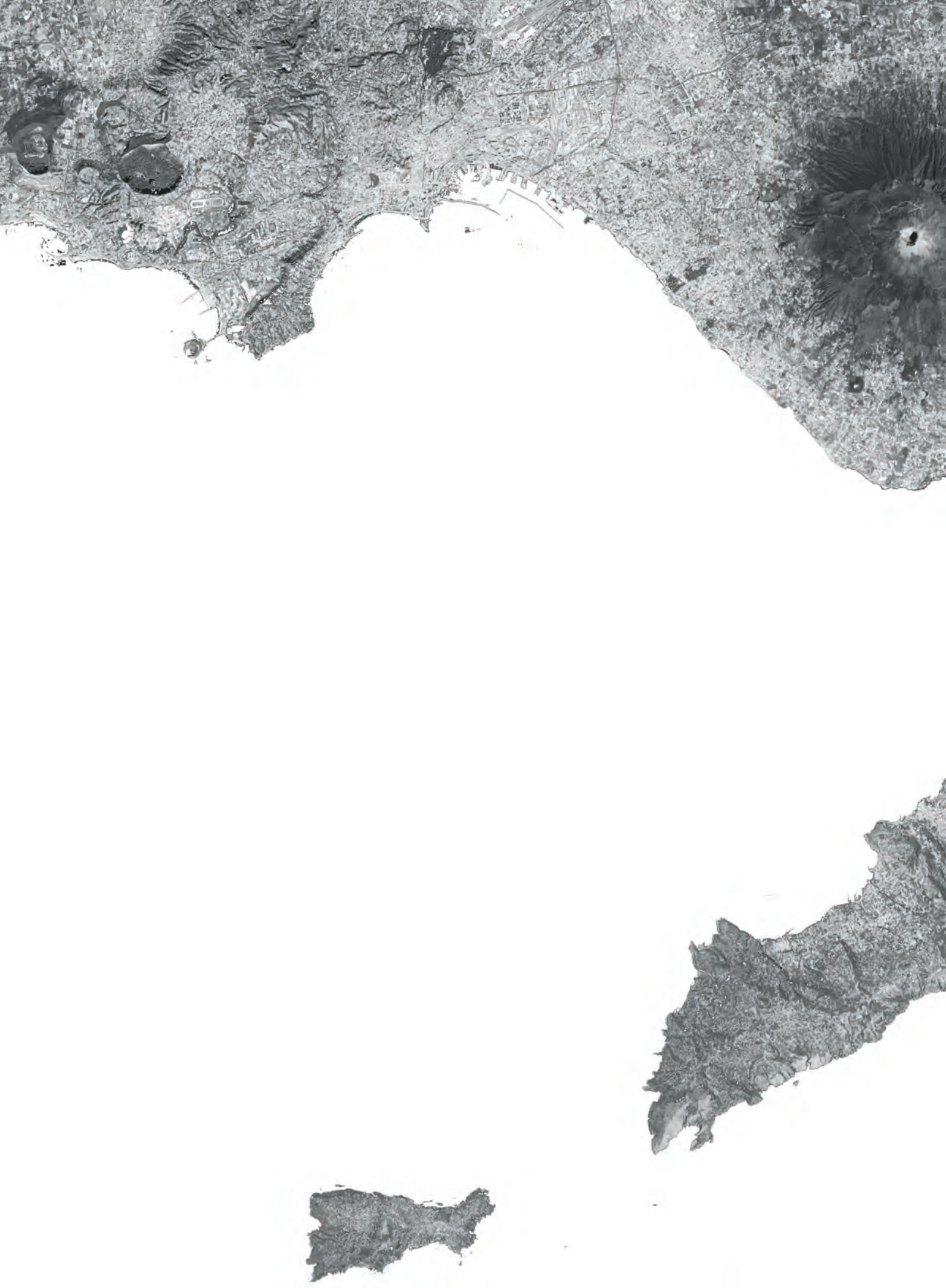
Regione
Campania
Assessorato
al Governo
del Territorio

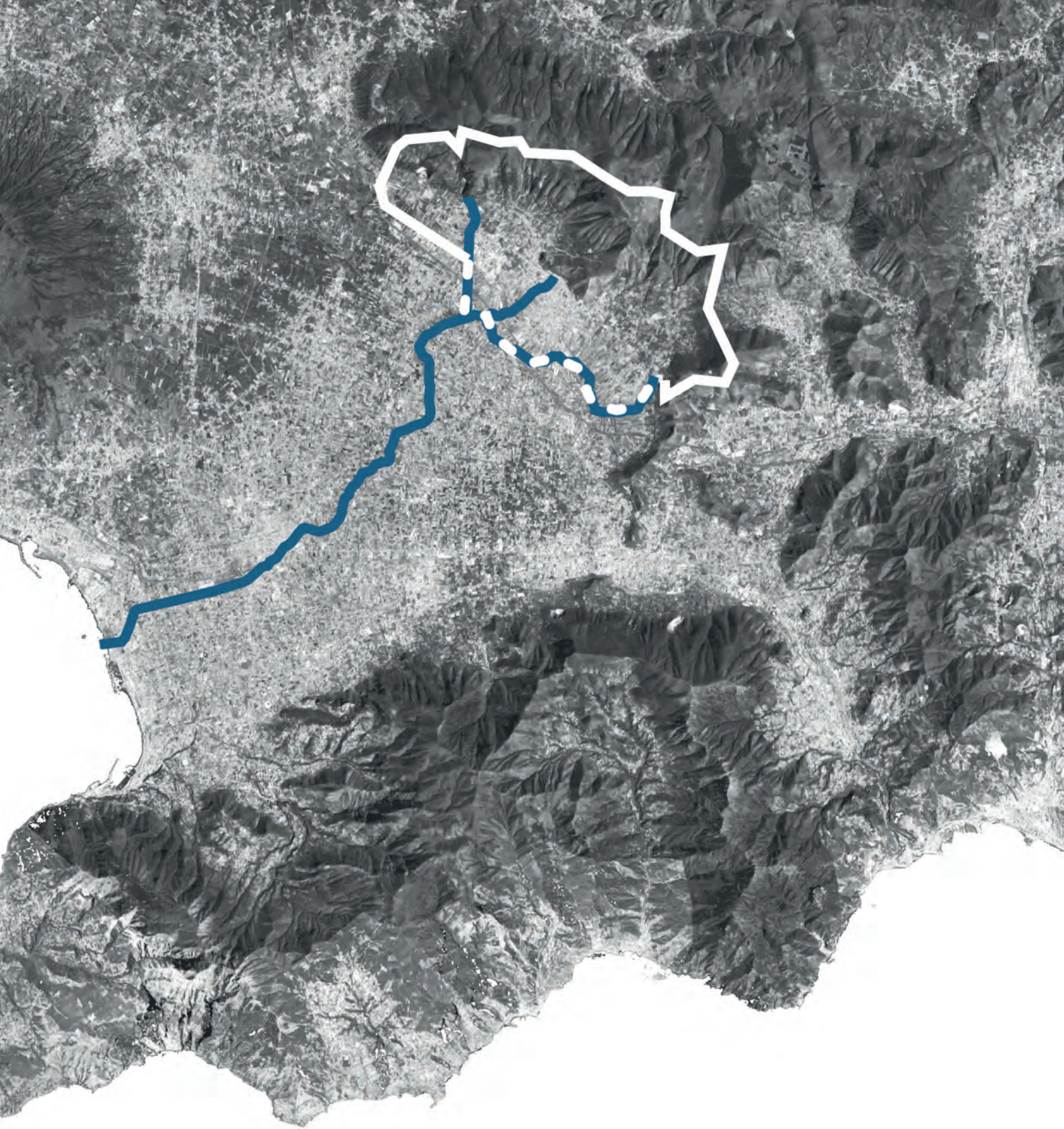


COMUNE DI SARNO

8	Introduction <i>Introduzione</i>
10	ESSAYS / SAGGI
12	Between middle and minor: urbanities to be rediscovered through architectural design <i>Tra medio e minore: urbanità da riscoprire attraverso il progetto di architettura</i> Pasquale Miano
20	Rethinking the city of Sarno: sustainable regeneration strategies <i>Ripensare la città di Sarno: strategie di rigenerazione sostenibile</i> Libera Amenta, Rosaria Iodice
24	Environmental sustainability of urban transformation and regeneration processes in the city of Sarno <i>La sostenibilità ambientale dei processi di trasformazione e rigenerazione urbana della città di Sarno</i> Eduardo Bassolino
28	Towards a zero carbon future: the construction sector and its key role <i>Verso un futuro zero carbon: il settore edilizio e il suo ruolo chiave</i> Giacomo Manniti, Margherita Mastellone
32	Evaluation activity as a central element of urban transformation processes <i>L'attività valutativa come elemento centrale dei processi di trasformazione urbana</i> Domenico Tirendi
35	SUSTAINABLE REGENERATION STRATEGIES FOR THE CITY OF SARNO STRATEGIE DI RIGENERAZIONE SOSTENIBILE PER LA CITTÀ DI SARNO edited by / a cura di Libera Amenta, Rosaria Iodice
48	The Sarno Valley and its archaeological heritage <i>La Valle del Sarno e il suo patrimonio archeologico</i> Serena De Caro
52	Places of oblivion, strongholds of urban care. From “surviving” elements to “new presences” for medium-urbanity landscapes <i>Luoghi dell'oblio, presidi di cura urbana. Da elementi “superstiti” a “nuove presenze” per paesaggi a media urbanità</i> Adriana Bernieri
59	SARNO: DIMENSIONE PAESAGGIO. LA CURA DEL PATRIMONIO ESISTENTE THE EXHIBITION / LA MOSTRA
62	PROJECTS / PROGETTI
65	The Quarry: from Wastescape to Lakescape Rosa Rippo <i>La Cava: da paesaggio di scarto a paesaggio dell'acqua</i>
73	Green Steel: the Monaco Ravine Annika Sarro <i>Acciaio verde: il Vallone di Monaco</i>
81	Landmark & Landscape. The Aqueduct's Public Infrastructure Vanda Mascia Notaro <i>Landmark & paesaggio. L'infrastruttura pubblica dell'acquedotto</i>
89	Ri Activate The River Park. A Water Museum Sjria Improta <i>Riattivare il parco fluviale. Un museo dell'acqua</i>
97	Sarno New Archaeological Park Alessandro Vergati <i>Il nuovo parco archeologico di Sarno</i>
105	Archaeology in Progress Alice Ruggiero <i>Archeologia in divenire</i>
113	Sarno Valley Exhibition Hub Davide Aprea <i>L'hub espositivo della Valle del Sarno</i>
121	Transitional Landscapes: Reconnecting and Inhabiting Marginal Areas Benedetta Tramontano <i>Paesaggi di transizione: riconnettere e abitare aree di margine</i>
129	The Vasca Curti: a New Sports Public Space Dolores Maselli <i>La Vasca Curti: un nuovo spazio pubblico per lo sport</i>
137	The Episcopio Hospital: a New Life for the Building and its Context Miriana Benincasa <i>L'ospedale di Episcopio: una nuova vita per l'edificio e il suo contesto</i>
145	Living Along the Edges: Vasca Trave Ferdinando Testa <i>Vivere lungo i bordi: Vasca Trave</i>
153	A New Sports Area for Sarno Yuriy Makar <i>Un nuovo polo sportivo per Sarno</i>
161	From Care to Culture: the Reuse of the Former Hospital Villa dei Pini Gianmarco Perna <i>Da cura a cultura: il riuso dell'ex ospedale Villa dei Pini</i>
169	Through the Ancient Walls Erika Scotto di Covella <i>Attraverso le mura storiche</i>
177	An Art Hub in the Church of San Martino on Saretto Hill Miriam De Gennaro <i>Un polo d'arte nella chiesa di San Martino sul Monte Saretto</i>

185	The Palazzo Mill: Recovery and Reuse for a New Public Space Lorenza Elisa Buono <i>Il Mulino di Palazzo: recupero e riuso per un nuovo spazio pubblico</i>
193	A New Library in Sarno City Center Caterina Amato <i>Una nuova biblioteca nel centro di Sarno</i>
201	Urban Educational Park Along the Rio Palazzo River Giovanni Falciola <i>Parco urbano educativo lungo il Rio Palazzo</i>
209	Extension of the Edmondo De Amicis Primary School Emanuela Miele <i>Ampliamento della scuola elementare Edmondo De Amicis</i>
217	Reconnecting Sarno: a park between railway and river Alessandro Palladino <i>Riconnettere Sarno: un parco tra la ferrovia e il fiume</i>
225	Reconnecting Through the Existing. The Rio Palazzo's Former Purification Station Tommaso Marchese <i>Riconnettere attraverso l'esistente. L'ex depuratore di Rio Palazzo</i>
233	The Sarno River Park as Agricultural Sustainable Innovation Vittorio Migliaccio <i>Il parco del fiume Sarno come innovazione agro-sostenibile</i>
241	The Sarno River Park as Innovative Cluster Giuseppina Caccavale <i>Il parco del fiume Sarno come cluster d'innovazione</i>
249	Water Culture. The Affrontata area Vincenzo Romano <i>Cultura d'acqua. L'area dell'Affrontata</i>
257	Periurban Line. Food Research Hub in the Market Public Area Emanuel Longobardi <i>Linea periurbana. Polo di ricerca alimentare nell'area del mercato pubblico</i>
265	Architecture and Pre-existence. A New Center for the Local Civil Protection Marika Del Core <i>Architettura e preesistenza. Un nuovo centro per la Protezione Civile locale</i>
273	Lavorate Agricultural Park Ludovica Grillo <i>Il parco agricolo di Lavorate</i>
282	INTEGRATED COURSES OF THE DESIGN STUDIO/CORSI INTEGRATI DEL LABORATORIO DI PROGETTAZIONE





— SARNO RIVER/
FIUME SARNO

— SARNO CITY BOUNDARIES/
CONFINI COMUNALI DI SARNO

• • • CITY BOUNDARY COINCIDING WITH THE RIVER/
CONFINE DELLA CITTÀ IN COINCIDENZA CON IL FIUME

Introduction

The design work carried out for the city of Sarno represented, for the students of the last year of the 5UE Architecture course, an experiment of great relevance from a design point of view, in dealing with a fragile, complex, heterogeneous territory, trying to combine an approach aimed at seeking an adequate response to the multiple needs posed by the context. The publication collects the results of the work carried out during the 2022-2023 academic year, highlighting the multiplicity of aspects and design themes addressed, as well as the variety of possible solutions proposed.

The structure of the book reflects this experimental approach which, from the “Essays” section to the “Projects” section, explores the city starting from some emerging themes and issues: through the filter of wastescapes in reference to the territorial, environmental and social context; in the openness to comparison at the occasion of the presentation of the results of the work and the design reflections to the institutions and the community; arriving at the systematization, through a synthesis, of the information and investigations carried out through the project proposals. The themes addressed in the projects are to be understood as individual project research that, starting from a premise, through a hypothesis, seek to build a regenerative scenario in relation to the elements brought into play. In this sense, together, the different project experiments try to provide possible transformative scenarios about open questions for the city, with the aim of remedying existing critical issues, but also of enhancing the potential and the different heritages that characterize the city of Sarno and the surrounding area, such as the river landscape, the historical and archaeological heritage, the areas at risk, the public facilities in a state of abandonment. The projects were in fact built starting from a mechanism of reuse and grafting into the existing, extending and incorporating urban pieces of different nature. Scenarios of new possible re-significations are, therefore, the result of this work, linked to the idea of Sarno as a multi-landscape city.

Introduzione

Il lavoro progettuale condotto per la città di Sarno ha rappresentato, per gli studenti dell'ultimo anno del corso di studi in Architettura 5UE, un esperimento di grande rilevanza dal punto di vista progettuale, nel confrontarsi con un territorio fragile, complesso, eterogeneo, provando a coniugare un approccio teso a ricercare una risposta adeguata alle molteplici necessità poste dal contesto. La pubblicazione raccoglie gli esiti del lavoro svolto nell'arco dell'anno accademico 2022-2023, ponendo in evidenza la molteplicità di aspetti e temi progettuali affrontati, così come la varietà delle possibili soluzioni proposte. La struttura del libro rispecchia tale approccio sperimentale che, dalla sezione "Saggi" a quella "Progetti", esplora la città a partire da alcuni temi e questioni emergenti: attraverso il filtro dei *wastescape* in riferimento al contesto territoriale, ambientale e sociale; nell'apertura al confronto in occasione della presentazione degli esiti del lavoro e delle riflessioni progettuali alle istituzioni e alla comunità; giungendo alla messa a sistema, attraverso una sintesi, delle informazioni e delle indagini effettuate attraverso le proposte progettuali. I temi affrontati nell'ambito dei progetti sono da intendere come delle ricerche progettuali singole che, a partire da una premessa, attraverso una ipotesi, cercano di costruire uno scenario rigenerativo in relazione agli elementi messi in gioco. In tal senso, nel loro insieme, le diverse sperimentazioni progettuali provano a fornire possibili scenari trasformativi su questioni aperte per la città, con l'obiettivo di rimediare alle criticità esistenti, ma anche di valorizzare le potenzialità e i diversi patrimoni che caratterizzano la città di Sarno e il territorio circostante, come il paesaggio fluviale, il patrimonio storico e archeologico, le aree a rischio, le attrezzature pubbliche in stato di abbandono. I progetti sono stati costruiti infatti a partire da un meccanismo di riuso e innesto nell'esistente, estendendosi e inglobando pezzi urbani di diversa natura. Scenari di nuove possibili ri-significazioni sono, dunque, il risultato di questo lavoro, legati all'idea di Sarno come città multi-paesaggio.





ESSAYS/SAGGI

REFERENCES

1. A. Lanzani (eds), *Italia di mezzo. Prospettive per la provincia in transizione*, Donzelli, Roma 2024.

Next page

Projects for Sarno. General Masterplan, 2023 (drawing by A. Bernieri)

Pagina seguente

Progetti per Sarno. Masterplan generale, 2023 (drawing by A. Bernieri)

The choice of the theme for the Final Design Studio of the 5UE Master of Architecture degree program has been linked, for some years, to the possibility of working on medium-sized cities in the Campania region, which in fact represent not only average centers in terms of housing and size, but also minor urban conditions, depending on the accentuations that can be given to this definition.

The terms medium center or minor city are used to identify an urbanity that is not univocally delineated, certainly different from both the big city of Naples but also from the inland areas of Campania. In fact, while on these two themes there has been a continuity of elaborations and a very intense debate in recent years, especially on the inland areas, about the medium/minor urbanities there has certainly been less reasoning, both at the general thematic level and in terms of in-depth analysis of specific contexts.

Yet, certainly at the quantitative level we are talking about an important heritage, an urban, architectural and landscape heritage that has been and continues to be a fundamental element of Italian cities, its specificity, its value, and its problems. In many ways, middle/minor urbanities are within the reflection that Arturo Lanzani has called "Middle Italy". With this definition Lanzani pointed to a part of Italy that also counts and weighs «in a long-term perspective towards the past and towards the future», that «has played a crucial role in the contemporary history of the country, guaranteeing its plasticity and playing an intermediary role with respect to its other territorial components», that «represents today a challenge for the country towards a socio-ecological transition that needs to be thought of starting not only from the city and its margins, but precisely from these territories». Within this definition the medium/minor urbanities of Campania constitute something more specific, not precisely identifiable within a more complex and in some cases more limited articulation in which individual centers assume a precise and identifiable role within a more general condition of peripheralization. For this reason, in continuity with the choice of the urban territories of Castel Volturno, Portici, Frattaminore, and Acerra, the municipality of Sarno was considered. What are the main connotations through which this urbanity is recognized? Basically two. The first is related to the 1998 flood, a disastrous event, which resulted in a real upheaval of the territory. The second characterizing aspect is related to the pollution of the Sarno River, whereby this river is considered as one of the most polluted in Europe. In reality, there is only the source of the river in Sarno, which instead runs through other municipal territories in the most polluted parts, but the identification through naming is certainly not irrelevant.

Sarno is therefore connoted as a problem, but in reality it is the holder – beyond the reported aspects – of a consolidated heritage of archaeological areas, historical settlements, rural territories and also of industrial and productive peculiarities, both related to a past that has greatly

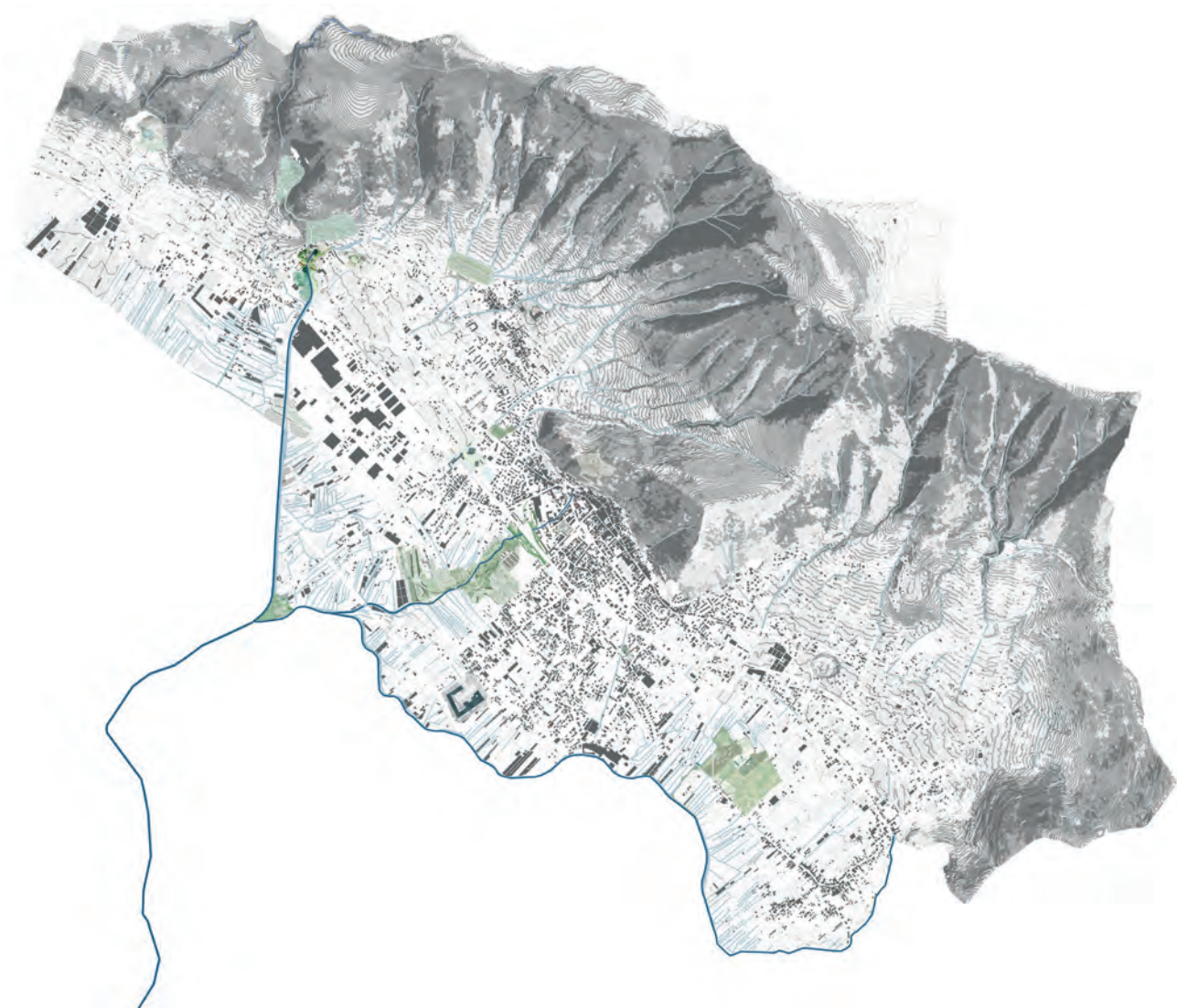
La scelta del tema del Laboratorio di Sintesi Finale del Corso di Laurea in Architettura Magistrale 5UE è legata, da alcuni anni, alla possibilità di lavorare su città di medie dimensioni della regione Campania, che di fatto rappresentano non solo centri medi dal punto di vista abitativo e dimensionale, ma anche condizioni urbane minori, a seconda delle accentuazioni che si possono dare a questa definizione.

Con i termini centro medio o città minore si intende individuare una urbanità non univocamente delineata, sicuramente diversa sia dalla grande città di Napoli ma anche dalle aree interne della Campania. Infatti, mentre su questi due temi si è registrata negli ultimi anni una continuità di elaborazioni e un dibattito molto intenso, soprattutto sulle aree interne, relativamente alle urbanità medie/minori si è sicuramente ragionato di meno, sia a livello tematico generale che di approfondimenti dei contesti specifici.

Eppure, sicuramente a livello quantitativo si sta parlando di un patrimonio importante, un patrimonio urbano, architettonico e paesaggistico che ha costituito e continua a costituire un elemento fondamentale della città italiane, della sua specificità, del suo valore e delle sue problematicità. Per molti aspetti le urbanità medie/minori sono dentro la riflessione che Arturo Lanzani ha definito *Italia di mezzo*. Con questa definizione Lanzani ha indicato una parte dell'Italia che conta e pesa anche «in una prospettiva di lungo periodo verso il passato e verso il futuro», che «ha svolto un ruolo cruciale nella storia contemporanea del paese, garantendone plasticità e svolgendo un ruolo intermediario rispetto ad altre sue componenti territoriali», che «rappresenta oggi una sfida per il paese verso una transizione socio-ecologica che ha bisogno di essere pensata a partire non solo dalla città e dai margini, ma proprio da questi territori». Dentro questa definizione le urbanità medie/minori della Campania costituiscono qualcosa di più specifico, non precisamente identificabile dentro un'articolazione più complessa e in alcuni casi più limitata nella quale i singoli centri assumono un ruolo preciso e identificabile entro una più generale condizione di periferizzazione.

Per questa ragione, in continuità con la scelta dei territori urbani di Castel Volturno, Portici, Frattaminore, Acerra, si è preso in considerazione il comune di Sarno. Quali sono i connotati principali attraverso cui questa urbanità viene riconosciuta? Fondamentalmente due. La prima è legata all'alluvione del 1998, un evento disastroso, che ha determinato un vero e proprio sconvolgimento del territorio. Il secondo aspetto caratterizzante è legato all'inquinamento del fiume Sarno, per cui questo fiume è considerato come uno dei più inquinati d'Europa. In realtà, a Sarno vi è solo la sorgente del fiume, che invece si sviluppa in altri territori comunali nelle parti più inquinate, ma l'identificazione attraverso la denominazione non è sicuramente irrilevante.

Sarno è dunque connotato come un problema, ma in realtà è detentore al di là degli aspetti segnalati, di un patrimonio consolidato di aree archeologiche,



characterized the urban history of the city (spinning mills and sugar refineries), and as a point of reference in the present day. A heritage that is inseparably related to those orographic, hydrographic, naturalistic and landscape specificities, which have been a source of destruction and whose risks are not completely to be underestimated even in the present situation. And this is the case both in the steepest areas and in those of the Sarno plain, for different reasons and therefore for different risks and dangers. Many years after the 1998 calamitous event, several issues have been addressed in the city of Sarno: from securing the areas at greatest risk to the construction of new facilities. However, the long transition phase, which characterizes the post-disaster period, is not yet completely closed. In the meantime, an issue has arisen that certainly does not concern Sarno alone, related to the loss of role that characterizes many medium/minor centers in Campania and more generally in Italy. A loss of role that stems from a process of urban homogenization, especially of the newer parts of the settlement, now within the dynamics of sprawl and undifferentiated, which brings them ever closer to the large metropolitan settlements. But at the same time, a loss of role that is related to the difficulty of ensuring the permanence and care of the heritage, on which the individuality and uniqueness of the center itself depends.

From this intertwining most often originates the phenomena of abandonment, which to varying degrees characterize these centers and the difficulties of grafting a systematic process of coordinated and forward-looking actions.

This aspect underscores the interest, from a planning and transformative point of view, in tracing the potential of a reading of the contemporary territory conducted from a categorization, albeit a very broad one, such as that of the medium centers of Campania, in order to investigate the specificity of the vicissitudes that, in a clear and distinct way, each place demonstrates and that must be preserved, if not enhanced.

Faced with these situations, the task of the project, therefore, is to start from these conditions and probe the not fully expressed potentialities inherent in this urbanity. To some extent, then, the starting conditions were defined and placed at the basis of the work of the individual students in the design studio: the need to extrapolate from the complicated general picture a theme and an urban configuration in which this condition appeared to become more significantly explicit, but at the same time the inescapable need to approach the project work not in isolation, but in a logic of correlation with other urban situations and other themes.

These ways of identifying the project theme and its development define a field of experimentation that is very important for understanding the lines of design action to be deployed in medium/minor urbanities such as Sarno. It is a field of experimentation that makes it possible to outline an alternative to the punctual logic that ordinarily characterizes intervention in the city. A logic, moreover, favored by

insediamenti storici, territori rurali e anche di peculiarità industriali e produttive, sia legate ad un passato che ha caratterizzato molto la storia urbana della città (filande e zuccherifici), sia come punto di riferimento nell'attualità. Un patrimonio che è inscindibilmente relazionato a quelle specificità orografiche, idrografiche, naturalistiche e paesaggistiche, che sono state fonte di distruzione e di cui non sono completamente da sottovalutare i rischi anche nella situazione attuale. E ciò sia nelle aree più acclivi che in quelle della piana del Sarno, per motivi diversi e quindi per rischi e pericolosità diverse.

A molti anni dall'evento calamitoso del 1998, nella città di Sarno diverse questioni sono state affrontate: dalla messa in sicurezza delle aree a maggiore rischio, alla realizzazione di nuove attrezzature. Tuttavia, la lunga fase di transizione, che caratterizza il dopo catastrofe, non è ancora completamente chiusa. Nel frattempo, si è generata una problematica che certamente non riguarda solo Sarno, relativa alla perdita di ruolo che caratterizza molti centri medi/minori della Campania e più in generale italiani. Perdita di ruolo che deriva da un processo di omologazione urbana, soprattutto delle parti più nuove dell'insediamento, ormai dentro la dinamica dello sprawl e dell'indifferenziato, che le avvicina sempre di più ai grandi insediamenti metropolitani. Ma nello stesso tempo, una perdita di ruolo che è connessa alla difficoltà di garantire la permanenza e la cura del patrimonio, dal quale dipende l'individualità e l'unicità dello stesso centro. Da questo intreccio il più delle volte si originano i fenomeni di abbandono, che in misura diversa caratterizzano questi centri e le difficoltà di innestare un processo sistematico di azioni coordinate e proiettate verso il futuro.

Questo aspetto sottolinea l'interesse, dal punto di vista progettuale e trasformativo, nel rintracciare le potenzialità di una lettura del territorio contemporaneo condotta a partire da una categorizzazione, seppur molto ampia, quale quella dei centri medi della Campania, per indagare le specificità delle vicende che, in maniera chiara e spiccata, ogni luogo dimostra di avere e che deve essere preservata, se non valorizzata. Di fronte a queste situazioni, compito del progetto, è dunque partire da queste condizioni e sondare le potenzialità non completamente espresse insite in questa urbanità. Si sono allora in qualche misura definite le condizioni di partenza, che sono state poste alla base del lavoro dei singoli studenti del laboratorio: la necessità di estrapolare dal complicato quadro generale un tema e una condizione urbana in cui tale condizione è apparsa esplicitarsi in maniera più significativa, ma nello stesso tempo l'esigenza inderogabile di affrontare il lavoro progettuale in maniera non isolata, ma in una logica di correlazione con altre situazioni urbane e con altri temi.

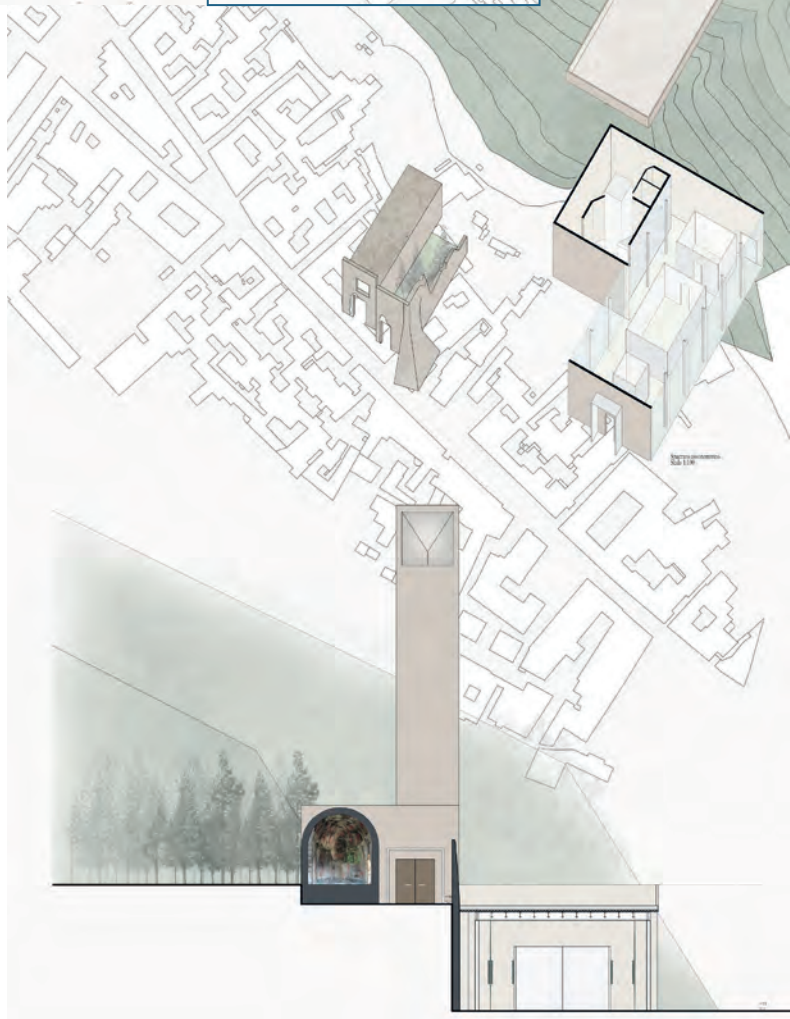
Queste modalità di individuazione del tema di progetto e il suo sviluppo definiscono un campo di sperimentazione che risulta molto importante per comprendere le linee di azione progettuale da mettere in campo nelle urbanità medie/minori come Sarno. È un campo di sperimentazione

Next page

Project for the Church of San Martino on the Saretto hill
(drawings by M. De Gennaro, 2023)

Pagina seguente

Progetto per la chiesa di San Martino sulla collina del Saretto
(disegni di M. De Gennaro, 2023)



the lack of resources, the rigidity of their disbursement and the impossibility of pursuing medium- and long-term goals and objectives.

This field of experimentation that was intended to be outlined is also an alternative not only to the logic of building the city by functional areas, of new and/or old setting, but also to that by generic actions, which end up simplifying the current condition and the same design objectives, in a one-directional perspective: the historic center to be safeguarded, the peripheral areas to be transformed, just to give some striking examples.

If one works in experimental terms, Sarno constitutes an urban case of great interest, first and foremost, for the purposes of renewing the city's relationship with the river. City understood in a broad sense as a water landscape, thus involving the entire municipal territory. River understood in a broad sense as a hydrographic basin, which has constituted in its entirety a decisive system in the very construction of the Sarno territory. The network of Sarno's hydrography represents in this logic the unifying thread that connects different areas, in which different projects are united by the objective of bringing out at the same time the watercourses with their folds, the still recognizable landscapes and the artifacts that have marked them, in the past (mills and other facilities) deeply influencing also "the new architectures of the design studio," understood as notable points in river parks, such as water museums and new collective spaces that can really benefit from the presence of the river.

From time to time, through the thread of hydrography, many elements of the city are reprojected toward the river, such as the archaeological area of Foce or even, in a completely different way, the area of the railroad and station, as well as the interstices from which the source of Rio Palazzo can be observed.

But it is not the rail and road infrastructure that are the elements capable of holding Sarno's settlements together, although much could be done on this ground.

Another determining element is the very special orographic-morphological situation of Sarno, which in many situations has become one with the historic settlements: from the north-northwest, the highest part, with Mount Sarò, which borders the province of Avellino, and which is characterized by the landslide risks mentioned earlier; in front, at the city center, the hill of Saretto, with the Longobard castle and walls, the village of Terravecchia, and the dirute chapels, which, just when the difficulties of access accentuate the processes of abandonment, constitute a unitary and inseparable system that we can call of the "inhabited hill". A system wounded by the post-flood basin interventions, which are only slowly being reintegrated into the landscape, and which some student projects also address. Other projects, on the other hand, deal more specifically with issues related to accessibility, the re-interpretation of historic architecture, and also the "reuse" of the basins, and as a whole define

che consente di delineare un'alternativa alla logica puntuale che caratterizza ordinariamente l'intervento nella città. Logica peraltro favorita dalla mancanza di risorse, dalla rigidità della loro erogazione e dall'impossibilità di perseguire obiettivi e finalità di media e lunga durata.

Questo campo di sperimentazione che si è inteso delineare è anche alternativo non solo alla logica della costruzione della città per aree funzionali, di nuova e/o vecchia impostazione, ma anche a quella per azioni generiche, che finiscono per semplificare la condizione attuale e le stesse prospettive progettuali, in un'ottica, monodirezionale: il centro storico da salvaguardare, le aree periferiche da trasformare, volendo fare solo esempi eclatanti.

Se si lavora in termini sperimentali, Sarno costituisce un caso urbano di grande interesse, in primo luogo, ai fini del rinnovamento del rapporto della città con il fiume. Città intesa in senso ampio come paesaggio d'acqua, che quindi coinvolge l'intero territorio comunale. Fiume inteso in senso ampio come bacino idrografico, che ha costituito nella sua interezza un sistema determinante nella stessa costruzione del territorio sarnese. La rete dell'idrografia di Sarno rappresenta in questa logica il filo unificante che collega diverse aree, nelle quali i progetti diversi sono accomunati dall'obiettivo di far emergere nello stesso tempo i corsi d'acqua con le loro pieghe, i paesaggi ancora riconoscibili e i manufatti che li hanno contrassegnati, in passato (mulini e altri impianti) influenzando profondamente anche "le nuove architetture del laboratorio", intese come punti notevoli nei parchi fluviali, come ad esempio musei dell'acqua e nuovi spazi collettivi che possano realmente beneficiare della presenza del fiume.

Di volta in volta, attraverso il filo conduttore dell'idrografia, molti elementi della città sono riproiettati verso il fiume, come ad esempio l'area archeologica di Foce o anche, in maniera completamente diversa, l'area della ferrovia e della stazione, così come gli interstizi da cui è possibile osservare la sorgente di Rio Palazzo.

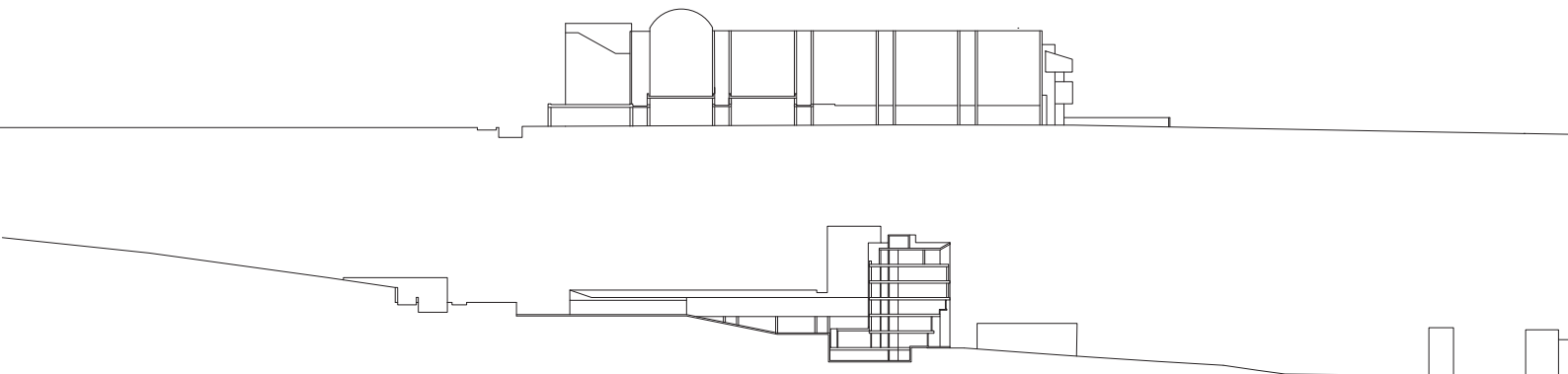
Ma non sono le infrastrutture ferroviarie e stradali gli elementi in grado di tenere insieme gli insediamenti di Sarno, anche se su questo terreno molto si potrebbe fare. Un altro elemento determinante è la particolarissima situazione orografico-morfologica di Sarno, che in molte situazioni è diventato tutt'uno con gli insediamenti storici: da nord nord-ovest, la parte più alta, con il monte Sarò, che confina con la provincia di Avellino, e che è caratterizzato dai rischi di frana di cui si è accennato in precedenza; davanti, in corrispondenza del centro cittadino, la collina del Saretto, con il castello e le mura longobardi, il borgo di Terravecchia, le cappelle dirute, che, proprio allorché le difficoltà di accesso ne accentuano i processi di abbandono, costituiscono un sistema unitario e inscindibile che possiamo chiamare della "collina abitata". Un sistema ferito dagli interventi di realizzazione delle vasche post-alluvione, che solo lentamente si stanno reintegrando nel paesaggio, e che alcuni progetti degli studenti anche affrontano. Altri progetti, invece, affrontano

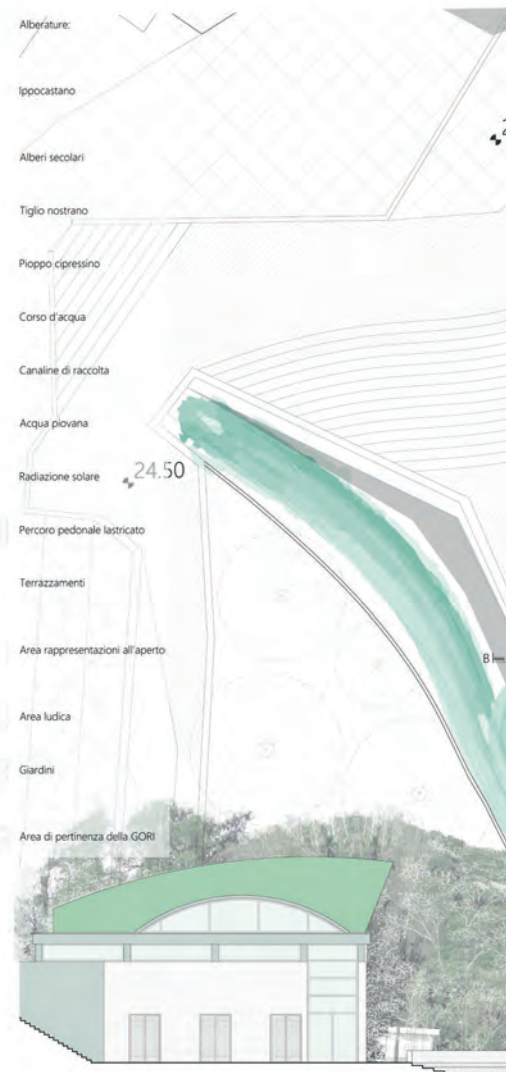
Next page

Project for the Hospital in
Episcopio (drawings by M.
Benincasa, 2023)

Pagina seguente

Progetto per l'ospedale di
Episcopio (disegni di M.
Benincasa, 2023)





unusual connections, unifying threads of a landscape where each element can be recognizable and thus recognized in a new urban perspective.

The care of the watershed and the return of an inhabited hill could testify to the overcoming of the negative condition in which the city pours, closing the phase of the long transition. All the projects are within this new condition, and many are emblematic actions, signaling that the "reversal" is now taking place: the water museum, the hospitals on the different hills, reused and greened, perhaps, as well as all the other projects, seem to be going in a definite direction.

They are, however, only school projects: seen alone they give a glimpse of the limits of our design work, which is never as thorough as it should be; seen together they show that this educational work can serve a purpose. Even more, the work done on Sarno, seen together with the work done on Acerra, Castel Volturno, Portici, Frattaminore, begins to constitute a set of reflections on the basis of which it is possible to draw some initial sums and advance new research perspectives.

più specificatamente le questioni legate all'accessibilità, alla rimessa in gioco delle architetture storiche, ma anche al "riuso" delle vasche, e definiscono nel loro insieme connessioni inconsuete, fili unificanti di un paesaggio dove ogni elemento può essere riconoscibile e quindi riconosciuto in una nuova prospettiva urbana.

La cura del bacino idrografico e il ritorno piano di una collina abitata potrebbero testimoniare il superamento della condizione negativa in cui la città riversa, chiudendo la fase della lunga transizione. Tutti i progetti sono dentro questa nuova condizione e molte sono le azioni emblematiche, che segnalano che il "ribaltamento" sta ormai avvenendo: il museo dell'acqua, gli ospedali sui diversi rilievi, riusati e rinverdiati, forse, così come tutti gli altri progetti, sembrano andare in una direzione precisa.

Sono però solo dei progetti di scuola: visti da soli fanno intravedere i limiti del nostro lavoro progettuale, mai approfondito come dovrebbe; visti insieme mostrano che questo lavoro didattico può servire a qualcosa.

Ancor di più, il lavoro svolto su Sarno, visto assieme al lavoro svolto su Acerra, Castel Volturno, Portici, Frattaminore, comincia a costituire un insieme di riflessioni sulla base delle quali è possibile tirare alcune prime somme e avanzare nuove prospettive di ricerca.

This page and next page

Project for the riverpark in Foce
(drawings by S. Improta)

Pagina seguente

Progetto per il parco fluviale di Foce
(disegni di S. Improta)



REFERENCES

1. L. Amenta & A. van Timmeren, *Beyond Wastescapes: Towards Circular Landscapes. Addressing the Spatial Dimension of Circularity through the Regeneration of Wastescapes*, "Sustainability", 10(12), 4740, 2018, <https://doi.org/10.3390/su10124740>.
2. L. Amenta & A. van Timmeren, *From Wastescapes Towards Regenerative Territories. A Structural Approach for Achieving Circularity*, in L. Amenta, M. Russo, A. van Timmeren (eds), *Regenerative Territories*, Springer, Cham 2022, pp. 147-160, https://doi.org/10.1007/978-3-030-78536-9_9.
3. J. Kirchherr, D. Reike & M. Hekkert, *Conceptualizing the circular economy: An analysis of 114 definitions. Resources, Conservation and Recycling*, 127, 2017, pp. 221-232, <https://doi.org/10.1016/j.resconrec.2017.09.005>.
4. G. Lucertini & F. Musco, *Circular Urban Metabolism Framework*, "One Earth", 2(2), pp. 138-142, 2020, <https://doi.org/10.1016/j.oneear.2020.02.004>.
5. REPAiR, *Process model for the two pilot cases: Amsterdam, the Netherlands & Naples, Italy. Deliverable 3.3. EU Commission Participant portal. Brussels. Grant Agreement No 688920*, 2018, <https://doi.org/55988e03-ea52-406d-a18f-57ff00630bfd>.

Next page

Knowledge framework. Above, wastescapes map and risk analysis (drawings by D. Maselli, V. M. Notaro, A. Palladino, R. Rippo, A. Ruggiero, A. Sarro, B. Tramontano). Below, interpretative schemes (drawings by M. del Core, G. Falcicola, L. Grillo, S. Improta, V. Romano, E. Scotto di Covella, A. Vergati).

Pagina seguente

Quadro conoscitivo. In alto, la mappa dei wastescape e analisi del rischio (elaborazioni di D. Maselli, V. M. Notaro, A. Palladino, R. Rippo, A. Ruggiero, A. Sarro, B. Tramontano). In basso, schemi interpretativi (elaborazioni di M. del Core, G. Falcicola, L. Grillo, S. Improta, V. Romano, E. Scotto di Covella, A. Vergati).

Introduction

The increasingly complex challenges that characterize contemporary territories, and which involve different spatial, environmental and socio-economic dimensions, bring to light the need for an integrated and sustainable perspective for urban planning. To respond to the needs of the territory in terms of resilience to climate change and optimization of resource use, approaches such as those of circular urban metabolism (Lucertini & Musco, 2020; Russo & van Timmeren, 2022) and the circular economy (Kirchherr et al., 2017) play a central role. The city is considered a living organism characterized by reciprocity and dynamic interactions between nature, urban areas, hinterland, and settled communities (van Timmeren et al., 2013: 20). The Urban Planning module, through the integration of the concepts of urban metabolism and circular economy, contributes to the definition of more sustainable and resilient cities, in which wastescape (REPAiR 2018) represents the resources to rebuild the dynamic balance that has been altered over time. The course focuses on the analysis and mapping of complex interactions between the urban fabric and the environmental system with the aim of providing critical tools for re-reading wastescape. The latter are exploited as strategic resources for the development of innovative solutions for contemporary urban design. The case study is the city of Sarno, in the province of Salerno, explored through surveys, mapping exercises and design vision elaborations.

Methodological approach: read Sarno through the lens of wastescapes

The workshop activity of the Urban Planning Course was organized in three main phases. The first phase involved the drafting of interpretative maps, the second phase focused on identifying the criticalities and potentialities of the territory, and the third phase explored new strategies. For the construction of the knowledge framework, particular interest was the mapping of wastescapes (Amenta, van Timmeren 2018, 2022).

The categories of wastescapes in the city of Sarno, understood as resource-spaces from which to begin for sustainable regeneration, have been redefined starting from the specific characteristics of the territory under consideration. The mapped wastescapes define the networks of abandoned spaces related to the dense hydrographic network of the city of Sarno, refers to the matrix rural landscape of the peri-urban belt, or addresses the existing high risk of landslides and must be considered for the development of urban and territorial strategies.

To unpack the complexity of the territory of Sarno and propose interpretative keys, the course identified a series of 'images' of cities, borrowed from the Antwerp Plan of Secchi e Viganò (Secchi & Viganò, 2009). Starting from the 'images' identified for Sarno, strategic visions have been defined to address new issues and challenges to facilitate the transition of the city of Sarno towards circularity and resilience. The images proposed are: Water city, Historic city, Eco city, Connected city, Porous city, Agricultural city, Productive city. For the sake of brevity, this paper focuses on one example of students' processing in relation to the Eco-city image.

Introduzione

Le sfide sempre più complesse che caratterizzano i territori contemporanei e coinvolgono le diverse dimensioni spaziali, ambientali e socio-economiche, fanno emergere la necessità di una prospettiva integrata e sostenibile per il progetto urbanistico. Per rispondere alle necessità del territorio in termini di resilienza ai cambiamenti climatici e ottimizzazione dell'utilizzo delle risorse, approcci legati al metabolismo urbano circolare (Lucertini & Musco, 2020; Russo & van Timmeren, 2022) e dell'economia circolare (Kirchherr et al., 2017) assumono un ruolo centrale. La città è concepita come un organismo vivente caratterizzato da reciprocità e interazioni dinamiche tra natura, aree urbane, hinterland, e comunità insediate (van Timmeren et al., 2013: 20).

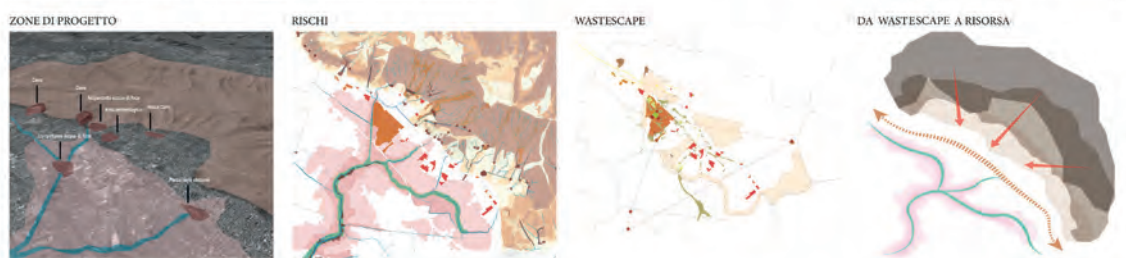
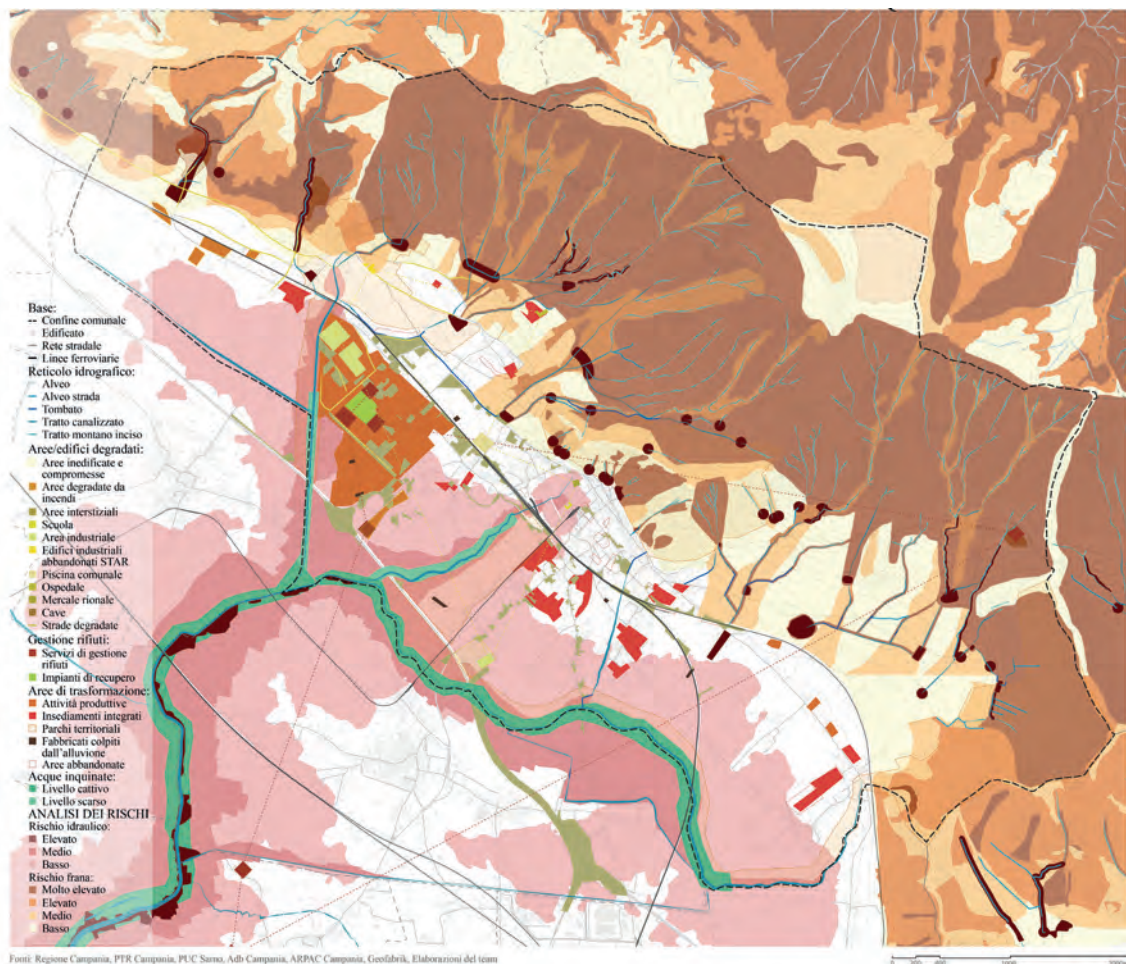
Il modulo di Urbanistica attraverso l'integrazione dei concetti di metabolismo urbano ed economia circolare contribuisce alla definizione di città più sostenibili e resilienti, in cui i *wastescape* (REPAiR 2018) possono rappresentare risorse per ricostruire l'equilibrio dinamico che nel corso del tempo è stato alterato. Il corso si concentra sull'analisi e la mappatura delle complesse interazioni tra il tessuto urbano e il sistema ambientale con l'obiettivo di fornire strumenti critici per la rilettura dei *wastescape*. Questi ultimi vengono valorizzati come risorse strategiche per lo sviluppo di soluzioni innovative per il progetto urbano contemporaneo. Il caso studio è la città di Sarno, in provincia di Salerno, esplorata attraverso sopralluoghi, esercizi di mappatura e elaborazioni di vision progettuali.

Approccio metodologico: rileggere Sarno attraverso la lente dei wastescape

L'attività laboratoriale del Corso di Urbanistica è stata organizzata in tre fasi principali. La prima fase consiste nella redazione di mappe interpretative, la seconda fase nell'identificazione delle criticità e potenzialità del territorio e la terza fase esplora nuovi assetti strategici. Per la costruzione del quadro conoscitivo, particolare interesse è stato dedicato alla mappatura dei *wastescape* (Amenta, van Timmeren 2018, 2022).

Le categorie dei *wastescape* della città di Sarno, intesi nell'accezione di spazi-risorsa da cui ripartire per una rigenerazione sostenibile, sono state ridefinite a partire dalle caratteristiche specifiche del territorio in esame. I *wastescape* mappati definiscono le reti di spazi abbandonati, connessi alla fitta rete idrografica che si innesta nel territorio sarnese, si riferiscono al paesaggio rurale matrice della fascia periurbana, o ancora si rapportano al forte rischio frana esistente e da considerare per lo sviluppo di strategie urbane e territoriali.

Per spaccettare la complessità del territorio di Sarno e proporre delle chiavi interpretative, il corso ha individuato una serie di "immagini" di città, mutate dal Piano di Anversa di Secchi e Viganò (Secchi & Viganò, 2009). A partire dalle "immagini" individuate per Sarno sono state definite delle visioni strategiche per la definizione di nuove questioni e nuove sfide per favorire la transizione della città di Sarno verso la circolarità e la resilienza. Le immagini proposte sono: *Water city*, *Historic city*, *Eco city*, *Connected city*, *Porous city*, *Agricultural city*, *Productive city*. Per brevità, il presente contributo si concentra su un solo esempio di elaborazione da parte degli studenti in relazione all'immagine Eco-city.



6. M. Russo & A. van Timmeren, *Dimensions of Circularity for Healthy Metabolisms and Spaces*, in L. Amenta, M. Russo & A. van Timmeren (eds), *Regenerative Territories Dimensions of Circularity for Healthy Metabolisms*, Springer Cham, pp. 1-27, 2022, https://doi.org/10.1007/978-3-030-78536-9_1.

7. B. Secchi, *La città dei ricchi e la città dei poveri*, Laterza, Bari-Roma 2013, pp. 41-53.

8. UN, *Trasformare il nostro mondo: l'Agenda 2030 per lo sviluppo sostenibile*, <https://sdgs.un.org//2030agen>, 2015.

9. A. van Timmeren, L. Henriquez & A. Reynolds, *ReciproCities. A dynamic equilibrium*, Delft University of Technology (TUD), 2013.

Rethinking the city of Sarno as an Eco-city

The complexity of the Sarno territory represented the starting point for the students' work, who explored strategies to rethink the city through the metaphor of the Eco-city, that is, a city capable of responding to the challenges of resilience and environmental, social and economic sustainability (UN, 2015). The strategies developed by the students focused on several key themes, such as the connection between the different parts of the territory, the management of hydrogeological risk and the enhancement of the landscape. The connections were understood both in a physical sense, such as sustainable mobility routes, the implementation of food and wine itineraries, and in a symbolic and social sense, enhancing the connection between cultural heritage and the local community. Risk management, in a context such as that of Sarno characterized by a history of significant hydrogeological instability, stimulated students to imagine solutions for risk mitigation through the reuse of some wastescapes transformed into renaturalized areas, retention basins, in which water was considered as a central element in the design strategies. In this sense, water was interpreted no longer as an element of potential danger, but as a resource capable of generating new opportunities for the territory, redefining the relationship between city and landscape, between anthropic dimension and natural habitat. Finally, students worked on the enhancement of agricultural landscapes and green areas, proposing interventions capable of reconnecting these spaces with the urban fabric, promoting a new perception of the landscape as an integral part of the daily life of the community.

Conclusions and open questions

The work carried out within the Synthesis Laboratory has allowed students to experiment with an integrated design approach, in which urban planning and architecture combine to respond to the challenges of a complex city like Sarno, shifting towards a more sustainable and resilient future. This approach has highlighted the importance of looking at the territory through its critical issues and potentialities that represent opportunities for transformation in terms of landscape reconstruction, the reuse of abandoned areas and new territorial relations. Being able to recognize them allows us to build a matrix of territories-opportunities, essential for triggering regeneration processes that respond to contemporary challenges. Wastescapes can serve as a basis for a different way of thinking about urban regeneration. However, mapping wastescapes remain an ongoing and experimental process, offering valuable insights for developing transition strategies towards a more circular and inclusive city.

Ripensare la città di Sarno come Eco-city

La complessità del territorio sarnese ha rappresentato il punto di partenza per il lavoro degli studenti, che hanno esplorato strategie per ripensare la città attraverso la metafora dell'*Eco-city*, ovvero una città in grado di rispondere alle sfide di resilienza e sostenibilità ambientale, sociale ed economica (UN, 2015). Le strategie sviluppate dagli studenti si sono focalizzate su diversi temi chiave, come la connessione tra le diverse parti del territorio, la gestione del rischio idrogeologico e la valorizzazione del paesaggio. Le connessioni sono state intese sia in senso fisico, come percorsi di mobilità sostenibile, l'implementazione di itinerari enogastronomici, sia in senso simbolico e sociale, valorizzando la connessione tra patrimonio culturale e comunità locale. La gestione del rischio, in un contesto come quello di Sarno caratterizzato da una storia di dissesti idrogeologici importanti ha stimolato gli studenti a immaginare soluzioni per la mitigazione del rischio, attraverso il riuso di alcuni *wastescape* convertiti in aree rinaturalizzate, vasche di laminazione. L'acqua è stata considerata come elemento centrale nelle strategie progettuali, e interpretata non più come elemento di potenziale pericolo, ma come una risorsa capace di generare nuove opportunità per il territorio, ridefinendo il rapporto tra città e paesaggio, tra dimensione antropica e habitat naturale. Infine, gli studenti hanno lavorato sulla valorizzazione dei paesaggi agricoli e delle aree verdi, proponendo interventi in grado di riconnettere questi spazi con il tessuto urbano, favorendo una nuova percezione del paesaggio come parte integrante della vita quotidiana della comunità.

Conclusioni e questioni aperte

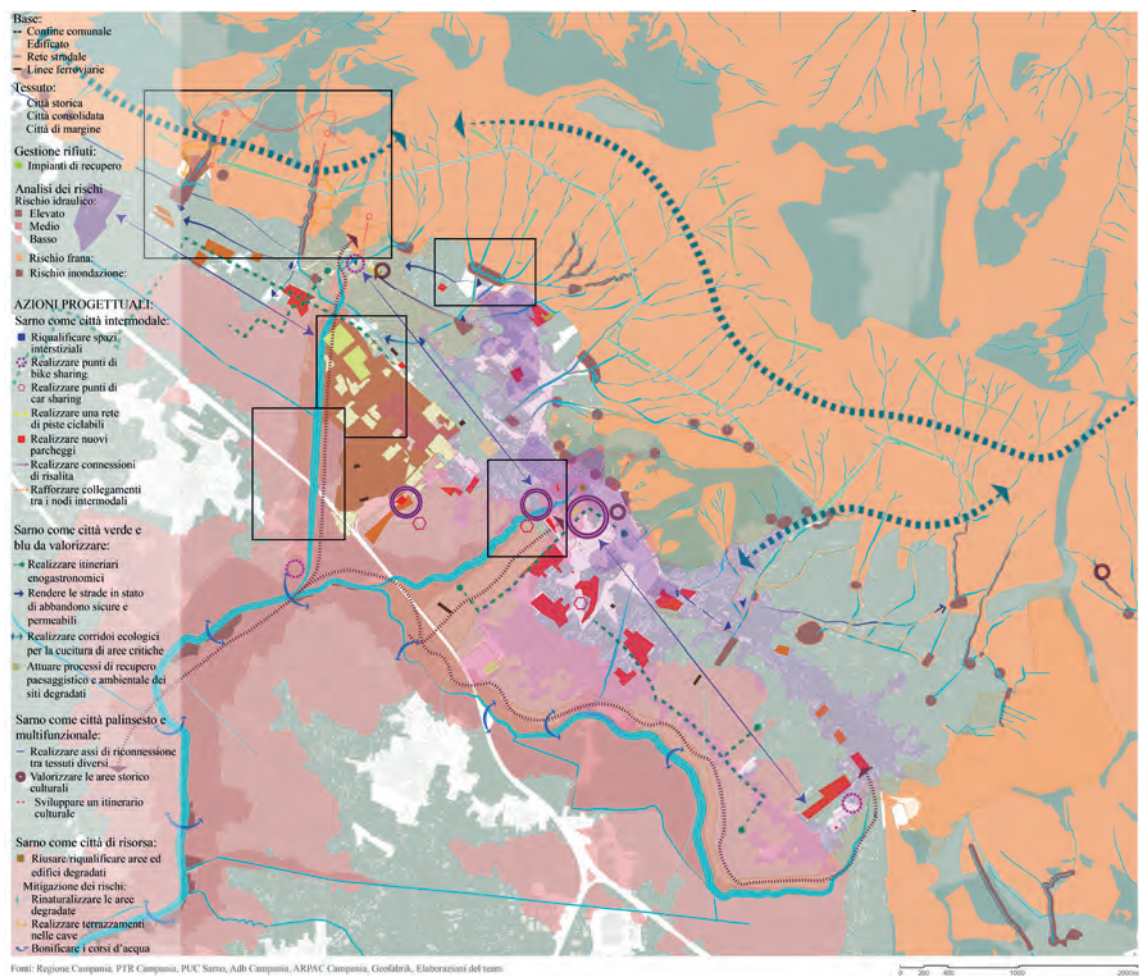
Il lavoro svolto all'interno del Laboratorio di Sintesi ha permesso agli studenti di sperimentare un approccio progettuale integrato, in cui l'urbanistica e l'architettura si combinano per rispondere alle sfide di una città complessa come Sarno, orientandosi verso un futuro più sostenibile e resiliente. Questo approccio ha evidenziato l'importanza di guardare al territorio attraverso le sue criticità e potenzialità, che rappresentano le opportunità di trasformazione in termini di ricostruzione del paesaggio, il riuso di aree abbandonate e nuove relazioni territoriali. Riuscire a riconoscerle permette di costruire una matrice di territori-opportunità, essenziale per innescare processi di rigenerazione che rispondano alle sfide contemporanee. I paesaggi di scarto - *wastescape* - possono costituire la base per un nuovo approccio alla rigenerazione urbana. La mappatura dei *wastescape* risulta tuttavia ancora un lavoro esplorativo ed aperto, un elemento sperimentale per esplorare possibili strategie di transizione verso una città più circolare e inclusiva.

Next page

Strategic framework. Above, Sarno Eco-city. Below, suggestions for the city of Sarno. Drawings by elaborazione degli studenti D. Maselli, V. M. Notaro, A. Palladino, R. Rippo, A. Ruggiero, A. Sarro, B. Tramontano.

Pagina seguente

Quadro strategico. In alto, Sarno Eco-city. In basso, suggestioni per la città di Sarno. Elaborazioni degli studenti D. Maselli, V. M. Notaro, A. Palladino, R. Rippo, A. Ruggiero, A. Sarro, B. Tramontano.



INFRASTRUTTURE_AREE DI PROGETTO



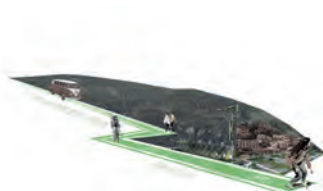
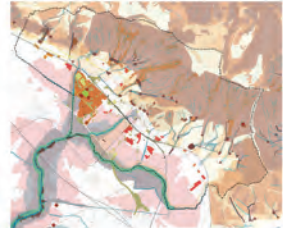
INFRASTRUTTURE VERDI E BLU_AREE DI PROGETTO



INSEDIATIVO/ATTREZZATURE_AREE DI PROGETTO



CITTA' FRAGILE_AREE DI PROGETTO



REFERENCES

1. E. Bassolino, *Climate-adaptive design e tecnologie digitali, Modelli, strumenti e pratiche*, Clean Edizioni, Napoli 2021.
2. E. Bassolino, *Misurare la sostenibilità dei processi edilizi attraverso il principio del DNSH*, "Costruire in laterizio", 194, 2024, pp. 62-71.
3. MASE, CAM - Criteri Ambientali Minimi Edilizia, ed. 2022, Roma, https://gpp.mase.gov.it/sites/default/files/2024-07/DM_23_06_2022_cam_edilizia.pdf.
4. Regolamento (UE) 2020/852 del Parlamento Europeo e del Consiglio del 18 giugno 2020.
5. UN - United Nations (2015b), *Transforming our World: The 2030 Agenda for Sustainable Development*, A/RES/70/1, New York, https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_70_1_E.pdf.

Next page

Above, project *The former Episcopio Hospital: a New Life for the Building and its Context*, by M. Benincasa.

Below, project *Through the Ancient Walls*, by E. Scotto di Covella.

Pagina seguente

In alto, progetto *L'ex ospedale di Episcopio: una nuova vita per l'edificio e il suo contesto*, di M. Benincasa.

In basso, progetto *Attraverso le mura storiche*, di E. Scotto di Covella.

The course in Executive Architectural Design within the Advanced Design Studio, which had as its field of study and application the city of Sarno, similar to previous experiences, defined as the focus of the teaching activity that related to the themes of architectural design, in particular with a careful look at the sustainability and environmental compatibility of building processes. In particular, emphasis was placed on topical issues such as actions aimed at mitigating and adapting to climate change and, more generally, to the sustainable development of our cities, in response to the objectives of Agenda 2030 (UN, 2015), while compliance and conformity to regulatory provisions was an essential prerequisite for the realisation of the Sarno area's transformation projects, in line with the principles of professional practice.

The environmental and morphological peculiarities of the context of the city of Sarno led to a focus on the relationship between buildings, open spaces and the environment, carefully reading the entire urban ecosystem. Right from the early stages of design development, these aspects, linked to the environmental, climatic and microclimatic context of the different intervention areas, were analysed to investigate the macro criticalities, while defining the potential that can be most attributed to the environmental context. During the development of the design concepts and the subsequent definition of the architectural organisms, formal and architectural verification phases alternated, as to functional-spatial needs and environmental components (lighting and natural ventilation), identifying those design strategies that could synthesise form and maximise the benefits deriving from the natural components, also to optimise the energy performance of the building, pursued systemically, to guarantee maximum compatibility with the urban ecosystem. The objectives of the EU Taxonomy (EU Regulation no. 852/2020), the respect of the DNSH principle (Bassolino, 2024), and the aspects related to building sustainability, such as mitigation and adaptation to climate change, have been assimilated and aimed at the definition of building organisms primarily capable of maximising the containment of climate-altering gas emissions, as well as the environmental impact of building processes related to the construction of new architectural artefacts or the renovation of existing buildings, with a view to life cycle compatibility. The themes thus defined were developed by the students through the choice of construction systems and building materials that would guarantee the lowest environmental impact, concerning the criteria set out in the updated C.A.M. regulations. - Minimum Environmental Criteria version 2022 (MASE, 2022), which is for the construction design and public procurement sector, defines the minimum environmental requirements that must be met during the various phases of the building processes, as well as the regulations in force for energy containment, and the guidelines for the use of Rating Systems to assess the environmental compatibility and compliance of projects (LEED, BREAM, Casa Clima, Itaca, etc.). These guidelines

Il corso di Progettazione Esecutiva dell'Architettura all'interno dell'Advanced Design Studio che ha avuto come ambito di studio e di applicazione la città di Sarno, in analogia a quanto fatto nel corso delle precedenti esperienze, ha definito quale focus dell'attività didattica quella legata ai temi del progetto di architettura, in particolare con uno sguardo attento alla sostenibilità e alla compatibilità ambientale dei processi edilizi. In particolare, si è voluto porre l'accento su tematismi di rilevante attualità quali le azioni volte alla mitigazione e all'adattamento ai cambiamenti climatici e, più in generale, allo sviluppo sostenibile delle nostre città, in rispondenza degli obiettivi dell'Agenda 2030 (UN, 2015), mentre la rispondenza e la conformità alle disposizioni normative è risultato un prerequisito essenziale per la realizzazione dei progetti di trasformazione del territorio di Sarno, in linea con i principi della pratica professionale. Le peculiarità ambientali e morfologiche del contesto della città di Sarno, hanno portato a focalizzare l'attenzione nel rapporto tra edifici, spazi aperti e ambiente, leggendo con attenzione l'intero ecosistema urbano. Già dalle prime fasi di sviluppo progettuale, tali aspetti legati al contesto ambientale, climatico e microclimatico delle differenti aree d'intervento, sono stati analizzati allo scopo di indagare le macro criticità, definendo al tempo stesso le potenzialità maggiormente riconducibili al contesto ambientale. Durante lo sviluppo dei concept progettuali e la successiva definizione degli organismi architettonici, si sono alternate fasi di verifica formale e architettonica, anche in relazione alle necessità funzionali-spaziali e alle componenti ambientali (illuminazione e ventilazione naturale), individuando quelle strategie progettuali che potessero fare sintesi tra la forma e la massimizzazione dei benefici derivanti dalle componenti naturali, anche in un'ottica di ottimizzazione delle prestazioni energetiche del manufatto edilizio perseguita in maniera sistemica, al fine di garantire la massima compatibilità con l'ecosistema urbano. Gli obiettivi della Tassonomia UE (Regolamento UE n. 852/2020), il rispetto del principio DNSH (Bassolino, 2024), e gli aspetti legati alla sostenibilità edilizia, quali la mitigazione e l'adattamento ai cambiamenti climatici, sono stati assimilati e volti alla definizione di organismi edilizi in primis capaci di massimizzare il contenimento delle emissioni di gas climalteranti, oltre che dell'impatto ambientale di processi edilizi legati alla costruzione di manufatti architettonici ex-novo o alla ristrutturazione di edifici esistenti, in un'ottica di compatibilità dei cicli di vita. I tematismi così definiti sono stati sviluppati dagli studenti attraverso la scelta di sistemi costruttivi e di materiali da costruzione che garantissero il minor impatto ambientale, con riferimento ai criteri enunciati dall'aggiornata disciplina normativa dei C.A.M. - Criteri Ambientali Minimi versione 2022 (MASE, 2022), che per il settore della progettazione e degli appalti pubblici delle costruzioni, definiscono i requisiti ambientali minimi che devono essere rispettati durante le diverse fasi dei processi edilizi, nonché quelle che sono le normative vigenti per il contenimento dell'energia, oltre che le indicazioni al ricorso a Rating System per la valutazione della compatibilità e rispondenza ambientale dei progetti (LEED, BREAM, Casa Clima, Itaca, ecc.). Tali indirizzi risultano una



are a guide towards a systemic vision that, through the choices made in the definition of technical solutions and building components, makes it possible not only to achieve the minimum performance levels but at the same time, to define NZEB - Nearly Zero Energy Building.

As part of a training course focused on climate change adaptation, students developed skills in the design of sustainable open spaces through the analysis of climate data and the use of simulation tools. Design proposals focused on mitigating the effects of heat waves and stormwater management, to improve urban resilience (Bassolino, 2021). The use of simulation tools enables the development of open space redevelopment projects that can improve urban resilience and contribute to the mitigation of climate change effects.

Through the use of simulation models, it is possible to assess the impact of different types of urban interventions, such as the creation of green surfaces, the construction of green infrastructure and the implementation of rainwater management systems, to mitigate the effects of climate change. Through the use of simulation models, it is also possible to assess the effectiveness of different strategies for adapting to climate change, such as increasing vegetation cover, using materials with low thermal inertia, implementing sustainable drainage systems and creating water bodies. The objective is to identify the most suitable solutions to mitigate the effects of heat waves and extreme events.

The design approach adopted is based on a holistic view of the built environment, taking into account the interactions between the building, open spaces and the natural context. The design choices are supported by instrumental analyses and verifications to guarantee the environmental compatibility of the intervention.

At the end of the work, the students were necessarily confronted with the production of detailed technical drawings, similar to what happens during executive design in public tenders, dealing with the instances of construction processes and phases as well as techniques and technologies, even the most innovative ones. The students' decision-making autonomy made it possible to verify the acquisition of the necessary skills for sustainable design, demonstrating the validity of the training course. The in-depth study of construction details represents a fundamental phase in the design process, as it allows the precise definition of how to realise the architectural work and integrate the knowledge acquired during the synthesis workshop.

Of fundamental importance is the conclusion of the work through the drafting of an illustrative technical report of the project, which retraces the development phases of the design process, illustrating how the different instances of urban, regulatory, structural, environmental, plant engineering and economic-financial integration have been harmonised to reach the design definition of the work. In particular, the results of the synthesis workshop are presented, where all the aspects considered were brought together.

guida verso una visione sistemica che attraverso la scelte operate nella definizione di soluzioni tecniche e di componenti per l'edilizia, permette non solo il raggiungimento dei livelli minimi prestazionali, ma al tempo stesso, di definire edifici di tipo NZEB - Nearly Zero Energy Building.

Nell'ambito di un percorso formativo incentrato sull'adattamento ai cambiamenti climatici, gli studenti hanno sviluppato competenze nella progettazione di spazi aperti sostenibili, attraverso l'analisi dei dati climatici e l'utilizzo di strumenti di simulazione. Le proposte progettuali si sono concentrate sulla mitigazione degli effetti delle ondate di calore e sulla gestione delle acque piovane, con l'obiettivo di migliorare la resilienza urbana (Bassolino, 2021). L'impiego di strumenti di simulazione consente di sviluppare progetti di riqualificazione degli spazi aperti in grado di migliorare la resilienza urbana e di contribuire alla mitigazione degli effetti dei cambiamenti climatici.

Attraverso l'utilizzo di modelli di simulazione, è possibile valutare l'impatto di diverse tipologie di interventi urbani, quali la creazione di superfici verdi, la realizzazione di infrastrutture verdi e l'implementazione di sistemi di gestione delle acque piovane, al fine di mitigare gli effetti dei cambiamenti climatici. Attraverso l'utilizzo di modelli di simulazione, è possibile inoltre valutare l'efficacia di diverse strategie di adattamento ai cambiamenti climatici, quali l'aumento della copertura vegetale, l'utilizzo di materiali a bassa inerzia termica, la realizzazione di sistemi di drenaggio sostenibili e la creazione di corpi d'acqua. L'obiettivo è individuare le soluzioni più adatte per mitigare gli effetti delle ondate di calore e degli eventi estremi. L'approccio progettuale adottato si basa su una visione olistica dell'ambiente costruito, che tiene conto delle interazioni tra l'edificio, gli spazi aperti e il contesto naturale. Le scelte progettuali sono supportate da analisi strumentali e verifiche volte a garantire la compatibilità ambientale dell'intervento.

A conclusione del lavoro, gli allievi si sono necessariamente confrontati con la produzione di elaborati tecnici di dettaglio, analogamente a quanto avviene durante la progettazione esecutiva negli appalti pubblici, confrontandosi con le istanze dei processi e le fasi costruttive nonché con le tecniche e le tecnologie, anche quelle più innovative. L'autonomia decisionale degli studenti ha permesso di verificare l'acquisizione delle competenze necessarie per una progettazione sostenibile, dimostrando la validità del percorso formativo. L'approfondimento dei dettagli costruttivi rappresenta una fase fondamentale del processo progettuale, in quanto permette di definire con precisione le modalità di realizzazione dell'opera architettonica e di integrare le conoscenze acquisite durante il laboratorio di sintesi.

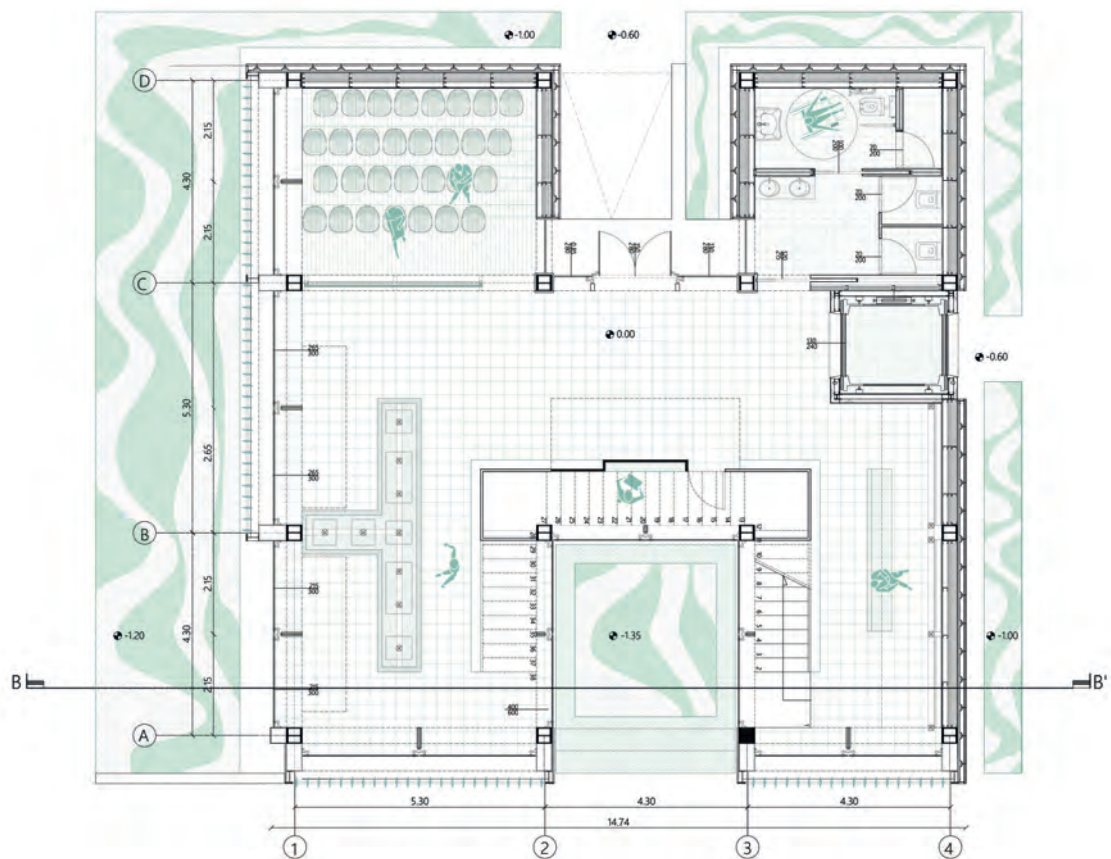
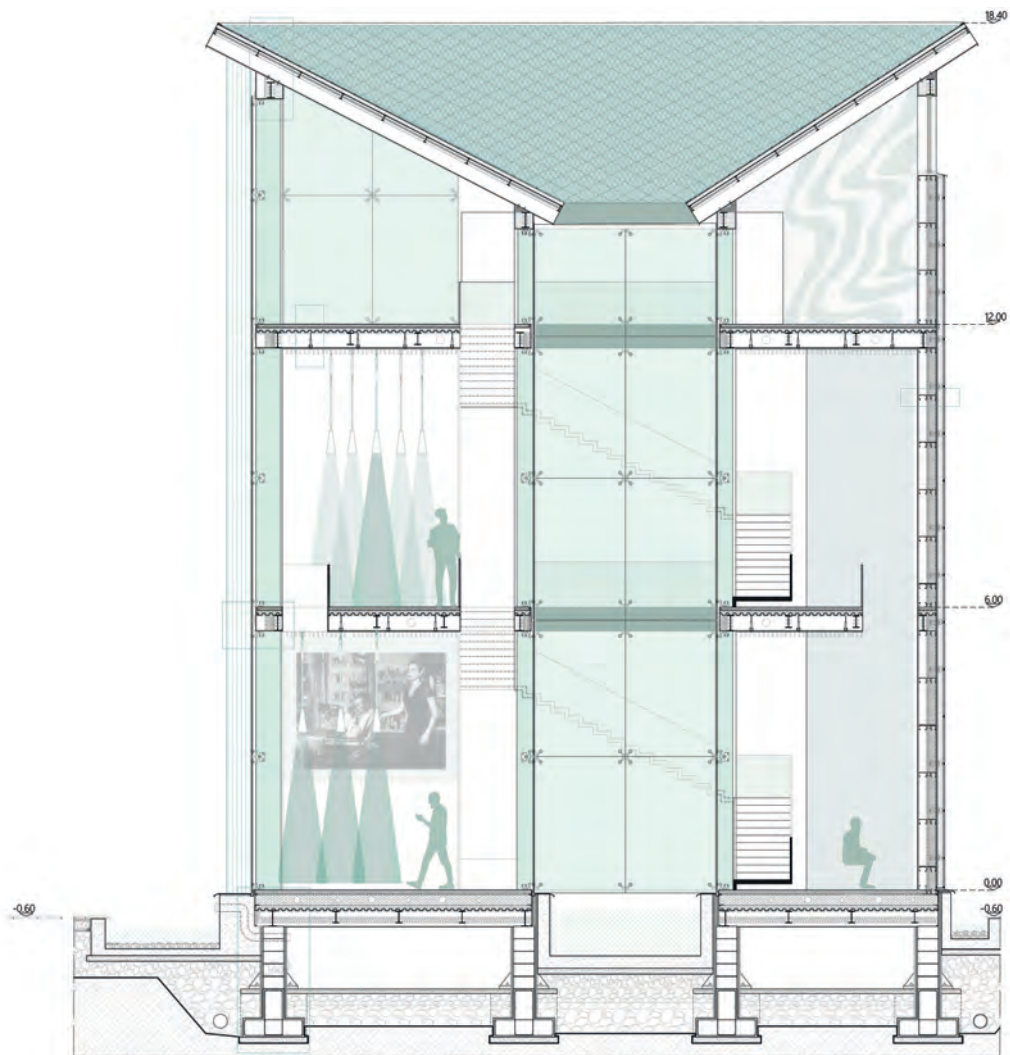
Di fondamentale importanza la conclusione del lavoro attraverso la redazione di una relazione tecnica illustrativa del progetto, che ripercorre le fasi di sviluppo del processo progettuale, illustrando come le diverse istanze d'integrazione urbanistiche, normative, strutturali, ambientali, impiantistiche ed economico-finanziarie, siano state armonizzate per giungere alla definizione progettuale dell'opera. In particolare, sono presentati i risultati del laboratorio di sintesi, dove sono stati messi a sistema tutti gli aspetti considerati.

Next page

Project RI|Activate The River Park. A Water Museum, by S. Improta

Pagina seguente

Progetto Riattivare il parco fluviale. Un museo dell'acqua, di S. Improta



REFERENCES

1. European Commission, EU Mission: Climate-Neutral and Smart Cities. https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en.
2. DIRECTIVE (UE) 2024/1275 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 April 2024 https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401275.
3. Commissione Europea, "Efficienza energetica nell'edilizia." Accessed: Jan. 08, 2024. [Online].
4. "Attualità Parlamento europeo," Case "green": approvata la posizione del Parlamento europeo. Accessed: Jan. 08, 2024. [Online].
5. DIRECTIVE 2002/91/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2002. Accessed: Jun. 28, 2022. [Online].
6. DIRECTIVE 2010/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 May 2010. Accessed: Jun. 28, 2022. [Online].
7. DIRECTIVE (EU) 2018/844 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2018. Accessed: Jun. 28, 2022. [Online].

Next page

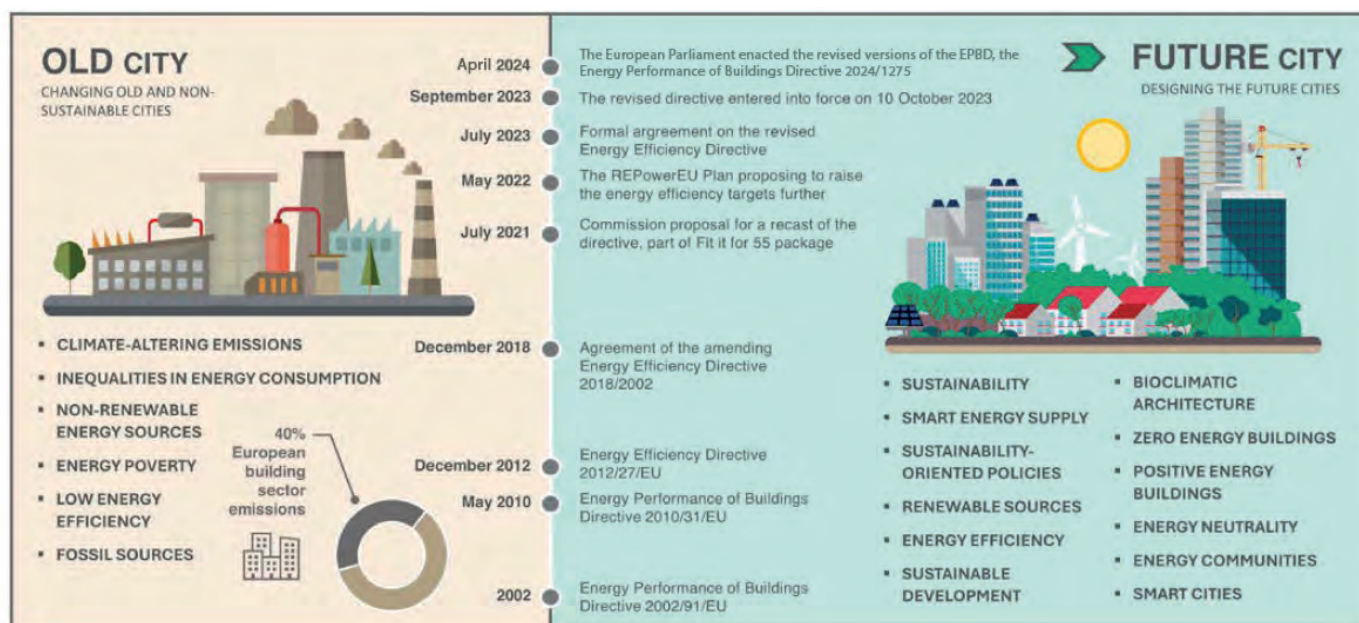
Regulatory developments in the field of energy efficiency of buildings

Pagina seguente

L'evoluzione normativa in materia di efficienza energetica degli edifici

Energy supply, one of the most uncertain issues at both a national and global level, today plays a key role in international conflicts, shaping the development perspective of cities and policies aimed at future sustainability. Growing concerns related to climate-changing emissions, the increase in energy costs, and the related social and economic consequences, emerge and are all central elements in the context of the built environment. Significant critical issues related to energy supply have occurred in recent decades, including climate change, caused by high greenhouse gas emissions from non-renewable energy sources, the limitation of fossil resources and marked inequalities in energy consumption on a global scale. Energy availability becomes a key indicator of wealth and economic growth for a country. Conversely, energy poverty often accompanies lower levels of development, and energy dependence on other nations can make national economies vulnerable. This energy shortage negatively affects low-income groups, compromising access to essential services such as heating in homes. According to Eurostat, approximately 11% of the Italian population does not have sufficient energy to heat their homes, yet in other European Union countries, the value is even higher. Therefore, it becomes essential to adopt strategies that combat resource depletion, reduce social inequalities, tackle global warming, and ensure energy supply. The first challenge is to improve the energy efficiency of the building stock to reduce energy demand by redeveloping existing buildings and constructing new highly efficient buildings. Consistent with the objective of reducing the use of fossil fuels, the energy market must necessarily move from a predominance of non-renewable sources to renewable sources. These include solar, wind, geothermal, hydroelectric, and energy obtainable from biomass. In a phase of energy transition, the right direction to move towards a low-carbon future is based on reducing energy consumption and using renewable energy sources. The design solutions, with a view to sustainability, both environmental, economic and social, were conceived for the municipality of Sarno, in the province of Salerno. The intervention area, in addition to presenting great critical issues, also presents great potential from an environmental point of view which makes it of particular interest. An urban regeneration intervention is therefore necessary which, in addition to providing new equipment, is capable of exploiting the environmental potential of the place. During the Techniques of Environmental Control course, integrated with the Architectural and Urban Design course, energy-efficient solutions were identified, which aim at the use of renewable energy sources, including solar, wind, but also hydroelectric. Energy efficiency measures comply with current regulations and at the same time are respectfully integrated into the environmental context. From the early design phases, the focus was on finding high standards of environmental and energy quality, starting from the scale of the single component up to the urban scale. "Passive" systems have been implemented, identifying effective solutions for the envelope, both opaque and transparent, in order to minimize the energy demand of the buildings. Furthermore, efficient systems

L'approvvigionamento energetico, una delle questioni più incerte sia a livello nazionale che mondiale, riveste oggi un ruolo chiave nei conflitti internazionali, plasmando la prospettiva di sviluppo delle città e le politiche orientate alla sostenibilità futura. Emergono crescenti preoccupazioni legate alle emissioni climalteranti, all'incremento dei costi energetici e alle conseguenze sociali ed economiche connesse, tutti elementi centrali nel contesto dell'ambiente costruito. Criticità significative legate all'approvvigionamento energetico si sono manifestate negli ultimi decenni, compreso il cambiamento climatico, causato dalle elevate emissioni di gas serra da fonti di energia non rinnovabile, la limitatezza delle risorse fossili e le marcate disuguaglianze nei consumi energetici su scala globale. La disponibilità di energia diventa un indicatore chiave di ricchezza e crescita economica per un paese. Al contrario, la povertà energetica spesso accompagna livelli di sviluppo più bassi, e la dipendenza energetica da altre nazioni può rendere vulnerabili le economie nazionali. Questa scarsità di energia colpisce negativamente le fasce a basso reddito, compromettendo l'accesso a servizi essenziali come il riscaldamento nelle abitazioni. Secondo l'Eurostat, circa l'11% della popolazione italiana non dispone di energia sufficiente per riscaldare le proprie abitazioni, eppure in altri paesi dell'Unione Europea il valore risulta ancora più elevato. Pertanto, diventa essenziale adottare strategie che contrastino l'esaurimento delle risorse, riducano le disuguaglianze sociali, affrontino il surriscaldamento globale e assicurino l'approvvigionamento energetico. La prima sfida consiste nel migliorare l'efficienza energetica del patrimonio edilizio per ridurre la domanda di energia, riqualificando gli edifici esistenti e costruendo nuovi edifici ad elevata efficienza. Coerentemente con l'obiettivo che punta alla riduzione dell'utilizzo di fonti fossili, il mercato dell'energia deve necessariamente passare da un predominio di fonti non rinnovabili a fonti rinnovabili. Tra queste rientrano il solare, l'eolico, la geotermia, l'idroelettrico e l'energia ottenibile dalle biomasse. In una fase di transizione energetica, la giusta direzione per orientarsi verso un futuro low-carbon si basa sulla riduzione del consumo energetico e sull'utilizzo di fonti di energia rinnovabile. Le soluzioni progettuali, nell'ottica della sostenibilità, sia ambientale che economica e sociale, sono state concepite per il comune di Sarno, in provincia di Salerno. L'area di intervento, oltre a presentare grandi criticità presenta anche grandi potenzialità da un punto di vista ambientale che la rendono di particolare interesse. Risulta dunque necessario un intervento di rigenerazione urbana che, oltre a fornire nuove attrezzature, sia in grado di sfruttare le potenzialità ambientali del luogo. Durante il corso di Tecnica del Controllo Ambientale, integrato con quello di Progettazione Architettonica e Urbana, sono state individuate soluzioni energeticamente efficienti, che puntano all'utilizzo di fonti di energia rinnovabile, tra cui il solare, l'eolico, ma anche l'idroelettrico. Le misure di efficienza energetica rispettando le attuali normative e al contempo sono integrate in



for microclimatic control were chosen, to guarantee the thermo-hygrometric comfort of the occupants. The Final Synthesis laboratory was an opportunity to underline the key role that the building sector plays in the energy transition, guiding the design, construction and execution processes of architectural products towards energy efficiency in building processes. Among the strategies for mitigating and reducing the energy demand of buildings, bioclimatic architecture solutions have been integrated, such as ventilated facades, green facades or green roofs, and solar greenhouses. These were accompanied by conversion systems from renewable sources and energy systems for environmental control, capable of satisfying the energy demand of buildings and the needs of sustainable mobility, with a strong focus on the standards of zero energy and positive energy buildings, the so-called plus-zero energy buildings.

The pursuit of a low-carbon future is a common objective of European energy directives. The building sector, currently responsible for over 40% of European energy consumption, has been the subject of various European Directives which have aimed at improving their energy performance, starting with the Energy Performance of Building Directive 2002/91/EU in 2002. This directive was subsequently revised in 2010 by the EPBD Recast 2010/31/EU, which introduced the minimum energy requirements for energy performance of buildings based on optimal cost levels. The scope was to achieve the “nearly zero-energy building” standard, to be pursued starting from 2019 for public buildings and from 2021 for private ones. In 2018, Directive 844/2018/EU was then issued and proposed a long-term plan for the energy refurbishment of existing buildings. The last update took place in 2023 with the Green Homes Directive, approved at the beginning of 2024. The main introduced innovations concern the complete decarbonization of the building stock by 2050, through the construction of zero-emission buildings starting from 2028 for the public and from 2030 for all other buildings. For the residential sector, the average primary energy consumption is expected to be reduced by 16% by 2030 and by 20-22% by 2035. To reduce the use of fossil fuels, it has been established that from 2025, the purchase and installation of fossil fuel generators will not be incentivized. Shifting attention from the scale of the individual building to that of the community, among the future objectives highlighted by the “100 climate neutral cities by 2030 - by and for the citizens”, by 2030, 100 European cities will have to achieve energy neutrality. This objective aligns with the development of energy communities, fundamental for the revaluation of urban districts. From this perspective, energy supply, including ways of accessing energy, flexibility in use through thermal storage and “demand-response” supply, would become essential features in our cities. Energy communities are based on plurality, both in terms of the multitude of subjects involved and in the diversification of their characteristics, which can operate in a complementary way despite the complexity of the entire system. Sharing and collaborating in the management of energy supply, generation, and consumption are part of the concept of energy community. The current challenge that

maniera rispettosa nel contesto ambientale. Dalle prime fasi di progettazione si è puntato alla ricerca di elevati standard di qualità ambientale ed energetica, partendo dalla scala del singolo componente fino a quella urbana. Sono stati implementati sistemi “passivi”, individuando soluzioni efficaci per l’involucro, sia opaco che trasparente, al fine di minimizzare la domanda energetica degli edifici. Inoltre, sono stati scelti sistemi efficienti per il controllo microclimatico, al fine di garantire il comfort termo-igrometrico degli occupanti. Il laboratorio di sintesi finale è stato un’opportunità per sottolineare il ruolo chiave che il settore edilizio gioca nella transizione energetica, guidando la progettazione, la costruzione e i processi di esecuzione dei manufatti architettonici verso l’efficienza energetica nei processi edilizi. Tra le strategie di mitigazione e riduzione della domanda energetica degli edifici, sono state integrate soluzioni di architettura bioclimatica, come facciate ventilate, facciate verdi o tetti verdi e serre solari. A queste sono stati affiancati sistemi di conversione da fonti rinnovabili e sistemi energetici per il controllo ambientale, capaci di soddisfare la domanda energetica degli edifici e le esigenze di mobilità sostenibile, con una forte attenzione agli standard di edifici a energia zero e a energia positiva, i cosiddetti plus-zero energy buildings.

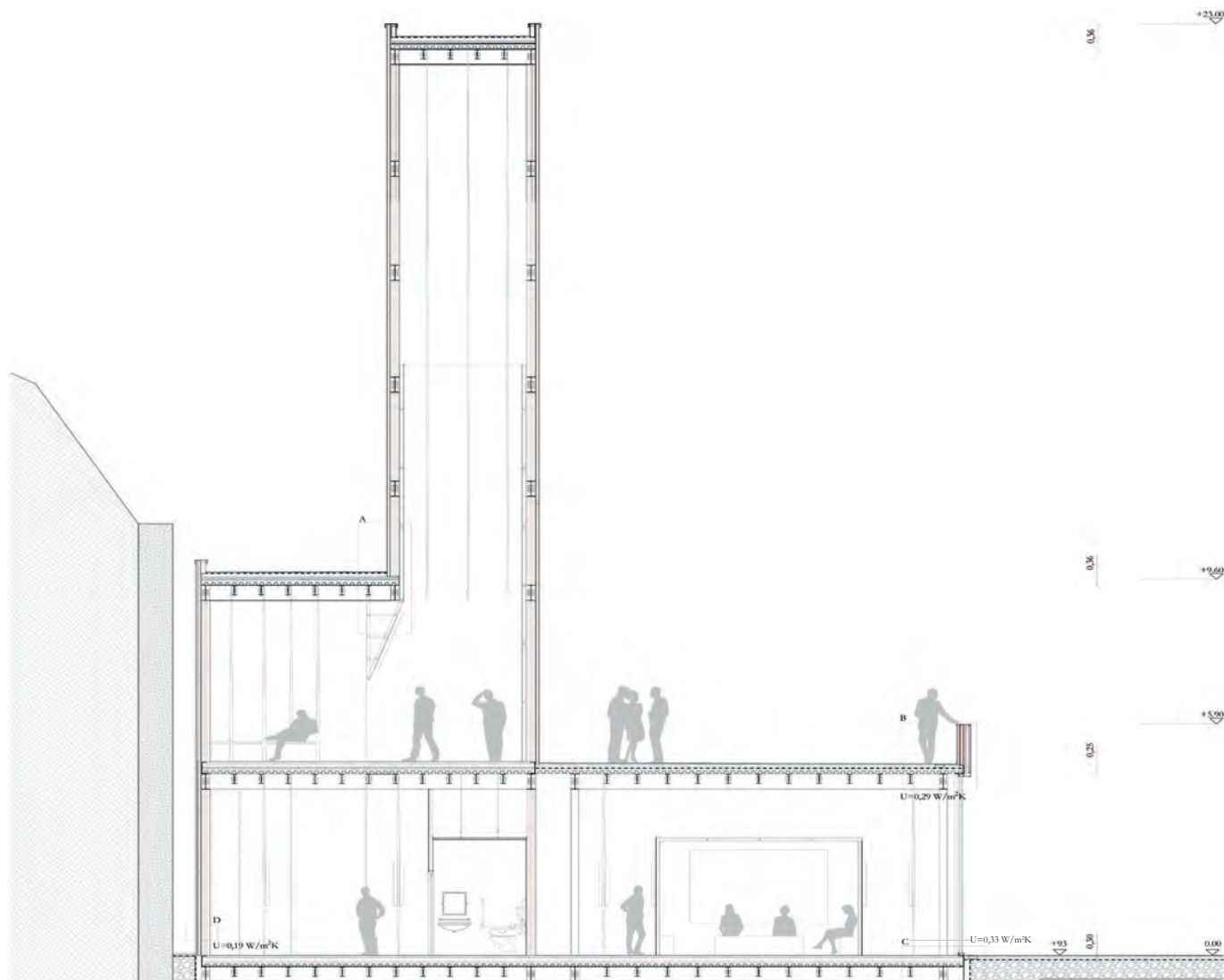
Il perseguimento di un futuro a basse emissioni di carbonio rappresenta un obiettivo comune delle direttive europee sull’energia. Il settore edilizio, ad oggi responsabile per oltre il 40% del consumo energetico europeo, è stato oggetto di varie Direttive Europee che hanno puntato a migliorarne le prestazioni energetiche, iniziando con l’Energy Performance of Building Directive 2002/91/UE a partire dal 2002. Questa direttiva è stata successivamente rivista nel 2010 dalla EPBD Recast 2010/31/UE, con la quale vengono introdotti i requisiti minimi di prestazione energetica degli edifici in funzione di livelli ottimali di costo, per raggiungere lo standard del “nearly zero-energy building”, da perseguire a partire dal 2019 per edifici pubblici e dal 2021 per quelli privati. Nel 2018 viene poi emanata la Direttiva 844/2018/UE che propone un piano a lungo termine per la riqualificazione energetica di edifici esistenti. Ultimo aggiornamento è avvenuto nel 2023 con la Direttiva Case Green, approvata all’inizio del 2024. Le principali novità introdotte riguardano la completa decarbonizzazione del parco edilizio entro il 2050, attraverso la costruzione di edifici ad emissioni zero a partire dal 2028 per quelli pubblici e dal 2030 per tutti gli altri edifici. Per il settore residenziale, è prevista la riduzione del consumo medio di energia primaria del 16% entro il 2030 e del 20-22% entro il 2035. Al fine di ridurre l’utilizzo di fonti fossili, è stato stabilito che dal 2025 non potranno essere più incentivati acquisto ed installazione di generatori a combustibili fossili. Spostando l’attenzione dalla scala del singolo edificio a quella della comunità, tra gli obiettivi futuri erimarcati dal “100 climate neutral cities by 2030 - by and for the citizens”, entro il 2030, 100 città europee dovranno raggiungere la neutralità energetica. Questo obiettivo si allinea con lo sviluppo delle comunità energetiche,

Next page

Project An Art Hub in the Church of San Martino on Saretto Hill, by M. De Gennaro

Pagina seguente

Progetto Un polo d'arte nella chiesa di San Martino sul Monte Saretto, di M. De Gennaro



31

cities of the future must face is the fight against energy poverty and the use of energy from renewable sources to offset the energy demand of buildings and the automotive sector. The objectives and issues addressed during the Environmental Control Technique course, starting from a small area, such as that of the municipality of Sarno (SA), are in line with the community ones since they aim at the energy transition towards smart cities and a future based on sustainable development.

fondamentale per la rivalutazione dei distretti urbani. In questa prospettiva, l'approvvigionamento energetico, comprese le modalità di accesso all'energia, la flessibilità nell'utilizzo attraverso accumuli termici e la fornitura "demand-response", diventerebbero caratteristiche essenziali nelle nostre città. Le comunità energetiche hanno alla base la pluralità, sia in termini di moltitudine dei soggetti coinvolti che nella diversificazione delle loro caratteristiche, che possono operare in modo complementare nonostante la complessità dell'intero sistema. Condividere, collaborare nella gestione dell'approvvigionamento energetico, nella generazione e nel consumo, rientrano nel concetto di comunità energetica. L'attuale sfida che le città del futuro devono affrontare è il contrasto alla povertà energetica e l'utilizzo di energia proveniente da fonti rinnovabili per compensare la domanda energetica degli edifici e del settore automobilistico. Gli obiettivi e le tematiche affrontate durante il corso di Tecnica del Controllo Ambientale, partendo da un'area ridotta, come quella del comune di Sarno (SA), sono in linea con quelli comunitari, poiché puntano alla transizione energetica verso le smart cities e ad un futuro basato sullo sviluppo sostenibile.

REFERENCES

1. B. Secchi, *La città dei ricchi e la città dei poveri*, LaTerza, Roma-Bari 2013.
2. L. Fusco Girard, P. Nijkamp, F. Nocca, *Toward Circular Regeneration Strategies*, FrancoAngeli, Milano 2024.
3. D. Tirendi (with A. Bianchi), *The Choice Experiment Method as a support to environmental risk reduction in the National Park of Cilento and Vallo di Diano*, "Bollettino del Dipartimento di Conservazione dei beni architettonici e ambientali BDC", vol.10/n. 1, 2010, Giannini Editore, Napoli.
4. D. Tirendi, *A Methodological proposal for the measurement of stakeholders benefits interested to the exploitation of Port of Naples*, "Bollettino del Dipartimento di Conservazione dei beni architettonici e ambientali BDC", vol.12/n. 1, 2012, Giannini Editore, Napoli.
5. D. Tirendi, *Environmental Economics and Evaluation of the Benefits Deriving from the Regeneration of Natural Ecosystems: The Case of the Decimare Nature Oasis*, in G. Mondini, A. Oppio, S. Stanghellini, M. Bottero, F. Abastante (eds), *Values and Functions for Future Cities. Green Energy and Technology*, Springer, 2019.

Next page

Site surveys in Sarno, September 2022 (photo by A. Bernieri).

Pagina seguente

Sopralluoghi nella città di Sarno, settembre 2022 (foto di A. Bernieri).

As part of the Environmental Economics and Estimation course, which is included in the project synthesis activity required of students, a "toolbox" was provided consisting of evaluation criteria and methods capable of translating benefits and costs into monetary terms. not only of the designed artefacts, but also of the other values "at stake", mercantile and extra-mercantile of the territory in which they are inserted. The students were called to carry out a deep reflection on the complexity of the urban transformation project in the city of Sarno, a city of around 30,000 inhabitants in the province of Salerno, located in a strategic geographical position at the foot of Monte Sarò and on the border between the Campania plain and the Agro Nocerino-Sarnese. This city lends itself more than any other to laboratory activities as it reflects a mix of historical, natural and modern characteristics. The heart of the city, in fact, is made up of a historic center full of charm, with narrow streets, stone buildings and ancient churches. Among the notable architecture, Sarno Castle stands out, dating back to the medieval period, which dominates the city from above offering a panoramic view of the valley. Sarno has undergone significant urban expansion since the 20th century, with the construction of residential neighborhoods and commercial areas.

This growth has characterized the urban landscape with a balance between old and new, between past and present. The city is also crossed by numerous canals and natural springs, being located in an area rich in water. The Sarno river, which crosses the area, represents a fundamental element, even if over the years with its high pollution, it has constituted an element of strong degradation, especially along its course. Around the city there are green areas and agricultural areas that create a gradual transition between the urban and natural context. The city of Sarno must face some unresolved issues: the pollution of its river which constitutes a crucial environmental and health issue for the territory; the complex management of hydrogeological risk (the city, over the years, has been hit by landslides, such as the tragic event of 1998); the urban redevelopment of suburbs that require interventions aimed at improving the quality of life through sustainability criteria. This last issue is what the students addressed through a design attentive to economic aspects, environmental sustainability and above all aimed at meeting the needs of the community. The ex-ante estimate consists of a strategic analysis of an urban project. It aims to provide an overall vision of the economic, environmental and social implications of an intervention, evaluating its convenience and effectiveness. The students preliminarily conducted a SWOT Analysis to evaluate the effectiveness and plan the planned interventions. This qualitative assessment is based on the strengths, weaknesses, opportunities and threats of the project by analyzing the effectiveness of the envisaged scenarios. This contextual analysis allows us to highlight the urban, environmental and demographic characteristics of the area, to identify any critical issues or potential.

Nell'ambito del corso di Economia ed Estimo ambientale, che è ricompreso nell'attività di sintesi progettuale richiesta agli studenti, è stata fornita una "cassetta degli attrezzi" costituita da criteri e metodi di valutazione in grado di tradurre in termini monetari benefici e costi non solo dei manufatti progettati, ma anche degli altri valori "in gioco", mercantili ed extra-mercantili del territorio in cui sono inseriti. Gli allievi sono stati chiamati ad una profonda attività di riflessione sulla complessità del progetto di trasformazione urbana nella città di Sarno, una città di circa 30.000 abitanti della provincia di Salerno, situata in una posizione geografica strategica ai piedi del Monte Sarò e al confine tra la pianura campana e l'Agro Nocerino-Sarnese. Questa città si presta più di ogni altra alle attività laboratoriali in quanto riflette un mix di caratteristiche storiche, naturali e moderne. Il cuore della città, infatti, è costituito da un centro storico ricco di fascino, con vie strette, edifici in pietra e antiche chiese. Tra le architetture di rilievo spicca il Castello di Sarno, risalente al periodo medievale, che domina dall'alto la città offrendo una vista panoramica sulla valle. Sarno ha subito una significativa espansione urbana a partire dal XX secolo, con la costruzione di quartieri residenziali e aree commerciali. Questa crescita ha connotato il paesaggio urbano con un equilibrio tra vecchio e nuovo, tra passato e presente. La città è, inoltre, attraversata da numerosi canali e sorgenti naturali, essendo situata in una zona ricca d'acqua. Il fiume Sarno, che attraversa l'area, rappresenta un elemento fondamentale, anche se nel corso degli anni col suo elevato inquinamento, ha costituito un elemento di forte degrado, soprattutto lungo il suo decorso. Intorno alla città si trovano aree verdi e zone agricole che creano una transizione graduale tra il contesto urbano e quello naturale. La città di Sarno deve affrontare alcuni nodi irrisolti: l'inquinamento del suo fiume che costituisce una questione ambientale e sanitaria cruciale per il territorio; la complessa gestione del rischio idrogeologico (la città, nel corso degli anni, è stata colpita da eventi franosi, come il tragico evento del 1998); la riqualificazione urbana delle periferie che necessitano di interventi atti al miglioramento della qualità della vita attraverso criteri di sostenibilità. Quest'ultimo nodo è quello che gli allievi hanno affrontato attraverso una progettazione attenta agli aspetti economici, di sostenibilità ambientale e soprattutto volta ad incontrare i bisogni della comunità. Le trasformazioni urbane rappresentano un processo complesso e articolato che coinvolge una molteplicità di stakeholders, risorse e dinamiche socio-economiche. In questo contesto, la stima assume un ruolo fondamentale, poiché consente di valutare in anticipo la fattibilità tecnica, economica e sociale degli interventi pianificati. Tale analisi, soprattutto nella fase preliminare non solo mitiga i rischi di fallimento del progetto, ma promuove anche la sostenibilità e l'efficacia delle trasformazioni, garantendo il massimo beneficio per la collettività. La stima ex-ante consiste in un'analisi strategica di un progetto urbano. Ha lo scopo di fornire una visione complessiva delle implicazioni economiche, ambientali e sociali di un intervento, valutandone la convenienza e l'efficacia. Preliminarmente gli studenti hanno condotto



After this first analysis, which is purely qualitative in nature, we move on to a quantitative one such as the Cost-Benefit Analysis (CBA) which has the objective of estimating the construction, management and maintenance costs, comparing them with the expected benefits, such as the increase in real estate value, the attractiveness of the area or the improvement of the quality of life. It is a complex activity that of the evaluator who is called upon to predict the impacts of transformations on the urban fabric, on the local community and on the environment, to promote responsible and sustainable interventions. This essential ex-ante evaluation must support (and not replace) political decision-makers, designers and investors in making informed decisions. It allows us to identify not only the intervention priorities, but also to evaluate alternative scenarios, through the comparison of the different project options, thus being able to choose the most advantageous one, reducing a whole series of potential risks of overestimates of the benefits, underestimates of the costs or resistance from the population involved. An urban regeneration project without a careful preliminary evaluation could run into problems of insufficient economic resources or lack of the necessary social consensus, therefore compromising the entire intervention. The evaluation process is, therefore, essential to ensure that urban transformations are sustainable both from a cultural, social and environmental point of view. In Western cultures the city has long been imagined as a space of social and cultural integration (Secchi, 2013). Through a careful evaluation process it is always possible to identify design solutions that reduce the consumption of natural resources and minimize environmental impact, while at the same time considering the needs of the local community, promoting inclusiveness and equity, allowing the complexity of planning to be addressed with a strategic vision, careful to minimize risks and maximize benefits.

una SWOT Analysis per valutare l'efficacia e pianificare gli interventi previsti. Questa valutazione di carattere qualitativo si basa sui punti di forza (*strengths*), di debolezza (*weaknesses*), sulle opportunità (*opportunities*) e sulle minacce (*threats*) del progetto analizzando l'efficacia degli scenari previsti. Questa analisi di contesto consente di evidenziare le caratteristiche urbanistiche, ambientali e demografiche dell'area, per individuare eventuali criticità o potenzialità. Dopo questa prima analisi, che ha carattere puramente qualitativo si passa ad una di tipo quantitativo come l'Analisi Costi-Benefici (ACB) che ha l'obiettivo di stimare i costi di costruzione, gestione e manutenzione, confrontandoli con i benefici attesi, come l'incremento del valore immobiliare, l'attrattività del territorio o il miglioramento della qualità della vita. È un'attività complessa quella del valutatore che è chiamato a prevedere gli impatti delle trasformazioni sul tessuto urbano, sulla comunità locale e sull'ambiente, per promuovere interventi responsabili e sostenibili. Questa imprescindibile valutazione ex-ante deve supportare (e non sostituire) i decisori politici, i progettisti e gli investitori nel prendere decisioni informate. Essa consente di individuare non solo le priorità d'intervento, ma anche di valutare scenari tra loro alternativi, attraverso il confronto delle diverse opzioni progettuali, potendo perciò scegliere quello più vantaggioso, riducendo tutta una serie di rischi potenziali di sovrastime dei benefici, sottostime dei costi o resistenze da parte della popolazione coinvolta. Un progetto di rigenerazione urbana senza una attenta valutazione preliminare potrebbe incorrere in problemi di risorse economiche insufficienti o di assenza del necessario consenso sociale, compromettendo, pertanto, l'intero intervento. Il processo valutativo è, perciò, essenziale per garantire che le trasformazioni urbane siano sostenibili sia dal punto di vista culturale che sociale e ambientale. Nelle culture occidentali la città è stata a lungo immaginata come spazio dell'integrazione sociale e culturale (Secchi, 2013). Attraverso un attento processo valutativo è sempre possibile identificare soluzioni progettuali che riducono il consumo di risorse naturali e minimizzano l'impatto ambientale, considerando al contempo le esigenze della comunità locale, promuovendo inclusività ed equità permettendo di affrontare la complessità della pianificazione con una visione strategica, attenta a minimizzare i rischi e a massimizzare i benefici.

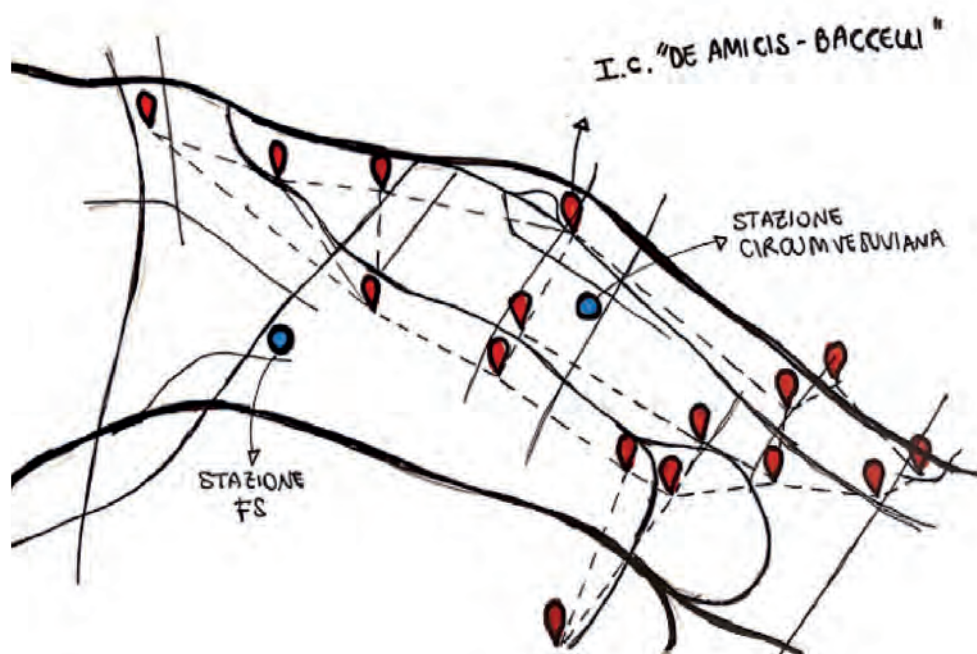
Next page

Sarno's archaeological site survey, September 2022. Photo by A. Bernieri.

Pagina seguente

Visita all'area archeologica di Sarno, settembre 2022. Foto di A. Bernieri.





SUSTAINABLE REGENERATION STRATEGIES FOR THE CITY OF SARNO/
STRATEGIE DI RIGENERAZIONE SOSTENIBILE PER LA CITTÀ DI SARNO

EDITED BY / A CURA DI L. AMENTA, R. IODICE

BETWEEN TRACES AND LANDSCAPES: INITIAL IMPRESSIONS OF A TERRITORY IN TRANSITION



SARNO'S VALLEY / LA PIANA DEL SARNO

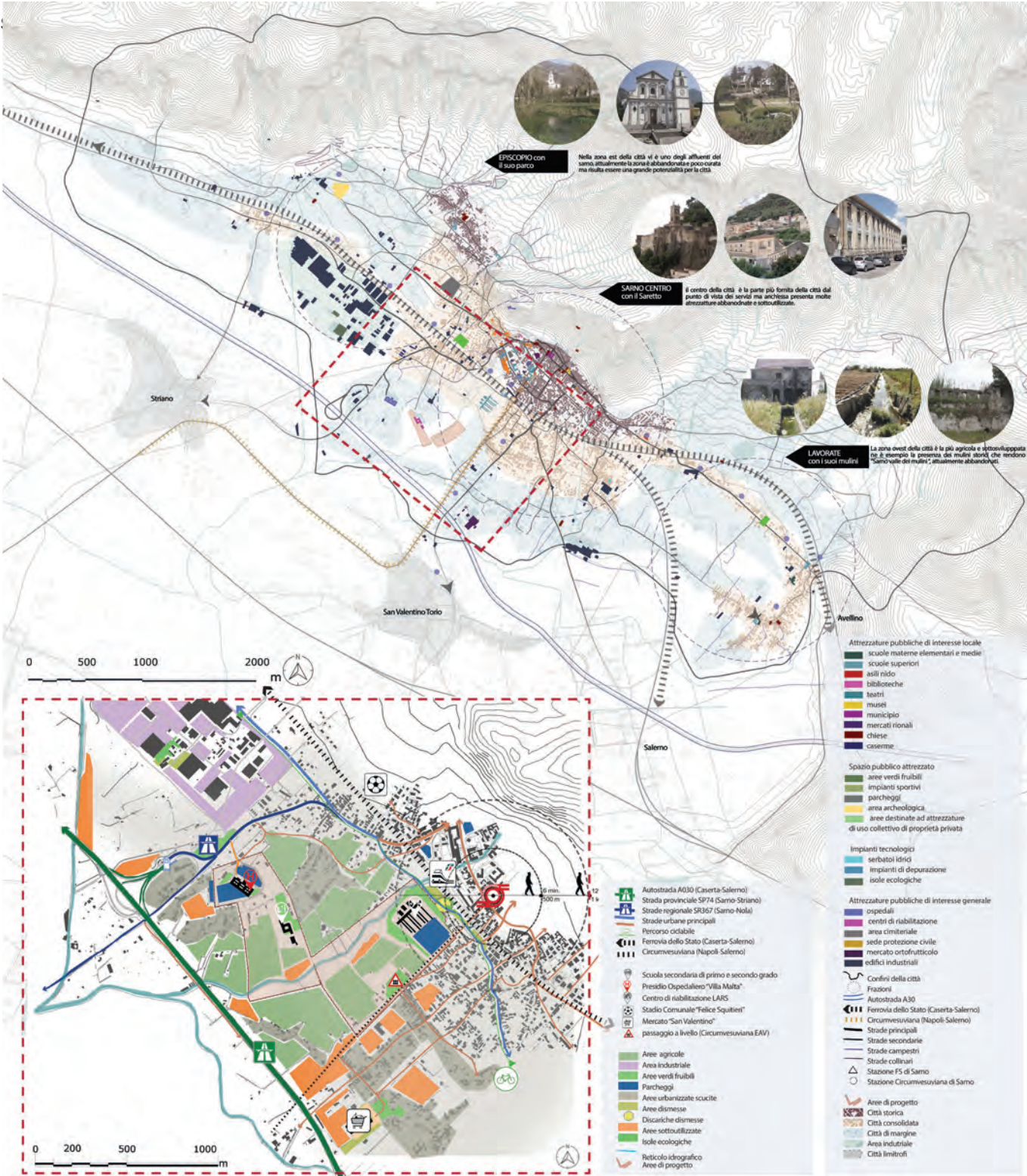
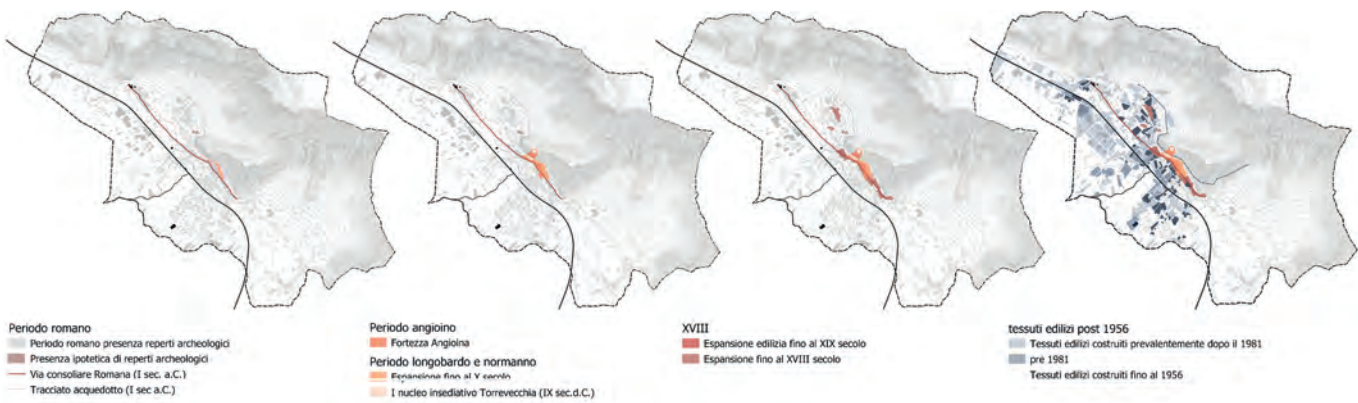


THE MUNICIPAL TERRITORY / IL TERRITORIO COMUNALE

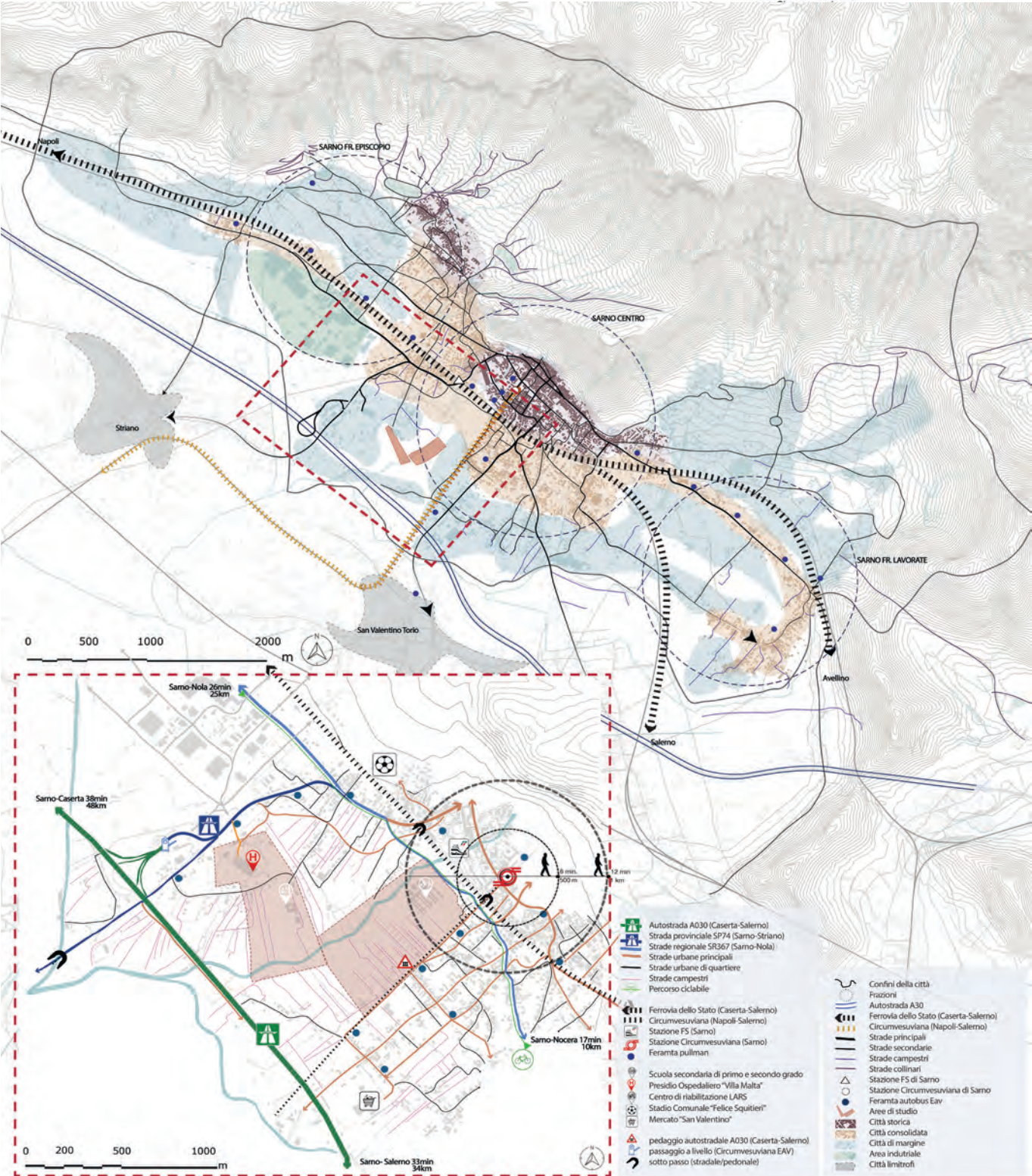


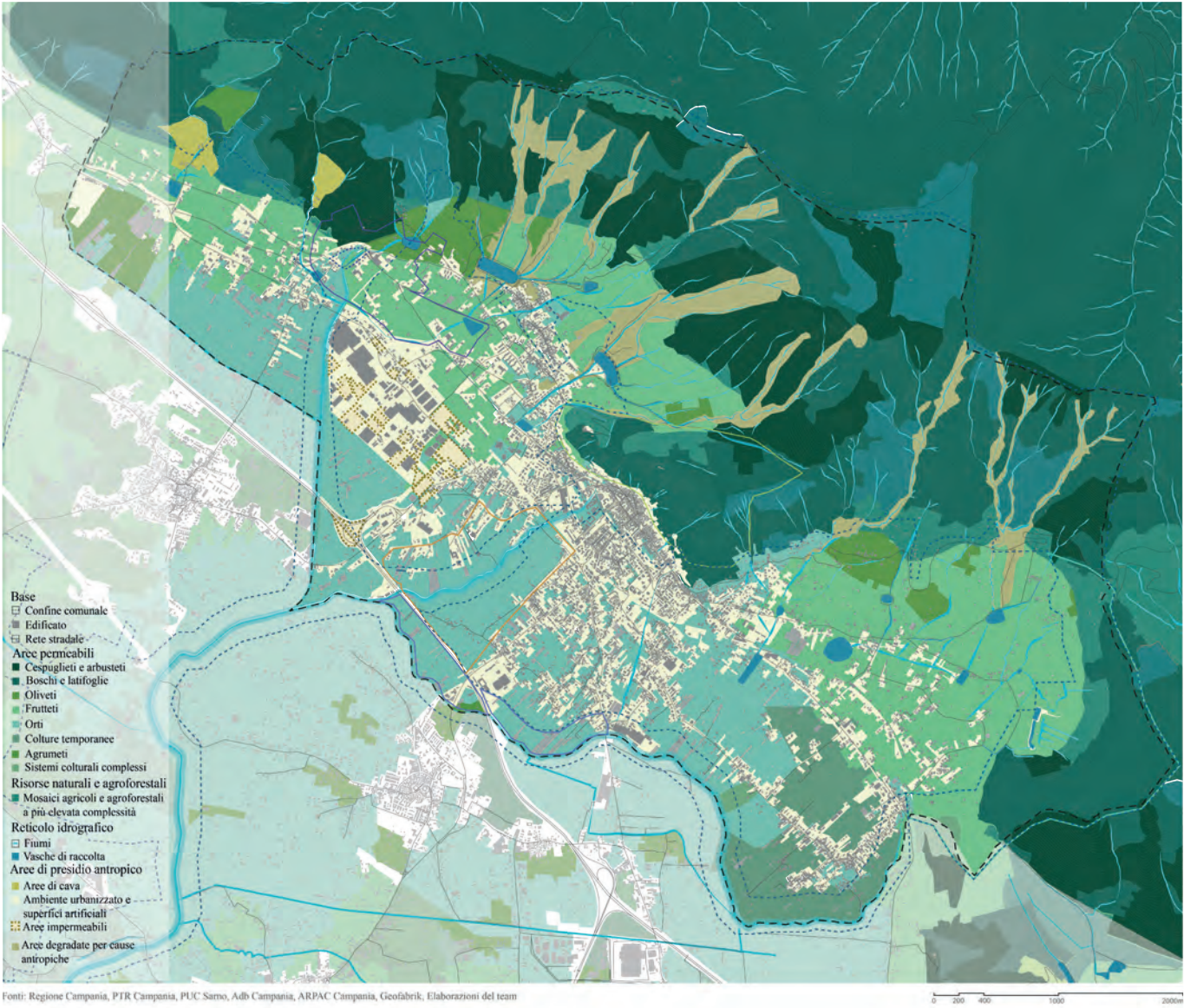
THE CITY CENTER / IL CENTRO ABITATO

SETTLEMENT SYSTEM

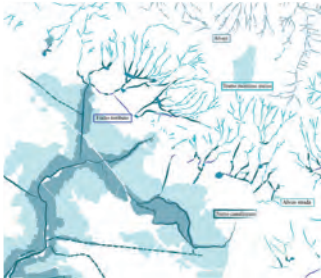


INFRASTRUCTURE SYSTEM





RETICOLO IDROGRAFICO



TIPOLOGIA DI VERDE



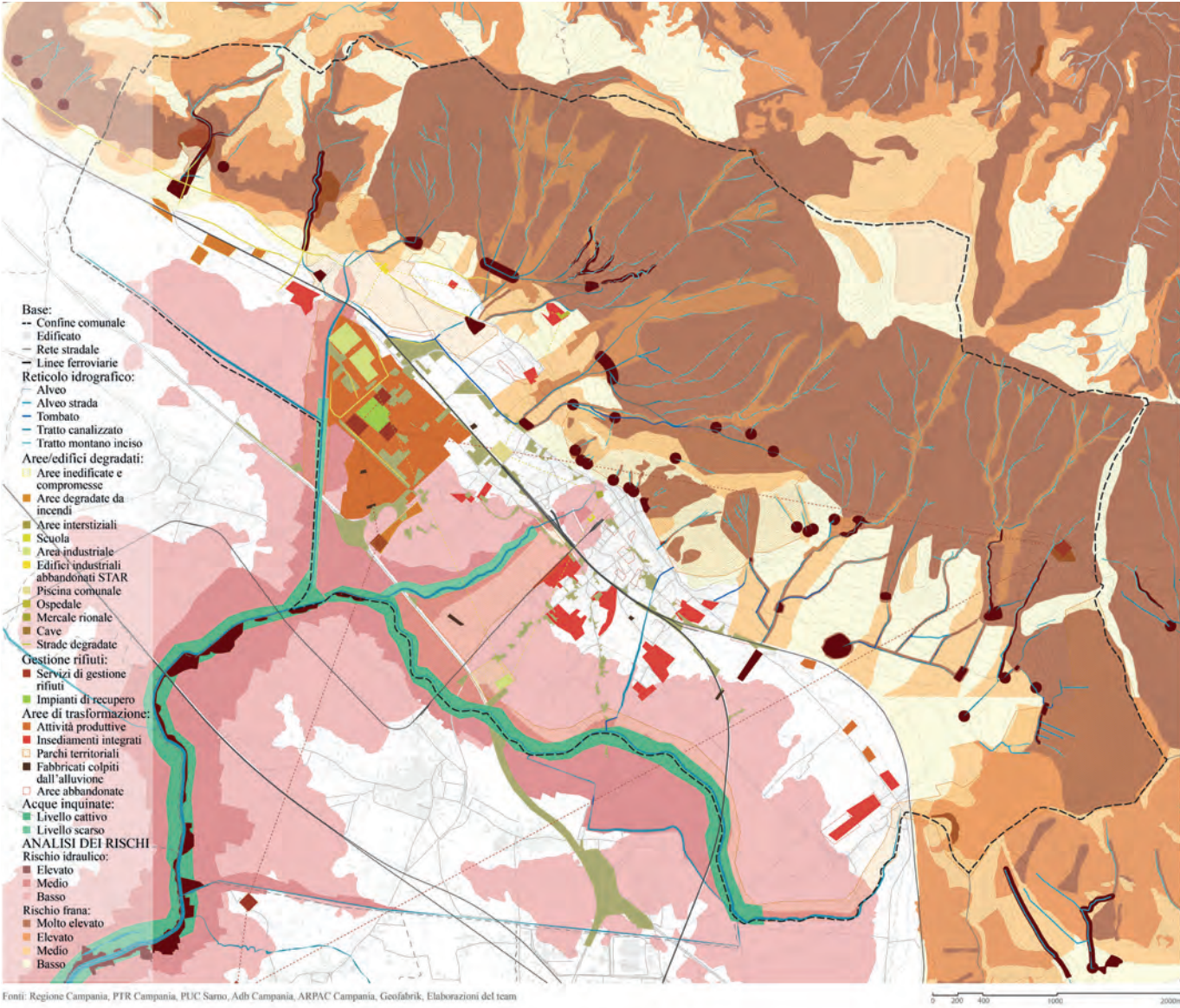
PARCHI TERRITORIALI



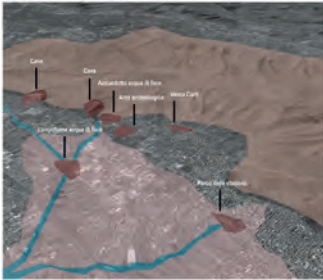
AREE IMPERMEABILI VS AREE PERMEABILI



WASTESCAPES AND RISKS



ZONE DI PROGETTO



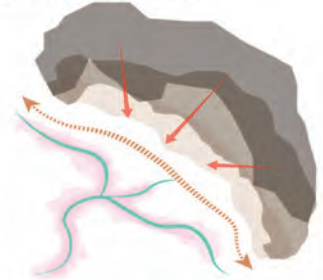
RISCHI



WASTESCAPE

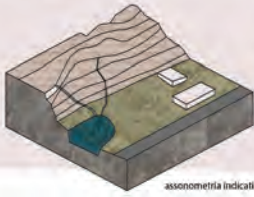


DA WASTESCAPE A RISORSA



Innovated City_Rinnovated City_Rinnovated City

CONTESTO AREE URBANE



assonometria indicativa zona Saretto

OBIETTIVI

Edifici dismessi/abbandonati
dicotomia città-campagna
Mancanza di sufficienti attrezzature
sposandosi dal centro città
Scarsa mobilità pubblica
Assenza di mobilità sostenibile
Nodi infrastrutturali depotenziati

Recupero sostenibile degli edifici
dismessi/abbandonati
Riconfigurazione del sistema del
verde urbano per ricucire e connettere
le diverse zone
Realizzazione di percorsi pedonali
e ciclabili
Valorizzazione delle emergenze storiche

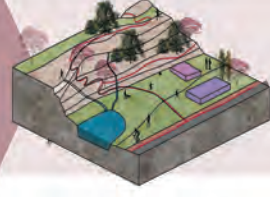
STRATEGIA

Realizzare percorsi pedonali
e ciclabili
Usare il materiale di scarto come
risorsa
Possibilità di sviluppo di nuovi
assi viari e percorsi verdi strategici
per collegare i siti e le aree
dislocate

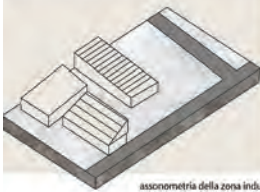
AZIONI

Riqualificazione dei manufatti dismessi e
adeguamento di quelli degradati riconvertendoli
a nuove funzioni eservizi per la città
Realizzazione di percorsi ciclopeditoni
Connessione delle aree verdi attraverso
la valorizzazione dei corridoi verdi all'interno
della maglia insediativa

SCENARI ATTESI



CONTESTO AREA INDUSTRIALE



assonometria della zona industriale

OBIETTIVI

Presenza di attività dismesse
Mancanza di fasce di rispetto
Presenza di aree di scarto
Smaltimento illegale di rifiuti

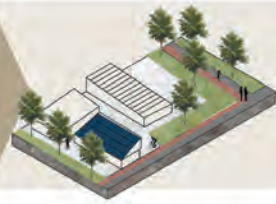
Rigenerazione delle aree industriali
e commerciali abbandonate
Attivare un metabolismo circolare
delle aree di scarto
Uso temporaneo dei suoli in attesa
di bonifica

STRATEGIA

Usare il materiale di scarto come
risorsa
implementazione della mobilità
Riuso delle attività dismesse
Possibile uso temporaneo dei terreni

AZIONI

Realizzazione di buffer zone intorno l'area industriale
Recupero sostenibile delle attività dismesse
Realizzazione del Parco dell'Innovazione
con attrezzature, servizi (valorizzazione
del patrimonio) nei pressi dell'area industriale
Promozione della bonifica dei terreni permettendo un
uso temporaneo attraverso living lab per sensibilizzare e
coinvolgere i cittadini



STRATEGIA RI - APPROPRIAZIONE

1. Riconnessione dei corpi idrici frammentati attraverso parchi fluviali che ne intermettono l'andamento e ne ricucino le discontinuità
2. Riattivazione delle aree adibite a parco
3. Bonifica della fascia fluviale e messa in sicurezza degli argini con la progettazione di aree filtro tra il fiume ed i campi agricoli
4. Recupero dei corpi di collegamento tra le sponde

RI - FRUIRE

1. Connessione delle aree archeologiche dismesse e/o abbandonate, per disporre di una rete archeologica accessibile
2. Consolidare le intermobilità di trasporto verso le aree periferiche e incrementare la mobilità sostenibile, individuando nuovi punti di bike sharing e nodi intermodali
3. Rendere inclusive ed accessibili le aree archeologiche e percorsi dei luoghi di maggior interesse
4. Inserimento di nuovi poli attrattivi e ricreativi, attraverso il recupero di aree ed edifici dismessi

RI - ATTIVARE

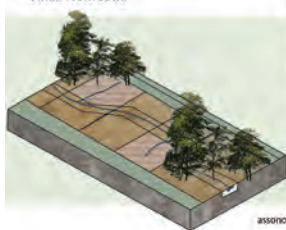
1. Connessione del territorio frammentato mediante Parco Agricolo
2. Sistema di mobilità sostenibile per collegare la frazione di Lavorate al centro urbano di Sarno
3. Nuove funzioni per gli edifici dismessi
4. Sistema di produzione (Masseria_Mulini)

RI(IN)NOVATED CITY
RINNOVATA | INCLUSIVA | RINNOVATIVA

0 100 200 300 400 500 600 700 800 900 1000

Rinnovated City_Rinnovated City_Rinnovated

CONTESTO AREE AGRICOLE



OBIETTIVI	STRATEGIA	AZIONI
Presenza di numerosi incolti produttivi Inquinamento del sistema idrico Smaltimento illegale di rifiuti Terreni contaminati Rischio idraulico	Recupero delle masserie storiche Recupero degli incolti produttivi Salvaguardia e valorizzazione del patrimonio agricolo mitigazione del rischio idraulico	Valorizzazione masserie storiche Sfruttare il sistema idrico per l'irrigazione dei terreni Possibile uso temporaneo dei terreni contaminati Realizzazione del Parco dell'Innovazione con attrezzature, servizi (valorizzazione del patrimonio agricolo) mitigazione del rischio idraulico attraverso l'ampliamento delle superfici permeabili e la riconfigurazione degli argini dei canali Recupero degli incolti produttivi per fini didattici

assonometria dei capi agricoli presso il parco dell'innovazione

SCENARI ATTESI



CONTESTO AREE PERIURBANE



OBIETTIVI	STRATEGIA	AZIONI
Manufatti abbandonati Presenza di numerose aree di scarto Dicotomia città-campagna Mancanza di sufficienti attrezzature Scarsa mobilità pubblica Assenza di mobilità sostenibile	Riconfigurazione del sistema del verde urbano per ricucire e connettere Realizzazione di percorsi pedonali e ciclabili lungo i corridoi verdi Riqualificazione delle aree di scarto Possibilità di sviluppo di nuovi assi viari strategici	Possibilità di recupero del costruito Dare nuova identità alle aree di scarto Realizzare percorsi pedonali e ciclabili sviluppo di nuovi assi viari strategici Riqualificazione dei manufatti dismessi e adeguamento di quelli degradati Recupero delle aree di scarto per la realizzazione di nuove attrezzature pubbliche delle aree disagiate Realizzazione di nuove aree verdi urbane Realizzazione di percorsi ciclopedonali sfruttando tratti di viabilità secondaria e infrastrutture dismesse con attrezzature e servizi

assonometria lungo l'affluente acqua di palazzo



CITTA' - NATURALE



CITTA' - STORICA



CITTA' - PRODUTTIVA



RI - APPROPRIARSI DELLA CITTA' FLUVIALE

RI - APPROPRIARSI IL PARCO FLUVIALE IN FODE



RI - FRUIRE L'AREA ARCHEOLOGICA



RI - FRUIRE | LA CITTA' STORICA

RI - APPROPRIARSI SNODO IDRICO DEL FIUME SARNO



RI - FRUIRE ACCESSIBILITA' AL SARETTO



RI - ATTIVARE IL SISTEMA DEI MULINI



RI - ATTIVARE L'EX MATTATOIO



RI - ATTIVARE IL SISTEMA DELLE SCUOLE



RI - ATTIVARE | LA CITTA' PRODUTTIVA



Sarno. **ECO-connected City**

CRITICITÀ E POTENZIALITÀ

Saro e Saretto



- ✗ Assenza di relazioni tra entroterra e borgo antico
- ✗ Presenza di **wastescape** ed edifici abbandonati
- ✗ Disomogeneità del tessuto edilizio



✓ Il dislivello del monte viene riconvertito in **collegamenti** tra l'entroterra e il borgo antico

Fiume Sarno



- ✗ Scarse relazioni tra il fiume e la città
- ✗ Presenza di **barriere e recinti** che intralciano il rapporto con l'acqua
- ✗ Assenza di attrezzature a supporto del fiume



✓ Il fiume attraversa la città in diversi punti risultando **facilmente raggiungibile** da diversi del territorio

Wastescape



- ✗ Presenza di numerosi edifici storici in **stato di abbandono**
- ✗ Numerosi **spazi interstiziali** utilizzati ad uso informale
- ✗ Numerosi **suoli permeabili** in stato di abbandono



✓ Gli edifici storici rappresentano il **carattere identitario** della comunità

Parco cinque sensi



- ✗ L'area **non è adeguatamente collegata** e il quartiere Foce non risponde alle esigenze degli abitanti
- ✗ Parco Cinque sensi è **recintato** e in **stato di parziale abbandono**
- ✗ Condizioni di **degrado** dell'area a ridosso del fiume



✓ La foce del fiume rappresenta un **luogo di grande salubrità**

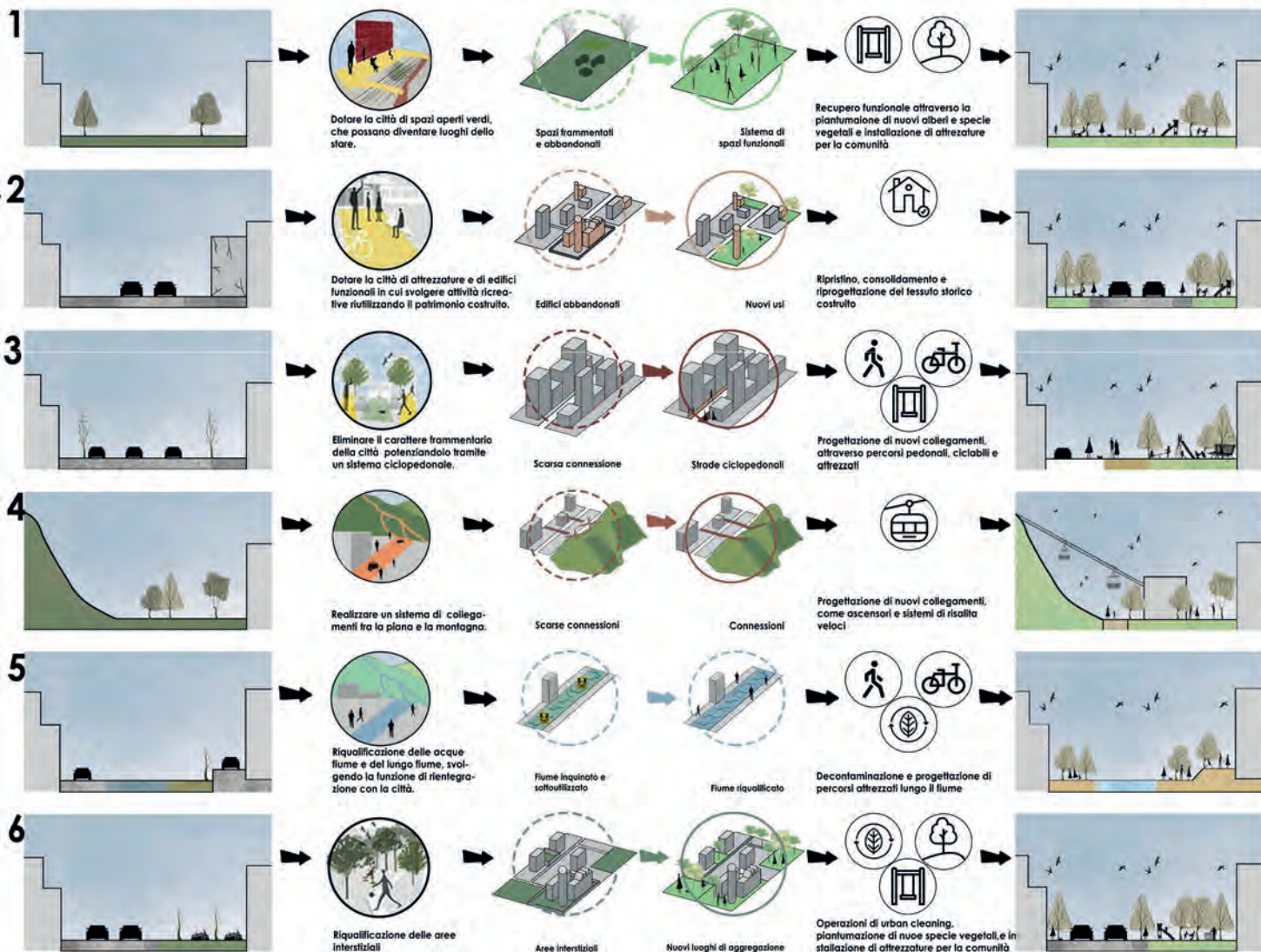
SEZIONI STATO DI FATTO

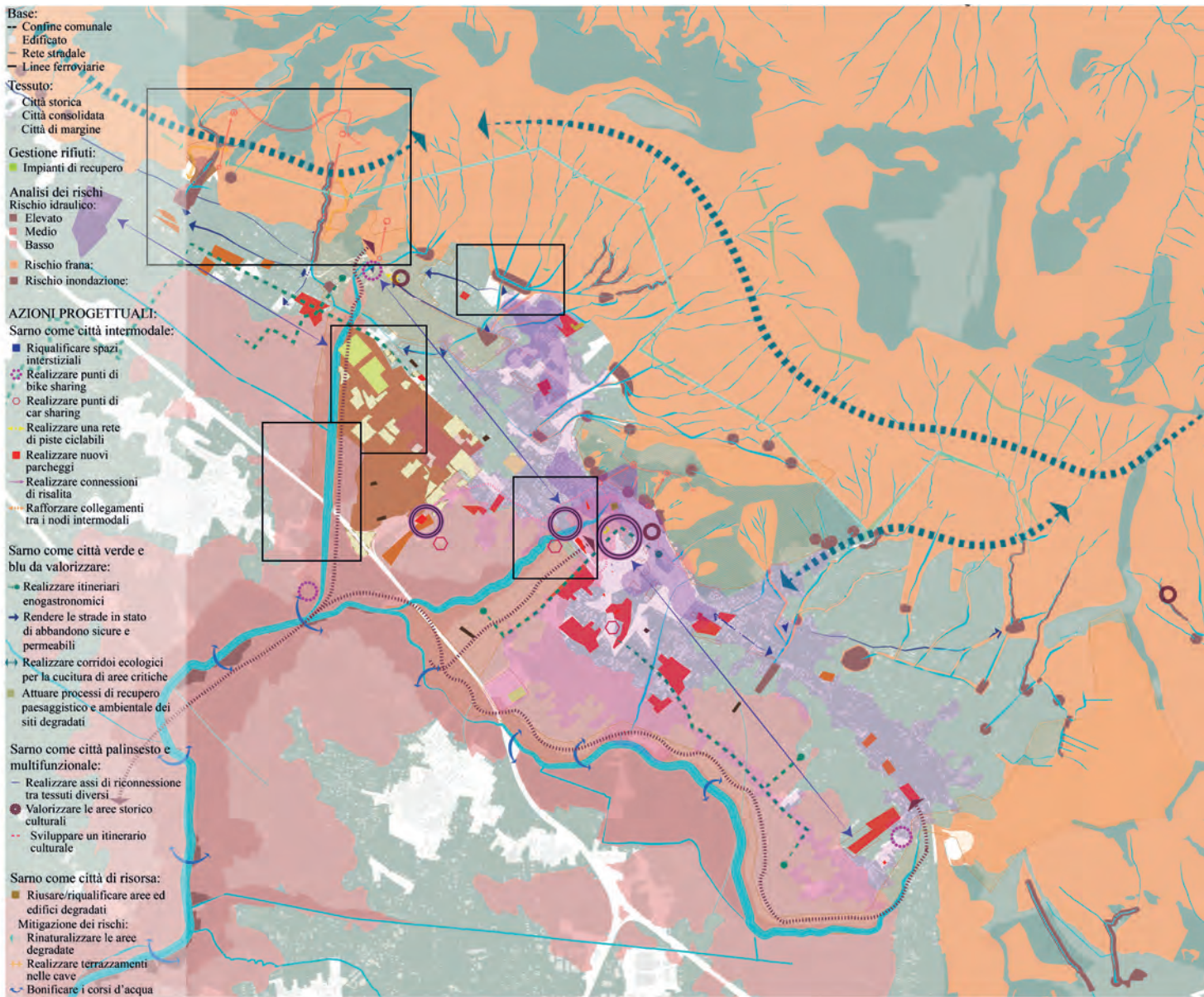
OBIETTIVI

STRATEGIE

AZIONI

SEZIONI DI PROGETTO

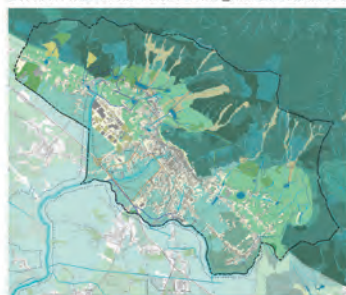




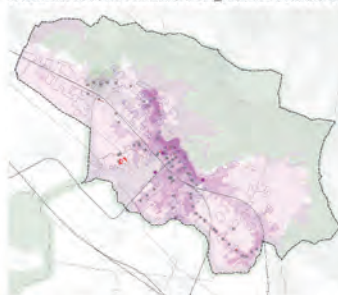
INFRASTRUTTURE_AREE DI PROGETTO



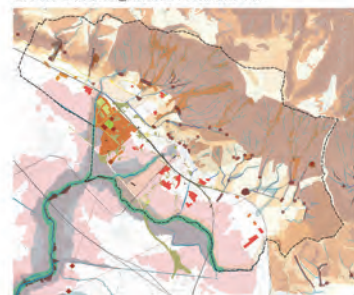
INFRASTRUTTURE VERDI E BLU_AREE DI PROGETTO



INSEDIATIVO/ATTREZZATURE_AREE DI PROGETTO



CITTÀ FRAGILE_AREE DI PROGETTO



Realizzare nuove connessioni

Realizzare terrazzamenti nelle cave

Rinaturalizzazione del paesaggio

Riqualificazione di aree degradate

Corridoio ecologico

Rischio idrogeologico

Bonifica dei corsi d'acqua

Rischio frana

REFERENCES

1. L. Cerchiai, *Gli antichi popoli della Campania*. Archeologia e storia, Roma, 2010.
2. B. d'Agostino, *Tombe della prima età del ferro a S. Marzano sul Sarno*, "Mélanges de l'École française de Rome - Antiquité, LXXXII", 1970, pp. 571-619.
3. S. De Caro, *Le tombe dipinte dalla Valle del Sarno*, "Parola del Passato", 2018/2, a. 73 n. 5, 2019, pp. 431-447.
4. M. de Spagnolis, *La dea delle sorgenti di Foce Sarno*, Roma-Itri, 2014.
5. M. de Spagnolis, *La Villa N. Popidi Narcissi Maioris in Scafati, suburbio orientale di Pompei*, Roma, 2002.

* Ministry of Culture, Regional Directorate of National Museums Campania Ministero della Cultura, Direzione Regionale Musei Nazionali Campania

Next page

Sarno Valley Museum. The grave goods of a high-ranking female tomb (T. 818, late 8th-first half of the 7th century BC; photo by S. De Caro)

Sarno Valley Museum. The painted tomb 1799 (photo by S. De Caro).

Pagina seguente

Museo della Valle del Sarno. Il corredo di una tomba femminile di rango elevato (T. 818, fine VIII-prima metà VII sec. a.C.; foto di S. De Caro).

Museo della Valle del Sarno. La tomba dipinta 1799 (foto di S. De Caro).

In the Sarno Valley, extraordinarily fertile and rich in water, located along important routes linking from the plains to the south and north of Vesuvius and the hinterland, the first traces of human habitation appear as early as the 4th millennium, becoming more consistent in the Copper and Bronze Ages. The numerous tombs excavated in the territories of the municipalities of San Marzano sul Sarno and San Valentino Torio date back to the Iron Age (9th-8th century B.C.), often surrounded by canals and connected to small villages, are referable to the "Fossakultur" (Cerchiai, 2010). The adult deceased is laid in a supine position, together with the grave goods, consisting on average of impasto vessels and metal ornaments. Among the very rich male burials dating from the second half of the 9th century B.C., the tomb 232 stands out, in which vases, weapons (spear and sword), ornaments and a bronze miniature cart, which supported a bone container, probably used as a perfume burner, were deposited (d'Agostino, 1970). Between the middle of the 8th and 7th centuries B.C., social differences became more evident within the local communities, linked to an agricultural-pastoral economy, and these are reflected in the funerary rituals adopted. In the eminent burials, numerous vases are laid, both of impasto and imported from the Greek colonies of *Pithekoussai* and *Cuma*, accompanied by weapons, razors and horse bits, in the case of adult males. Women of rank, such as the deceased of tomb 818, are buried with dresses held by fibulae with bone and amber decorations, wearing diadems, earrings, necklaces with *fayence*, amber, and glass paste vases, bronze and silver pendants with scarabs, bracelets and rings. During the first half of the 6th century B.C., the number of burials dropped considerably, the grave goods tended to be simplified and the number of objects reduced. In addition to impasto vessels, bucchero and Greek imported vessels, especially Corinthians, testifying to contacts with the Etruscans and the Greeks of the colonies, are found, associated with a few fibulae and a few bronze or iron rings.

From the mid-6th century B.C. the villages are abandoned in favour of the centres of Nola, Pompeii and Nuceria.

From the middle of the 4th century B.C., the areas closest to the river and the foothills were permanently re-frequented, as witnessed by the tombs found in small groups in the localities Garitta del Capitano and San Vito, on the itinerary that in Roman times would connect Capua to Reggio.

In women's burials are deposited vases, jewellery, statuettes and objects reminiscent of cosmetics and domestic activities, while in men's burials are often used weapons. As in Capua, Nola and Pontecagnano, there is the use of painting the walls of tombs with frescoes in plant motifs, funeral processions, scenes of daily life and the return of the warrior (De Caro, 2019). In tomb 1799, datable between the end of the 4th and the beginning of the 3rd century B.C., the knight carrying the clothes of the defeated enemy, welcomed by a woman with *oinochoe* and *skyphos*.

From the second half of the 4th to the 2nd century B.C., the area of Foce Sarno probably dedicated to a female divinity, was frequented for cultic purposes, as evidenced by the terracotta statuettes and pottery found there (de Spagnolis, 2014). In this same locality around the middle of the 2nd century B.C., was built a theatre with tiers of seats against the natural slope, renovated in the Augustan period.

During the roman period the territory is crossed by important communication routes, along these were built many funerary monuments, and dotted by numerous rustic villas, as those identified in San Valentino

Nella Valle del Sarno, straordinariamente fertile e ricca di acque, posta lungo importanti vie di collegamento fra le pianure a sud e a nord del Vesuvio e l'entroterra, già dal IV millennio compaiono le prime tracce di frequentazione antropica, che diventano più consistenti nelle Età del Rame e del Bronzo. All'Età del Ferro (IX-VIII secolo a.C.) risalgono le numerose tombe scavate nei territori dei Comuni di San Marzano sul Sarno e San Valentino Torio, riferibili alla "Cultura delle tombe a fossa", spesso circondate da canali, connesse a villaggi di piccole dimensioni (Cerchiai, 2010). Il defunto adulto è deposto in posizione supina, insieme al corredo, costituito in media da vasi di impasto e da oggetti di ornamento in metallo. Tra le ricchissime sepolture maschili risalenti alla seconda metà del IX secolo a.C. emerge la tomba 232, nella quale erano deposti vasi, armi (lancia e spada), oggetti di ornamento e un carretto miniaturistico in bronzo, che supportava un contenitore di osso, utilizzato probabilmente come bruciapfumi (d'Agostino, 1970).

Tra la metà dell'VIII e il VII secolo a.C., all'interno delle comunità locali, legate a un'economia agricolo-pastorale, si fanno più evidenti le differenze sociali, che si riflettono nel rituale funerario adottato. Nelle sepolture eminenti sono deposti numerosi vasi sia di impasto sia importati dalle colonie greche di *Pithekoussai* e *Cuma*, accompagnati da armi, rasoi e morsi di cavallo, nel caso di maschi adulti. Le donne di rango, come la defunta della tomba 818, sono sepolte con abiti trattenuti da fibule con decorazioni in osso e ambra, indossano diademi, orecchini, collane con vaghi in *fayence*, ambra e pasta vitrea, pendagli di bronzo e d'argento con scarabei, bracciali e anelli.

Nel corso della prima metà del VI secolo a.C. il numero delle sepolture cala notevolmente, i corredi tendono a semplificarsi e il numero degli oggetti si riduce. Oltre ai vasi in impasto, si rinvencono contenitori in bucchero e di importazione greca, soprattutto corinzia, testimoni dei contatti rispettivamente intercorsi con gli Etruschi e con i Greci delle colonie, associati a poche fibule e a qualche anello in bronzo o in ferro.

A partire dalla metà del VI secolo a.C. i villaggi sono abbandonati a favore dei centri di Nola, Pompei e Nuceria.

Dalla metà del IV secolo a.C. le zone più prossime al fiume e la fascia pedemontana vengono rifrequentate stabilmente, come testimoniano le tombe rinvenute in piccoli gruppi o in nuclei più consistenti nelle località di Garitta del Capitano e San Vito, sull'itinerario che in epoca romana collegherà Capua a Reggio.

Nelle sepolture femminili sono deposti vasi, monili, statuette e oggetti che rimandano alla cosmesi e alle attività domestiche, mentre in quelle maschili ricorrono spesso le armi. Come a Capua, Nola e Pontecagnano anche qui è attestato l'uso di dipingere le pareti delle tombe a cassa di tufo con motivi vegetali, cortei funebri, scene di vita quotidiana e il ritorno del guerriero (De Caro, 2019). Significativa è la tomba 1799, databile tra la fine del IV e gli inizi del III secolo a.C., con il cavaliere che porta con sé le vesti del nemico vinto, accolto da una donna con *oinochoe* e *skyphos*.

Dalla seconda metà del IV e fino al II secolo a.C. è frequentata per scopi cultuali l'area di Foce Sarno, dedicata probabilmente a una divinità femminile, come testimoniano le statuette di terracotta e il vasellame rinvenuti (de Spagnolis, 2014). In questa stessa località intorno alla metà del II secolo a.C. viene edificato il teatro con le gradinate addossate al pendio naturale, ristrutturato in epoca augustea.

In epoca romana il territorio è solcato da importanti vie di comunicazione, lungo le



49



Torio, San Marzano, Sarno and Scafati, including the villa of Numerius Popidius Narcissus, destroyed in 79 AD. from the eruption of Vesuvius (de Spagnolis, 2002). In the Middle Ages, documentary sources testify to a widespread occupation of the territory: in San Marzano sul Sarno, in the area of a protohistoric necropolis, a number of pits have yielded vases dated to the 11th-13th centuries A.D., while an oil mill is active in Episcopio di Sarno.

The National Archaeological Museum of the Sarno Valley, which is part of the Regional Directorate of National Museums of Campania, is the custodian of the immense archaeological heritage that the Sarno Valley has yielded since the 1950s, thanks to a capillary and careful protection of the territory carried out by the competent Superintendency. The finds are material evidence of the existence in the area since the Iron Age of complex societies, open to exchange and integration, which played an important role in the history of ancient Campania.

The museum was established in 1975 by the Salerno Archaeological Superintendency with the collaboration of the Municipality of Sarno in the Franciscan Convent in the locality of Foce. Since 2011, it has been located in the city's historic centre, in a splendid three-storey nobleman's palace, built in the mid-eighteenth century by a local noble family and sold a century later to a textile entrepreneur. At the end of the eighties of the last century, the palace was purchased for the specific purpose of housing the museum.

An imposing lava stone portal leads to a large central courtyard, dominated by a triple loggia of arches. Two flights of wide stairs lead to the first and second floors, where the permanent exhibition is located.

The second floor, the residence of the palace's owners, is divided into twelve rooms, these are frescoed between the late 18th and early 20th century. The first decorative campaign was the work of an artist who was fully part of the cultural temperament developed around Luca Giordano and Francesco Solimena. His hand is responsible for the decoration of the room with sacred subjects, depicted amid fantastic architecture that gives depth to the ceiling, while the walls are decorated by vases with different varieties of flowers, also proposed in the adjacent room. Here is a fake dome, realised with a skilful play on perspective, that breaks through the ceiling, while in the medallions above the doors, the landscapes recalling the Sarno Valley. In the adjacent rooms, on the walls are 18th-century representations of the elements of nature, reproductions of tapestry weavings and precious polychrome marbles.

The ceilings were decorated in 1907 by the painter Salvatore Cozzolino with allegorical female figures playing musical instruments. The room with the ellipsoidal ceiling decorated with doves, vine leaves and grapes in stucco, which has two representations of the Gulf of Naples on the entrance doors. In recent years, the Museum has become a laboratory open to collaboration with numerous Italian and foreign research institutes, a place for study and research, aimed at broadening the framework of historical and archaeological knowledge of such important area in ancient Campania. At the same time, it is open to dialogue with the community and the territory.

quali si innalzano anche molti monumenti funerari, e punteggiato da numerose ville rustiche, come quelle individuate a San Valentino Torio, San Marzano, Sarno e a Scafati, fra cui quella di Numerio Popidio Narcisso, distrutta nel 79 d.C. dall'eruzione del Vesuvio (de Spagnolis, 2002).

In epoca medievale le fonti documentarie testimoniano una diffusa occupazione del territorio: a San Marzano sul Sarno, nell'area di una necropoli protostorica alcune fosse di scarico hanno restituito vasi datati all'XI-XIII secolo d.C. mentre un frantoio è attivo a Episcopio di Sarno.

Il Museo Archeologico Nazionale della Valle del Sarno, che afferisce alla Direzione Regionale Musei Nazionali Campania, è custode dell'immenso patrimonio archeologico restituito dalla Valle del Sarno sin dagli anni Cinquanta del secolo scorso, grazie a una capillare e attenta tutela del territorio, portata avanti dalla Soprintendenza competente. I reperti sono la testimonianza materiale dell'esistenza nel territorio sin dall'Età del Ferro di società complesse, aperte agli scambi e all'integrazione, che hanno svolto un ruolo importante nella storia della Campania antica.

Il Museo, sorto nel 1975 per volontà della Soprintendenza Archeologica di Salerno con la collaborazione del Comune di Sarno nel Convento francescano in località Foce, dal 2011 ha sede nel centro storico della città, in uno splendido palazzo gentilizio, articolato su tre piani, edificato verso la metà del Settecento da una nobile famiglia locale, venduto un secolo più tardi a un imprenditore tessile. Alla fine degli anni Ottanta del secolo scorso il palazzo è stato acquistato con l'obiettivo specifico di allestirvi il museo.

Attraverso un imponente portale in pietra lavica si raggiunge una grande corte centrale, dominata da una triplice loggia di arcate. Due rampe di ampie scalinate conducono al primo e al secondo piano, ove è collocata l'esposizione permanente.

Il secondo piano, residenza dei proprietari del palazzo, si articola in dodici sale per la maggior parte affrescate fra la fine del Settecento e gli inizi del Novecento. La prima campagna decorativa si deve a un artista che si inserisce a pieno titolo nella temperie culturale sviluppatasi intorno a Luca Giordano e a Francesco Solimena. Alla sua mano è ricondotta la decorazione della sala con soggetti sacri, raffigurati fra architetture fantastiche che conferiscono profondità al soffitto, mentre alle pareti dominano vasi con diverse varietà di fiori, proposti anche nell'ambiente adiacente. Qui una finta cupola, realizzata con un sapiente gioco prospettico, sfonda il soffitto mentre nei medaglioni, al di sopra delle porte, sono riprodotti paesaggi che richiamano la Valle del Sarno. Nelle sale adiacenti, sulle pareti si conservano le rappresentazioni settecentesche con gli elementi della natura, le riproduzioni delle trame degli arazzi e di preziosi marmi policromi. I soffitti sono stati decorati nel 1907 dal pittore Salvatore Cozzolino con figure femminili allegoriche che suonano strumenti musicali. Particolare è la sala dal soffitto ellissoidale decorato con colombe, pampini e uva in stucco, che sulle porte di accesso presenta due rappresentazioni del Golfo di Napoli.

Il Museo è diventato negli ultimi anni un laboratorio aperto alla collaborazione con numerosi istituti di ricerca italiani e stranieri, luogo di studio e di ricerca, finalizzati ad ampliare il quadro delle conoscenze storiche e archeologiche di un comparto molto importante per la Campania antica, e al contempo è aperto al dialogo con la comunità e il territorio.

Next page

Sarno Valley Museum. Internal courtyard with arcaded loggias (photo by S. De Caro).

Sarno Valley Museum. Hall frescoed at the end of the eighteenth century (photo by S. De Caro).

Pagina seguente

Museo della Valle del Sarno. Cortile interno con le logge ad arcate (foto di S. De Caro).

Museo della Valle del Sarno. Sala affrescata alla fine del Settecento (foto di S. De Caro).



51



REFERENCES

1. J. Corner, *The Agency of Mapping: Speculation, Critique, and Invention*, in D. Cosgrove (eds), *Mappings*, Reaktion Books, London 1999 [recently published in J. Corner, *The Landscape Imagination: Collected Essays of James Corner 1990-2010*, Princeton Architectural Press, New York 2014].
2. P. Eisenman, University Art Museum di Long Beach in California (<https://www.cca.qc.ca/en/search/details/collection/object/323428>).
3. P. Eisenman, Bibliotheque de l'Institut Universitaire des Hautes Études Internationales a Ginevra (<https://www.cca.qc.ca/en/search/details/collection/object/400154>).
4. V. Gregotti, *Dentro l'architettura*, Bollati Boringhieri, Torino 1991.
5. S. Holl, *Anchoring: Selected projects, 1975-1988*, Princeton Architectural Press, New York 1989.

Next page

Postcards from Sarno (pictures by A. Bernieri, M. Benincasa, M. De Gennaro, Y. Makar, T. Marchese)

Pagina seguente

Cartoline da Sarno (fotografie di A. Bernieri, M. Benincasa, M. De Gennaro, Y. Makar, T. Marchese)

The work presented within this volume was carried out as part of the teaching and research activities at the Department of Architecture of the University of Naples Federico II over a period that exceeded the didactic time of the Advanced Design Studio, expanding to further moments of application and dialogue. From the laboratory, in fact, an architectural exhibition was organized in the city of Sarno – an opportunity to present to communities and institutions the work carried out and the perspectives it poses – and another design studio experience was also conducted.

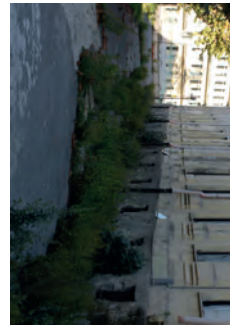
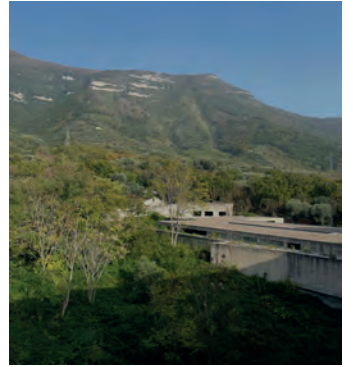
The exhibition, entitled *Sarno: dimensione Paesaggio. La cura del patrimonio esistente (Sarno: Landscape Dimension. Caring for the existing heritage)*, was held in the halls of the Archaeological Museum of the Sarno Valley in March 2024. It presented the design work developed starting from a very clear concept: to place at the center of the study the identity elements of the landscape of the city of Sarno, regardless of the historical period to which they refer, rediscovered from the condition of abandonment and oblivion in which they have long been imprisoned. Wrecks, but also strongholds, outposts; anchors in the landscape, as Steven Holl would define, in considering «the uniqueness of each site, context as the starting point of architecture. Architecture does not intrude into a landscape, but explains it» (Holl, 1989). Architectures, understood in their individuality, which, through actions of valorization, re-signification and re-appropriation can become cornerstones of progressive urban transformations and reverberations on the city, both from a qualitative and functional point of view. Anchored to their territory, they thus become new reading elements, rediscovered “access points” to heritage, strongholds of new urban visions. Hence the involvement of the National Archaeological Museum of the Sarno Valley, which already represents on the territory a place of great value, built over time to increasingly assume this role. A “good practice” that can also be an inspiration for future actions with the aim that, as a whole, they could become a system. In referring to this relationship, the exhibition was designed to stage a dialogue between the futuristic visions of the design proposals and the older history of the place. The archaeological finds, the Museum’s treasure, were related to the drawings, models and imagined scenarios, weaving a dense web of cross-references that transcends time as well as the spaces of the rooms of Palazzo Capua. The words of Vittorio Gregotti thus return loudly when he stated: «It is important for now to collect and classify the detritus of the existing, to make them uniformly archaeological, to reconstruct the reasons for their detached incompleteness as the foundation of every transformation» (Gregotti, 1991), brilliantly summarizing a process of careful reading and recomposition of the historical-architectural vicissitude of the artifacts, of every age and type.

It was precisely from the Museum and the Palazzo Capua that the work of comprehension of the territory had initially started, through surveys, research, in-depth studies. Later, as part of the workshop activities, the introduction of a device that we called “map-model” represented the result of an initial phase of “project annotation” (Corner, 1999): a tool both for investigation and for the ideation and modification of the city, a synthetic relationship between the essentiality of cartography and the plasticity of an already interpretative model. The map-model is conceived as the physical representation of some possible project

Il lavoro presentato all’interno di questo volume è stato svolto nell’ambito delle attività di didattica e di ricerca del Dipartimento di Architettura dell’Università di Napoli Federico II nell’arco di un periodo che ha superato il tempo didattico del Laboratorio di Sintesi Finale, ampliandosi a ulteriori momenti di applicazione e confronto. Dal laboratorio, infatti, sono scaturite una mostra di architettura organizzata sul territorio – occasione di presentazione alle comunità e alle istituzioni del lavoro svolto e delle prospettive che questo pone – e un’altra esperienza laboratoriale didattica.

La mostra, dal titolo *Sarno: dimensione Paesaggio. La cura del patrimonio esistente*, svolta presso le sale del Museo Archeologico della Valle del Sarno nel marzo del 2024, ha presentato il lavoro progettuale sviluppato partendo da un concetto molto chiaro: porre al centro dello studio gli elementi identitari del paesaggio della città di Sarno, indipendentemente dal periodo storico a cui fanno riferimento, riscoperti a partire dalla condizione di abbandono e di oblio in cui sono da tempo imprigionati. Relitti, ma anche presidi, avamposti; ancore nel paesaggio, come Steven Holl definirebbe, nel considerare «l’unicità di ogni sito, contesto come punto di partenza dell’architettura. L’architettura non si intromette in un paesaggio, ma serve a spiegarlo» (Holl, 1989). Architetture singole, intese nella loro individualità, che, attraverso azioni di valorizzazione, risignificazione e riappropriazione possono divenire caposaldi di progressive trasformazioni e riverberazioni urbane sulla città, sia da un punto di vista qualitativo che funzionale. Ancorati al proprio territorio, diventano così nuovi elementi di lettura, riscoperti “punti di accesso” al patrimonio, presidi di nuove visioni urbane. Da qui il coinvolgimento del Museo Archeologico Nazionale della Valle del Sarno, che rappresenta già sul territorio un presidio di grande valore, costruito nel tempo per assumere sempre di più questo ruolo. Una “buona pratica” che può essere di ispirazione anche per azioni future con l’obiettivo che, nell’insieme, si arrivi a fare sistema. Nel far riferimento a questa relazione, la mostra è stata progettata per mettere in scena il dialogo tra le visioni futuribili delle proposte progettuali e la più antica storia del luogo: i reperti archeologici, tesoro del Museo, sono entrati in relazione con i disegni, i modelli e gli scenari immaginati, intessendo una fitta trama di rimandi che travalica il tempo così come gli spazi delle sale di Palazzo Capua. Ritornano così a gran voce le parole di Vittorio Gregotti quando affermava che: «È importante per ora raccogliere e classificare i detriti dell’esistente, renderli uniformemente archeologici, ricostruire le ragioni della loro incompletezza distaccata quale fondamento di ogni trasformazione» (Gregotti, 1991), sintetizzando brillantemente un processo di attenta lettura e ricomposizione della vicenda storico-architettonica dei manufatti, di ogni epoca e tipologia.

Proprio dal Museo e dal Palazzo Capua che lo ospita era partito inizialmente il lavoro di conoscenza del territorio, attraverso sopralluoghi, ricerche, approfondimenti. Successivamente, nell’ambito delle attività e degli spazi laboratoriali, l’introduzione di un dispositivo che abbiamo definito “mappa-modello” ha rappresentato il risultato di una prima fase di «annotazione progettuale» (Corner, 1999): uno strumento sia di indagine che di ideazione e modificazione della città, relazione sintetica tra l’essentialità della cartografia e la plasticità di un modello già interpretativo. La mappa-modello, nella rappresentazione fisica di alcuni areali possibili di progetto e, soprattutto,



areas and, above all, of the relationships that these weave between each other and within the city's already visible landscapes. It became, on the one hand, the starting point in understanding the morphology of the territory, and on the other, the foundation of ideational design reflections.

References in this sense are Peter Eisenman's topographical surveys for the University Art Museum project in Long Beach, California, as well as his conceptual models for the Bibliothèque de l'Institut Universitaire des Hautes Études Internationales project in Geneva. Composite objects of drawing and cardboard that succinctly offer a glimpse into design interpretation not yet in place but already, significantly, reflective. Again, another parallel can be found in the work carried out and exhibited at the ETSA in Barcelona, entitled *Mapa oportunidades*, which reflects on the displacement of new housing interventions starting from the investigation and understanding of current urban criticalities, and the relationship between these and the structure of the city of Barcelona.

These examples, pertaining to the ideational-creative sphere of the project, serve to demonstrate the role of the latter as an investigative tool that, particularly in the case of the city of Sarno, becomes even more supportive in highlighting the criticalities but also, above all, the potentials, with a renewed look at the relationship between architecture and the territory, especially in reference to areas that daily experience the theme of abandonment in its various forms.

Starting from this initial work, the projects, protagonists of the exhibition and of this volume, have dealt in particular with three major themes, which can be identified as follows: the relationship with the Sarno River; the reintegration of existing public facilities; and the action on the historical-archaeological heritage.

With reference to the relationship between the city and the river, for the river park at the source of the Rio Foce is envisioned the rethinking, in an energetic key, of the structure of the old mill, which may, later on, serve to expand the boundary of the park itself and to extend to the riverfront and the nearby archaeological area. Expansion is also mentioned in the plan for the enhancement of the park envisaged by the urban planning instruments, Innovation Park 2.0, along the Rio Palazzo, which can be more integrated with the hospital and rehabilitation facilities already present, according to a territorial and landscape development that follows an expanded principle of urban care.

But urban care also deals with more punctual actions on existing public facilities, including those built for hydro-geological risk. A first significant example is the project for the skeleton of the "never-hospital" of Episcopo: a structure built and then abandoned, which today remains the symbol of a defeat that can be overcome starting from a reinterpretation of the basement in relation to the orography of the place and the system of accessibility, as well as through the reuse of the structural frame of the elevation, for the restitution of a new architectural image for the neighborhood of Episcopo and the whole city. At the same time, the sports area, currently a minefield of abandoned architectures, can be completely rethought and redesigned starting precisely from the "surviving" elements and the idea of a greater ramification within the urban fabric. Finally, for the De Amicis elementary school, in the heart of the city center, a reactivation was envisioned starting from its open spaces and its relations with contiguous schools, in the definition of an element supporting educational as well as urban activities. In this framework, the former water purification

delle relazioni che questi tessono tra loro e all'interno dei paesaggi già visibili della città, è diventata, da un lato, il punto di inizio nella comprensione della morfologia del territorio, dall'altro, il fondamento delle riflessioni ideative di progetto.

Riferimenti in tal senso sono le indagini topografiche di Peter Eisenman per il progetto University Art Museum di Long Beach in California, così come i suoi modelli concettuali per il progetto Bibliothèque de l'Institut Universitaire des Hautes Études Internationales a Ginevra. Oggetti composti di disegno e cartone che, in maniera sintetica, offrono uno scorcio sull'interpretazione progettuale non ancora in essere ma già, in maniera significativa, riflessiva. Ancora, un altro parallelo può essere ritrovato nel lavoro svolto ed esposto presso la ETSA di Barcellona, dal titolo *Mapa oportunidades*, che riflette sulla dislocazione di nuovi interventi di edilizia residenziale a partire dall'indagine e dalla comprensione delle criticità urbane attuali, e dalla relazione tra queste e la struttura della città di Barcellona.

Questi esempi, afferenti alla sfera ideativo-creativa del progetto, servono a dimostrare il ruolo di quest'ultimo come strumento di indagine che, in particolare nel caso della città di Sarno, diventa ancor di più di supporto nel mettere in luce sì le criticità ma anche soprattutto le potenzialità, con uno sguardo rinnovato sul rapporto tra architettura e territorio, soprattutto in riferimento ad aree che vivono quotidianamente il tema dell'abbandono nelle sue diverse forme.

A partire da questo lavoro iniziale di impostazione, i progetti, protagonisti della mostra e di questo volume, hanno affrontato in particolare tre grandi tematiche, che possono così essere individuate: il rapporto con il fiume Sarno; la reintegrazione delle attrezzature pubbliche esistenti; l'azione sul patrimonio storico-archeologico.

In riferimento al rapporto tra la città e il fiume, per il parco fluviale in corrispondenza della sorgente del Rio Foce è immaginato il ripensamento, in chiave energetica, della struttura del vecchio mulino, che potrà, successivamente, servire ad ampliare il confine del parco stesso per estendersi al lungofiume e alla vicina area archeologica. Di ampliamento si parla anche nel progetto per il potenziamento del parco previsto dagli strumenti urbanistici, il Parco dell'innovazione 2.0, lungo il Rio Palazzo, che può essere maggiormente integrato alle strutture ospedaliere e di riabilitazione già presenti, secondo uno sviluppo territoriale e paesaggistico che segue un principio ampliato di cura urbana.

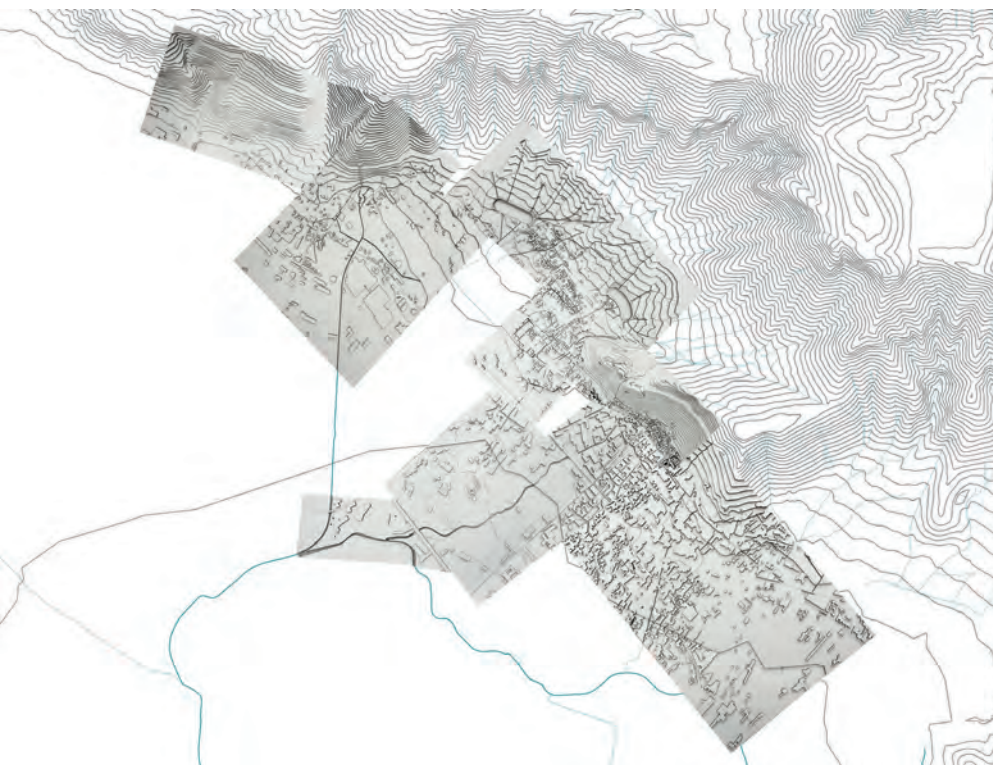
Ma la cura urbana riguarda anche le azioni più puntuali sulle attrezzature pubbliche esistenti, comprese quelle realizzate per il rischio idro-geologico. Un primo esempio significativo è il progetto per lo scheletro del "mai-ospedale" di Episcopo: una struttura costruita e poi abbandonata, che oggi resta il simbolo di una sconfitta che può essere superata a partire da una reinterpretazione del basamento in relazione all'orografia del luogo e al sistema dell'accessibilità, nonché attraverso il riuso del telaio strutturale dell'alzato, per la restituzione di una nuova immagine architettonica per la frazione di Episcopo e la città tutta. Allo stesso tempo, l'area sportiva, attualmente un campo minato di architetture abbandonate, può essere completamente ripensata e ridisegnata a partire proprio dagli elementi "superstiti" e dall'idea di una maggiore ramificazione all'interno del tessuto urbano. Infine, per la scuola elementare De Amicis, in pieno centro città, si è immaginato una riattivazione a partire dai suoi spazi aperti e dalle relazioni con le scuole contigue, nella definizione di un elemento a supporto delle attività didattiche

Next page

Map-model realised during the Design Studio: collage and pictures of the exhibition Sarno: *dimensione Paesaggio* (by A. Bernieri)

Pagina seguente

Mappa-modello realizzata durante il laboratorio progettuale: collage e fotografie della mostra Sarno: *dimensione Paesaggio* (di A. Bernieri)



station becomes almost a contemporary monument, in the design of a structure that does not delete the forms of the old machine but rather amplifies their importance by converting them to quality architectural spaces.

Finally, of great importance are the proposals elaborated on the historical and archaeological heritage, which pursue the main objective of reintroducing the architectures, starting from an acknowledgement of their current state of preservation, within a new culture of living. This can therefore include the archaeological area, the Longobard castle and walls, the village of Terravecchia, the dirute chapels, but also the buildings and structures pertaining to the industrial past of the city, partly converted and then semi-abandoned, or never involved in the dynamics of new contemporary uses. These, like the other projects, share the purpose of rethinking the edges, the areas in between, the disused and then forgotten places. Following even disastrous events such as floods, the last of which occurred in 1998, collective life has stopped flowing in these areas, in getting used to the presence of inaccessible spaces, physically and even more so mentally. These places represent the possible trigger in a redevelopment mechanism through which new sequential subsystems are identifiable: the river and its landscape; artificial landscapes related to facilities; landscapes of rediscovery of historical and archaeological heritage.

Thematic inputs to the complex palimpsest of the territory of the city of Sarno that, from the point of view of design operations, intertwine, intersect, generating even more complex and layered situations.

Among these complexities, a precise thematization was subsequently identified, in the construction of a didactic “spin-off” studio: the work carried out with the students of the last year of the Advanced Design Studio became, in fact, the premise of the second year’s Architectural and Urban Design Studio D of the following academic year, within which the design activities were conducted in complete continuity. Specifically, the focus was on the municipal hospital system, which represents a particularly significant issue in the area: in addition to the hospital structure built in recent years, not far from the Rio Palazzo but completely unrelated to it, the hospital system is an architectural heritage, also qualitatively interesting, characterized by several abandoned structures, including precisely the “never-hospital,” but also the former sanatorium on the Saretto hill, whose vicissitudes are linked to the violent episodes of which the town has been a victim.

Therefore, the theme was addressed according to different declinations and, in a parallel way, in several project areas. In all of them, the idea was to start again from the existing structures in order to propose a re-signification of them, mindful also of the health care activities that took place there, according to the possibility of rediscovering a new role of care in relation to the urban and landscape fabric in which they are located. The aim, in this case, was mainly to experiment, in concrete and especially through architectural projects, the concept of territorialization of care, through a closer view about the quality of collective spaces. Brought together on the occasion of the exhibition at the Archaeological Museum, the inter-laboratory work carried out and staged tried in this sense to offer a possible demonstration, on several levels, of how all these places can become the scaffold for a new widespread and capillary system of public spaces, reconfiguring a complex and multiple scenario for the city. A very intense workshop work, the product of numerous moments of exchange in which, over a period of about two years, the projects were gradually dissected

Next page

Design themes and pictures from the second year’s Architectural and Urban Design Studio D (2023-24, teaching staff A. Bernieri and V. Sansoni)

Pagina seguente

Temi di progetto e fotografie dal Laboratorio di Composizione architettonica e urbana 2D (2023-24, docenti A. Bernieri e V. Sansoni)

così come di quelle urbane. In questo quadro, l’ex depuratore diventa quasi un monumento contemporaneo, nella progettazione di una struttura che non annulla le forme della vecchia macchina ma anzi ne amplifica l’importanza convertendole a spazi architettonici di qualità.

In ultimo, di grande importanza sono le proposte elaborate sul patrimonio storico e archeologico, che perseguono l’obiettivo principale di reimmettere le architetture, a partire da una presa d’atto del loro attuale stato di conservazione, all’interno di una nuova cultura dell’abitare, che possa dunque includere l’area archeologica, il castello e le mura longobardi, il borgo di Terravecchia, le cappelle dirute, ma anche i palazzi e le strutture afferenti al passato industriale della città, in parte convertite e poi semi-abbandonate, o mai coinvolte nelle dinamiche di nuovi usi contemporanei.

Questi, come gli altri progetti, condividono lo scopo di ripensare i bordi, le aree di mezzo, i luoghi dismessi e poi dimenticati – a seguito di eventi anche di portata disastrosa come le alluvioni, l’ultima delle quali avvenuta nel 1998 – dove la vita collettiva ha smesso di fluire, nell’abituarsi alla presenza di spazi inaccessibili, fisicamente e ancor di più mentalmente. Questi luoghi rappresentano il possibile innesco in un meccanismo di riqualificazione attraverso cui sono individuabili nuovi sottosistemi sequenziali: il fiume e il suo paesaggio, i paesaggi artificiali legati alle attrezzature, paesaggi di riscoperta del patrimonio storico e archeologico. Ingressi tematici al complesso palinsesto del territorio della città di Sarno che, dal punto di vista delle operazioni progettuali, si intrecciano, si intersecano, generando delle situazioni ancora più complesse e stratificate.

In particolare, tra queste complessità, è stata successivamente individuata una precisa tematizzazione, nella costruzione di uno “spin-off” didattico-laboratoriale: il lavoro svolto con gli studenti dell’ultimo anno del Laboratorio di Sintesi finale è diventato, infatti, la premessa del Laboratorio di Composizione architettonica e urbana 2D dell’anno accademico successivo, nell’ambito del quale le attività progettuali sono proseguite in completa continuità.

Nello specifico, l’attenzione si è concentrata sul sistema ospedaliero comunale, che rappresenta un tema particolarmente significativo sul territorio: oltre alla struttura ospedaliera costruita negli ultimi anni, non lontana dal Rio Palazzo ma a questo completamente slegata, si tratta di un patrimonio architettonico, anche qualitativamente interessante, caratterizzato da diverse strutture in abbandono, tra cui appunto il “mai-ospedale”, ma anche l’ex sanatorio sulla collina del Saretto, le cui vicende sono legate agli episodi violenti di cui la cittadina è stata vittima.

Il tema è stato pertanto affrontato secondo diverse declinazioni e, in maniera parallela, in più aree di progetto. In tutte, l’idea è stata di ripartire dalle strutture esistenti per proporre una loro risignificazione, memore anche delle attività sanitarie che vi si svolgevano, secondo la possibilità di riscoprire un nuovo ruolo di cura in relazione al tessuto urbano e paesaggistico in cui si collocano. L’obiettivo, in questo caso, è stato principalmente quello di sperimentare, nel concreto e soprattutto attraverso progetti di architettura, il concetto di territorializzazione della cura, nell’ottica in cui questo possa essere legato maggiormente anche ad un ragionamento di qualità degli spazi collettivi.

Riunito in occasione della mostra presso il Museo Archeologico, il lavoro inter-laboratoriale svolto e messo in scena ha provato in questo senso ad offrire una dimostrazione possibile, su più livelli, di come tutti questi luoghi possano diventare



in all components, from the urban to the more detailed aspects.

In conclusion, a final reflection examines the relationship between the design experiments and the landscape or, rather, the different, co-present, landscapes identified. In this sense, the exhibition at the Archaeological Museum of the Sarno Valley was inaugurated on the occasion of the national day dedicated to the landscape: the reference to the “landscape dimension” in the title of the exhibition is understood in the perspective of the implementation of “care” actions that, as emerged several times in the text, in all scales, thematic, areas, never arises as an invasive or separate way from the landscape context in which the “surviving” architectural elements are located. On the contrary, the landscape becomes the essential condition from which all reflections start. It is an absolute attractor, with great intrinsic potential, yet mostly neglected, that opens up a reconsideration of territories with “medium urbanity” – and Sarno represents an exemplary case of this – that can restart precisely from the uniqueness of their territory, in close relationship with the landscape or landscapes that, although in a fragmented condition, generate and, in a very significant way, characterize entire areas. Against the risk of oblivion, architectural design can take on the role of caring for the existing in order to transform silence into active memory. This is a deep-rooted yet contemporary way of understanding the project, which moves from the reuse and recycling of structures, to the enhancement of interstitial places and the construction of a robust system of public spaces, capable of giving new breath to places that over time have become non-priority order landscapes. The project, as a synthesis operation between tool and action, from the map-model to the creation of new strongholds on the territory, ultimately represents the ability to see presence where there is absence, potential where there is separation, new worlds in continuity with the past and the present. There takes place, in this sense, a complete reversal of the vision of a city like Sarno: from being mainly remembered as a geographical reference of the river basin defined as one of the most polluted in Europe, or for the high hydro-geological risk present on its territory, the strong concentration of “presences”, from the urban, architectural and landscape character, call for a high design attention and the will to experiment, more and more, possible configurations of new collectivities.

Next pages

Logo and pictures from the exhibition *Sarno: dimensione Paesaggio. La cura del patrimonio esistente*, 14-22 March 2024, National Archaeological Museum of the Sarno Valley. Exhibition curated by A. Bernieri; design and set-up by A. Bernieri and F. Testa with A. Borrelli, R. De Vivo and R. Memoli.

Pagine seguenti

Logo e fotografie della mostra *Sarno: dimensione Paesaggio. La cura del patrimonio esistente*, 14-22 marzo 2024, Museo Archeologico Nazionale della Valle del Sarno. Mostra a cura di A. Bernieri; progetto e allestimento di A. Bernieri e F. Testa, con A. Borrelli, R. De Vivo e R. Memoli.

L'impalcato per un nuovo sistema di spazi pubblici diffuso e capillare, riconfigurando uno scenario complesso e molteplice per la città. In definitiva, un lavoro laboratoriale molto intenso, prodotto di numerosi momenti di scambio in cui, nell'arco di circa due anni, i progetti sono stati man mano sviscerati in tutte le componenti, da quelle urbane fino agli aspetti di maggiore dettaglio.

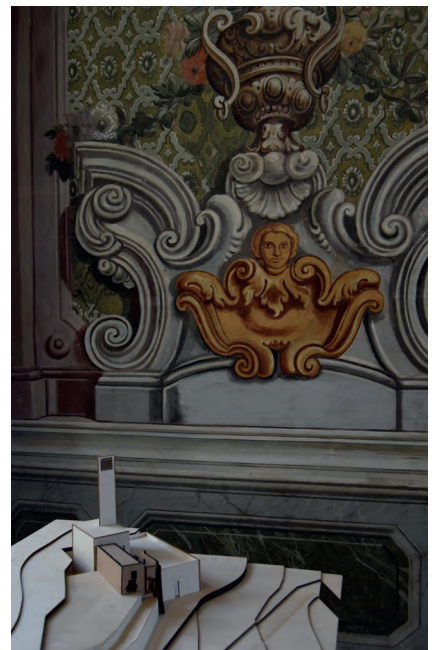
In conclusione, una riflessione finale riguarda la relazione tra le sperimentazioni progettuali e il paesaggio o, meglio, i differenti, compresenti, paesaggi individuati. In questo senso, l'esposizione presso il Museo Archeologico della Valle del Sarno è stata inaugurata in occasione della giornata nazionale dedicata al paesaggio: il riferimento alla “dimensione paesaggio” nel titolo della mostra è inteso nella prospettiva di attuazione di azioni di cura che, come emerso più volte nel testo, in tutte le scale, tematizzazioni, aree, non si pone mai in maniera invasiva o separata dal contesto paesaggistico in cui gli elementi architettonici “superstiti” si trovano, anzi, il paesaggio diventa la condizione essenziale da cui tutte le riflessioni partono. Si tratta di un attrattore assoluto, dalla grande potenzialità intrinseca, seppur per la maggior parte trascurato, che apre a una reconsiderazione dei territori a “media urbanità” – e Sarno ne rappresenta un caso esemplare – che possono ripartire proprio dalle unicità del loro territorio, in stretta relazione con il paesaggio o con i paesaggi che, seppur in condizione frammentata, generano e, in maniera molto significativa, caratterizzano intere aree. Contro il rischio dell'oblio, il progetto di architettura può assumere un ruolo di cura per l'esistente al fine di tramutare il silenzio in memoria attiva. Si tratta di una maniera radicata, ma contemporanea, di intendere il progetto, che passa dal riuso e dal riciclo delle strutture, alla valorizzazione di luoghi interstiziali e alla costruzione di un robusto sistema di spazi pubblici, in grado di dare nuovo respiro a luoghi che nel tempo sono divenuti paesaggi di ordine non prioritario. Il progetto, quale operazione di sintesi tra strumento e azione, dalla mappa-modello alla creazione di nuovi presidi sul territorio, rappresenta in definitiva la capacità di vedere presenza laddove vi è assenza, potenzialità dove c'è separazione, mondi nuovi in continuità con il passato e con il presente. Avviene, in questo senso, un completo ribaltamento della visione di una città come Sarno: dall'essere principalmente ricordata come riferimento geografico del bacino idrografico del fiume definito tra i più inquinati di Europa, o per l'elevato rischio idro-geologico presente sul suo territorio, la forte concentrazione di “presenze”, dal carattere urbano, architettonico e paesaggistico, richiamano un'attenzione progettuale elevata e la volontà di sperimentare, ancora, possibili configurazioni di nuove collettività.



**SARNO: DIMENSIONE PAESAGGIO.
LA CURA DEL PATRIMONIO ESISTENTE**
THE EXHIBITION / LA MOSTRA

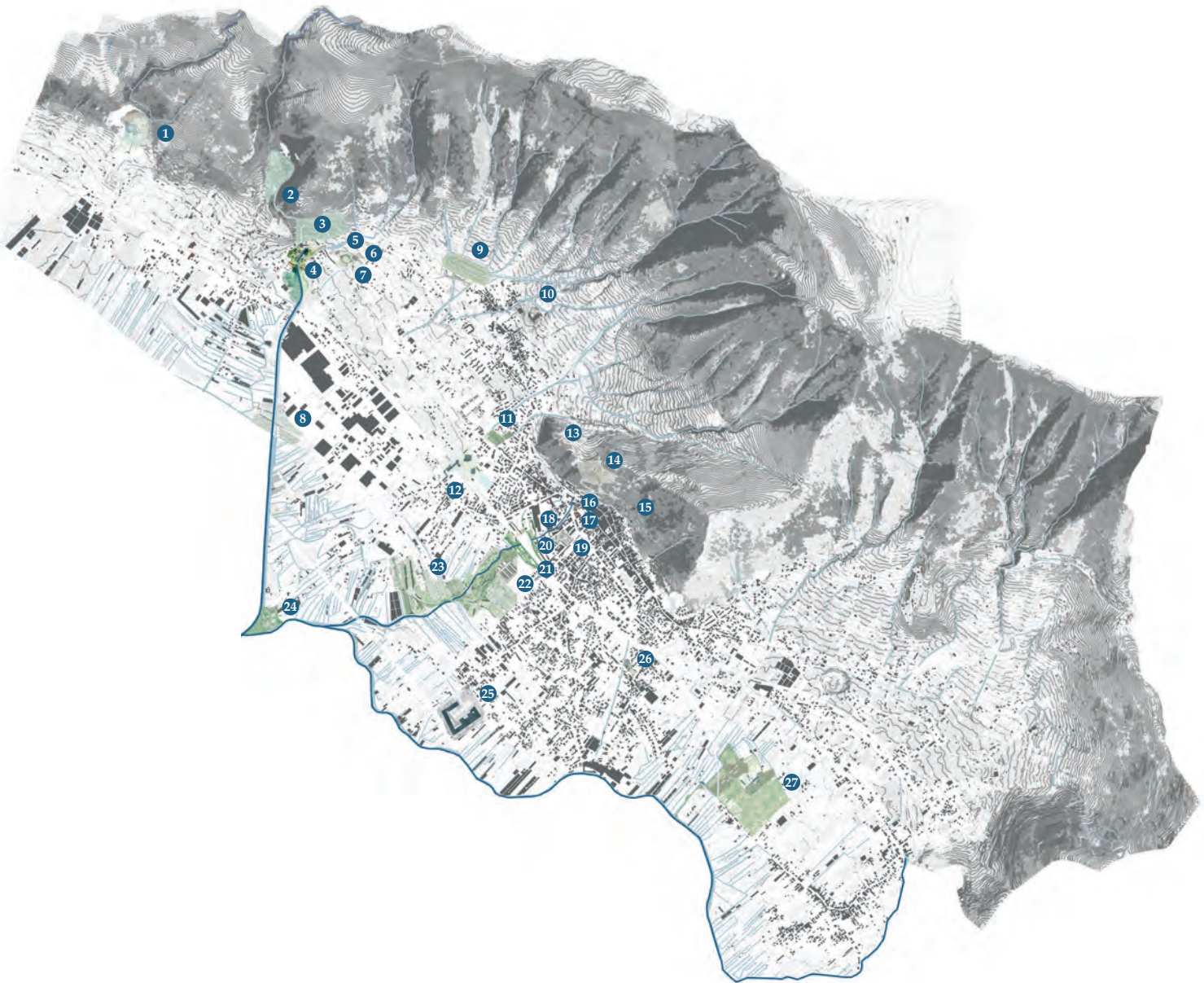


60





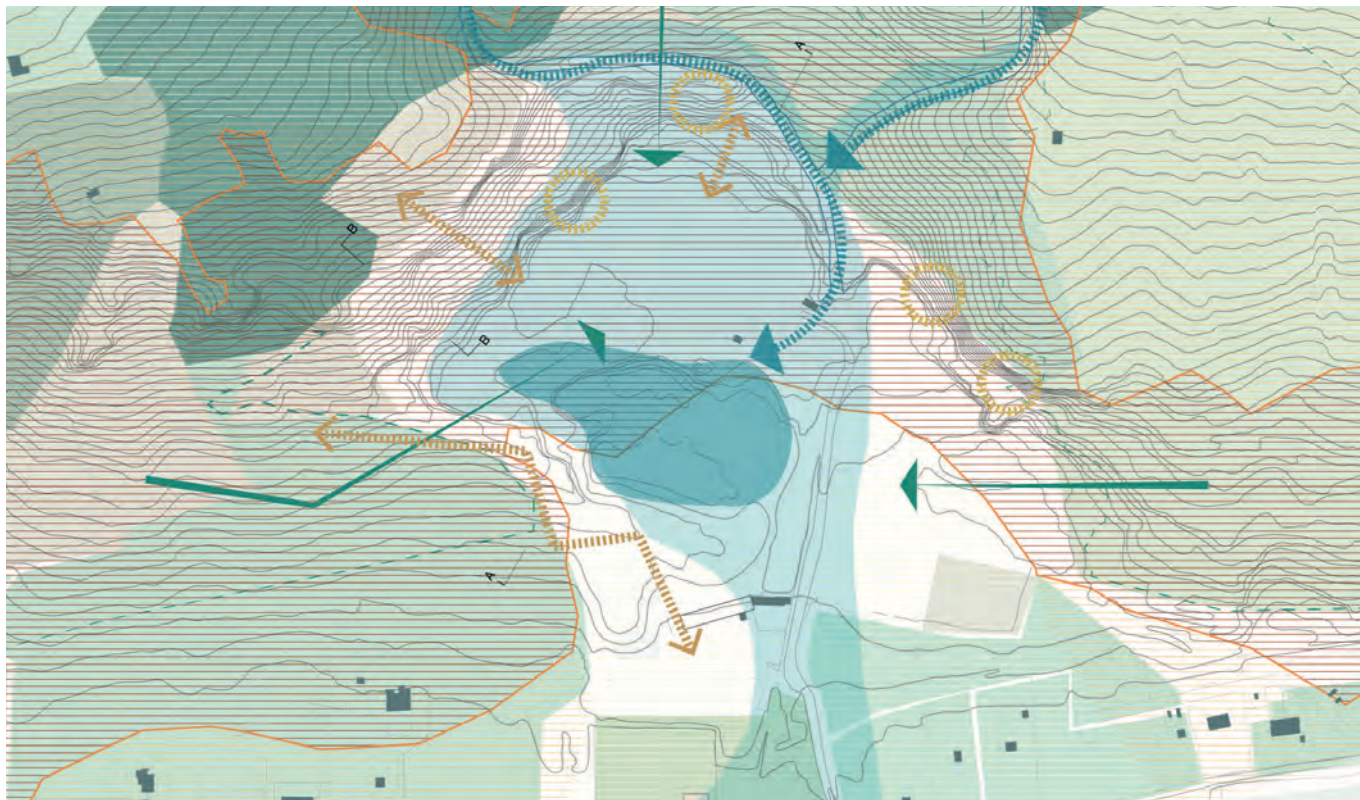
PROJECTS/PROGETTI



- (1) The Quarry: from Wastescape to Lakescape**
- (2) Green Steel: the Monaco Ravine**
- (3) Landmark & Landscape. The Acqueduct's Public Infrastructure**
- (4) Ri|Activate The River Park. A Water Museum**
- (5) Sarno New Archaeological Park**
- (6) Archaeology in Progress**
- (7) Sarno Valley Exhibition Hub**
- (8) Transitional Landscapes: Reconnecting and Inhabiting Marginal Areas**
- (9) The Vasca Curti: a New Sports Public Space**
- (10) The Former Episcopio Hospital: a New Life for the Building and its Context**
- (11) Living Along the Edges: Vasca Trave**
- (12) A New Sports Area for Sarno**
- (13) From Care to Culture: the Reuse of the Former Hospital Villa dei Pini**
- (14) Through the Ancient Walls**
- (15) An Art Hub in the Church of San Martino on Saretto Hill**
- (16) The Palazzo Mill: Recovery and Reuse for a New Public Space**
- (17) A New Library in Sarno City Center**
- (18) Urban Educational Park Along the Rio Palazzo River**
- (19) Extension of the Edmondo De Amicis Primary School**
- (20) Reconnecting Sarno: a park between railway and river**
- (21) Reconnecting Through the Existing. The Rio Palazzo's Former Purification Station**
- (22) The Sarno River Park as Agricultural Sustainable Innovation**
- (23) The Sarno River Park as Innovative Cluster**
- (24) Water Culture. The Affrontata area**
- (25) Periurban Line. Food Research Hub in the Market Public Area**
- (26) Architecture and Pre-existence. A New Center for the Local Civil Protection**
- (27) Lavorate Agricultural Park**

ROSA RIPPO - THE QUARRY : FROM WASTESCAPE TO LAKESCAPE
LA CAVA: DA PAESAGGIO DI SCARTO A PAESAGGIO DELL'ACQUA

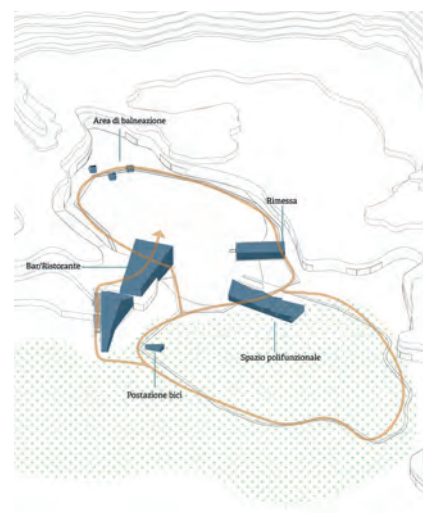
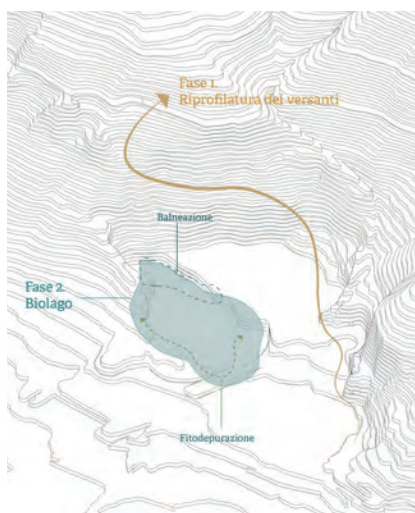
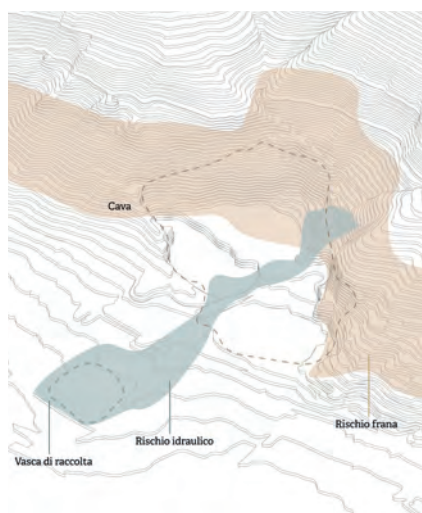


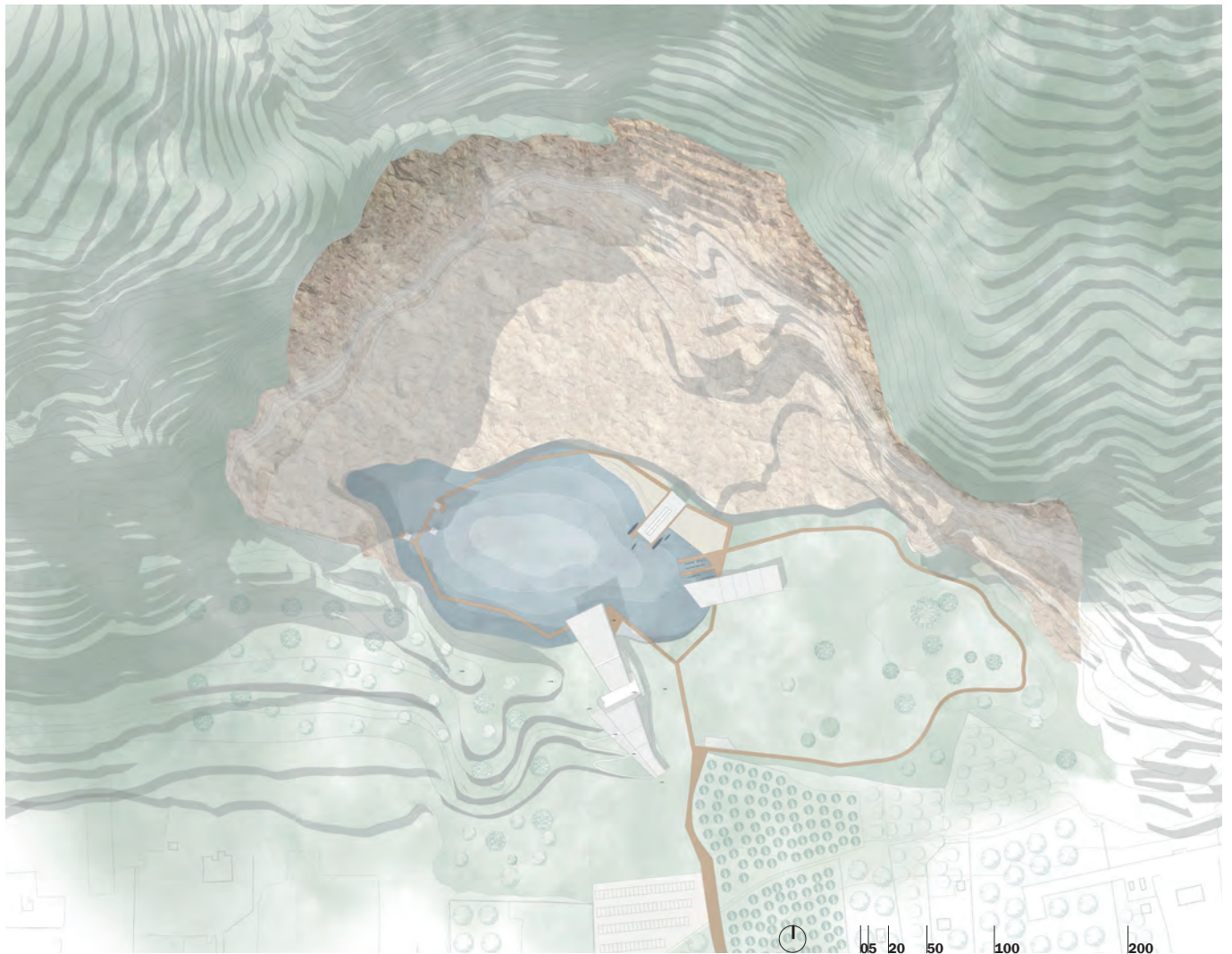


GENERAL STRATEGY

The project “The Quarry: from Wastescape to Lakescape” aims to activate a process of recovery and management of the abandoned quarry. It will no longer be a waste landscape but a resource landscape for the regeneration of the territory in all its aspects.

66





URBAN & ARCHITECTURE FRAMEWORK

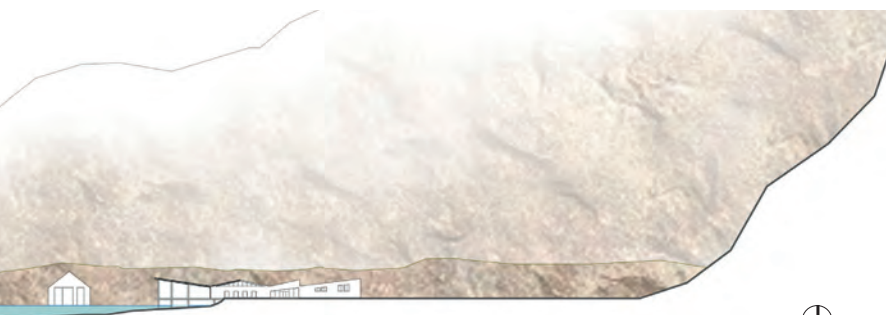
Program

sport facilities, urban park, sheds, bar and restaurant center

Covered area	2.664,77 m ²
Outdoor area	31695 m ²
Above-ground floors	3
Built volume	22.500,54 m ³
Estimated cost (restaurant center)	€ 1564211,3

The project aims to combine the need to provide new community spaces while overcoming the site's critical environmental issues through the use of compatible materials, the use of bioclimatic solutions, and the reduction of energy consumption. A first phase of the project strategy involves the maintenance and mitigation of the quarry, which will be carried out over an unshort period of time. The second phase involves the construction of a bio-lake. Its main function is to collect rainwater and regulate water channels, so that it can mitigate the risk of flooding. It will become a technically facilitated aquatic ecosystem.

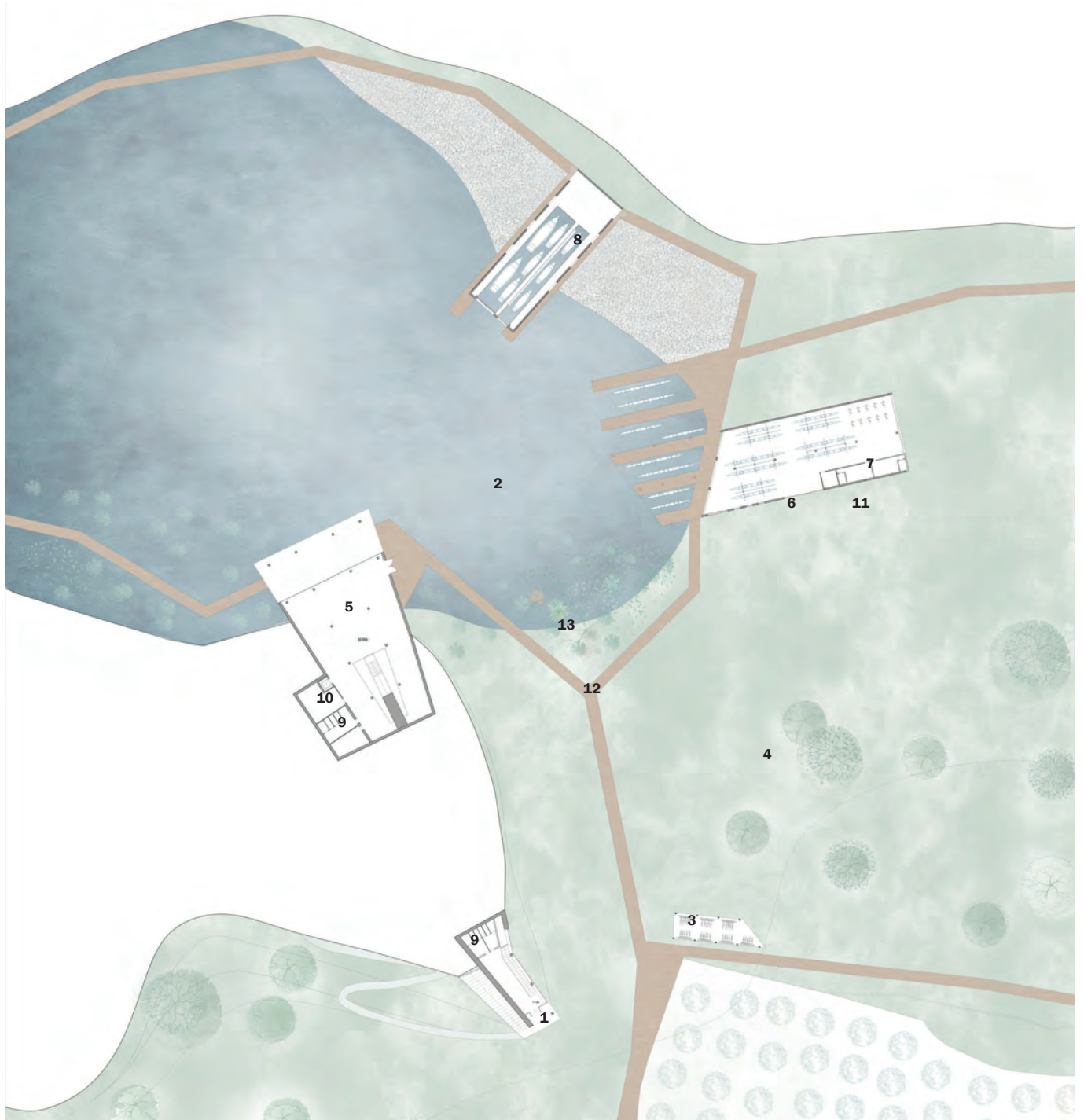
The risk of flooding has defined a basin within the quarry, which causes the water to flow towards the catch basin a few meters from it. Multifunctional blocks, including a restaurant and lounge bar, and two canoe sheds and spaces for rowing activities are grafted around the biolake.



0 5 10 20 50

100

200

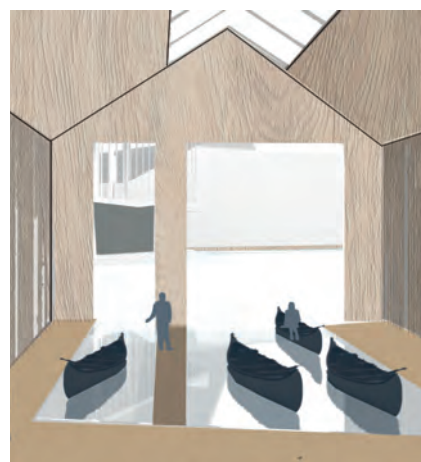
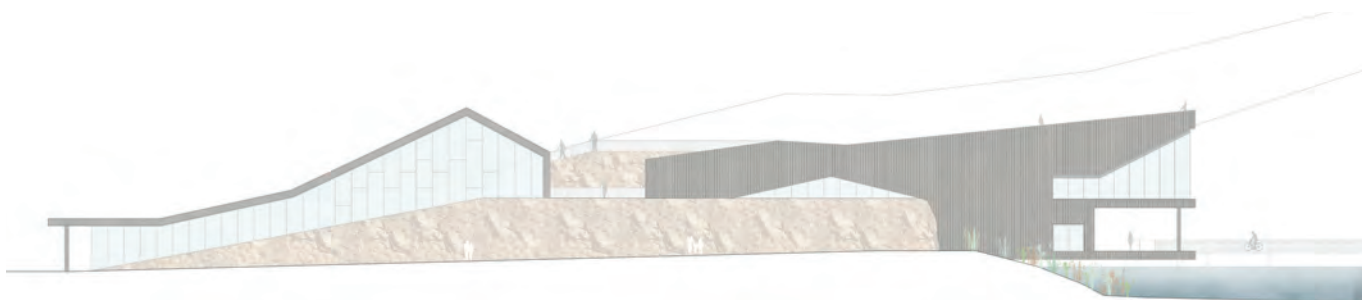


1. Access
2. Biolake
3. Bike sharing
4. Urban Park

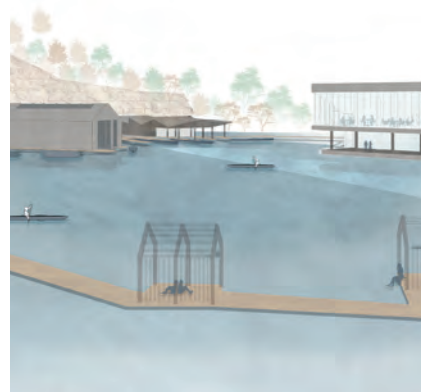
5. Exhibition hall
6. Sports canoe storage
7. Gym
8. Canoe shed

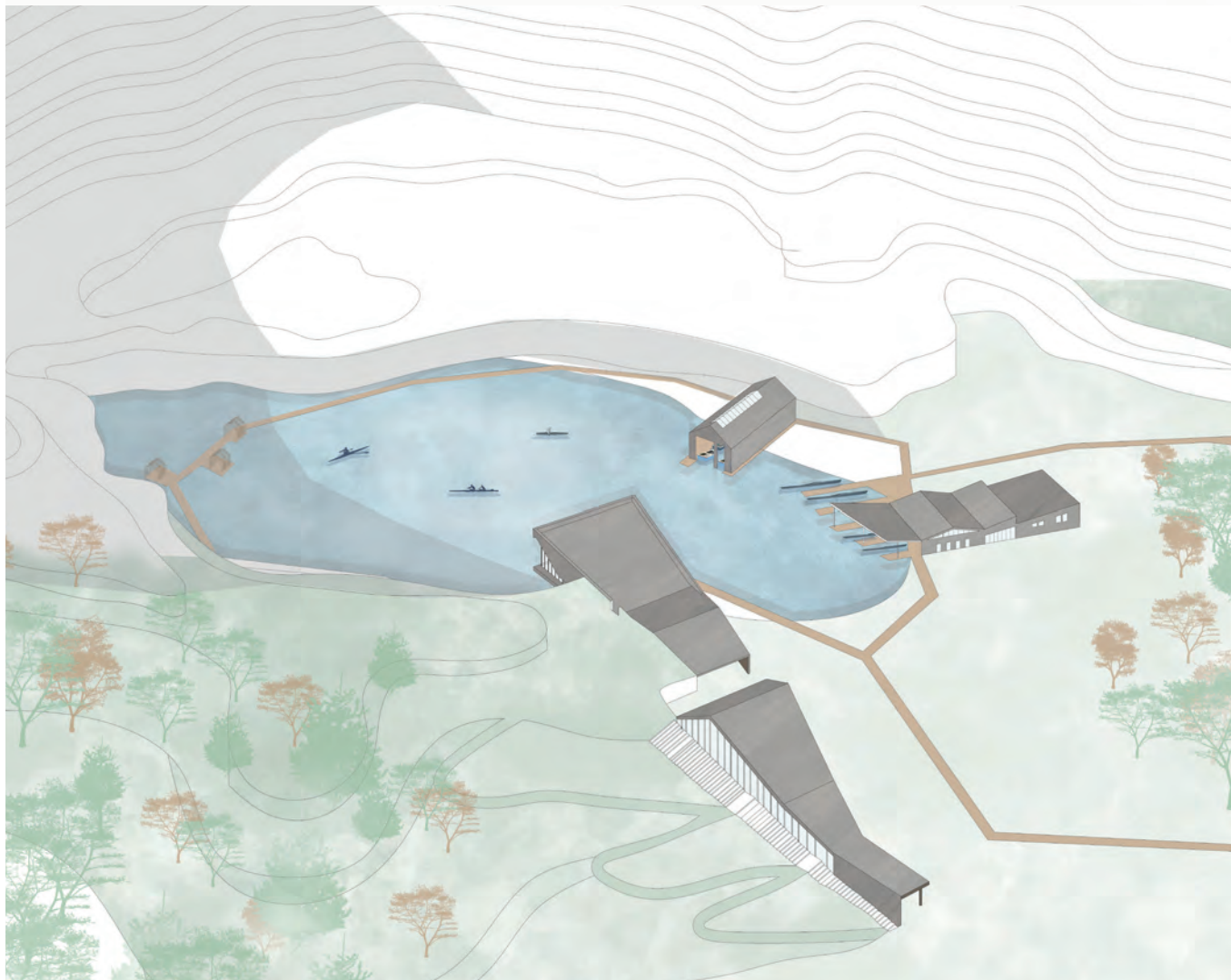
9. Services
10. Deposit
11. Locker rooms
12. Connections

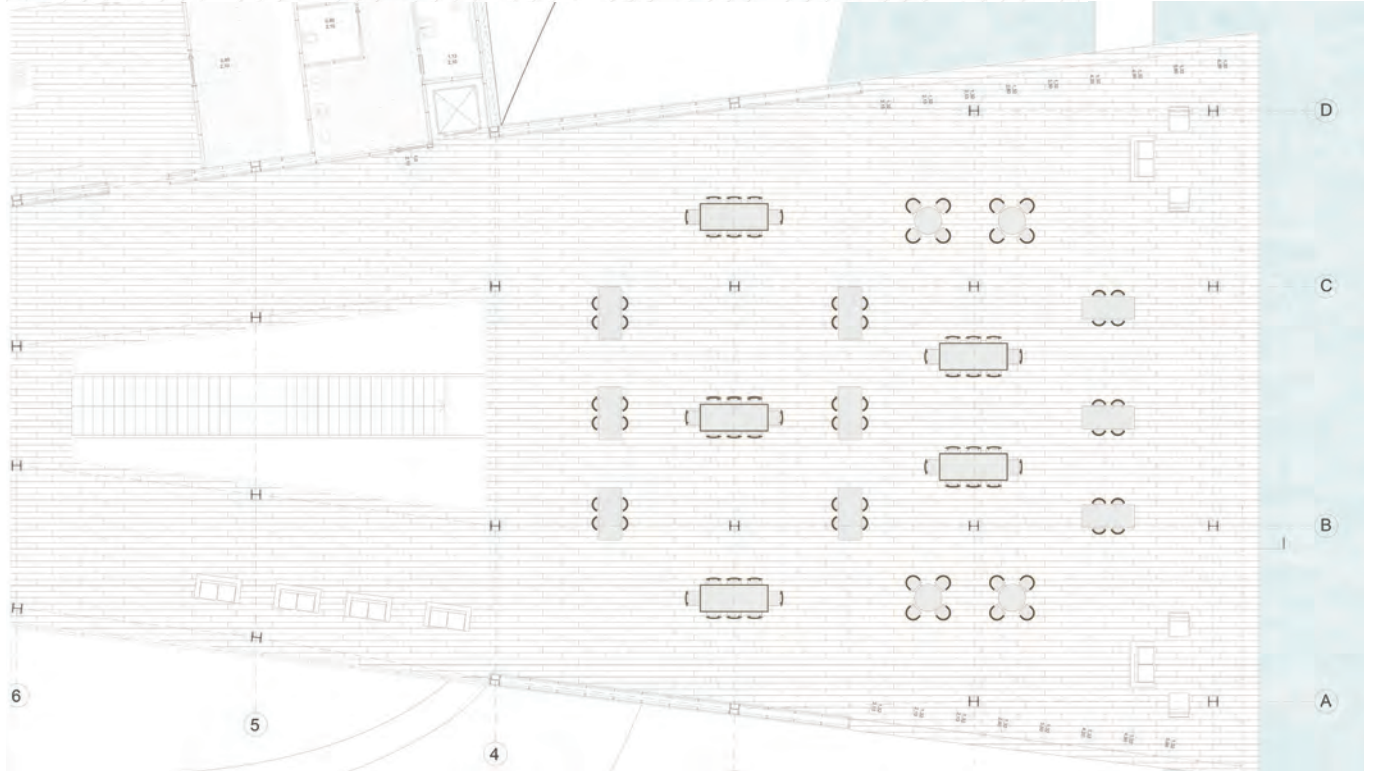
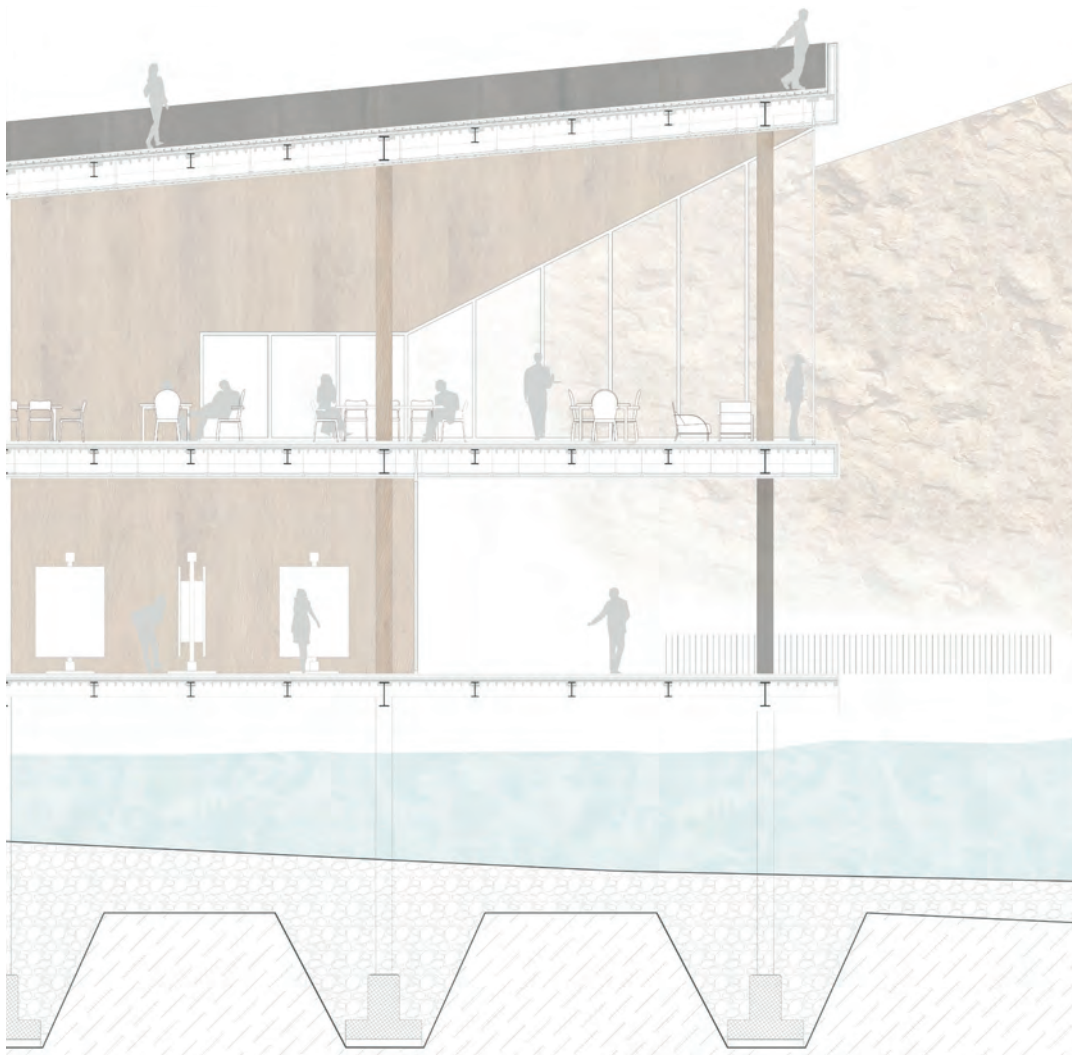
13. Phytoremediation's area



69







INDOOR/OUTDOOR RELATION SCALE 1:50

The quarry located at the northwest edge of Sarno is one of the many endangered landscapes within the territory. The project “The Quarry: from Wastescape to Lakescape” aims to activate a process of recovery and management of the abandoned quarry. It will no longer be a waste landscape but a resource landscape for the regeneration of the territory in all its aspects.

A process that embraces various spheres, from environmental to social. The quarry is grafted into the fabric of the margin city in a state of neglect, but with so much potential.

In a landscape immersed in greenery, between agricultural fields delineated by roads and degraded and disused areas. One of the critical points is especially the presence of landslide and hydrogeological risk.

Above all, the risk of flooding has defined a basin within the quarry, which causes the water to flow towards the catch basin a few meters from it, characterized moreover by the presence

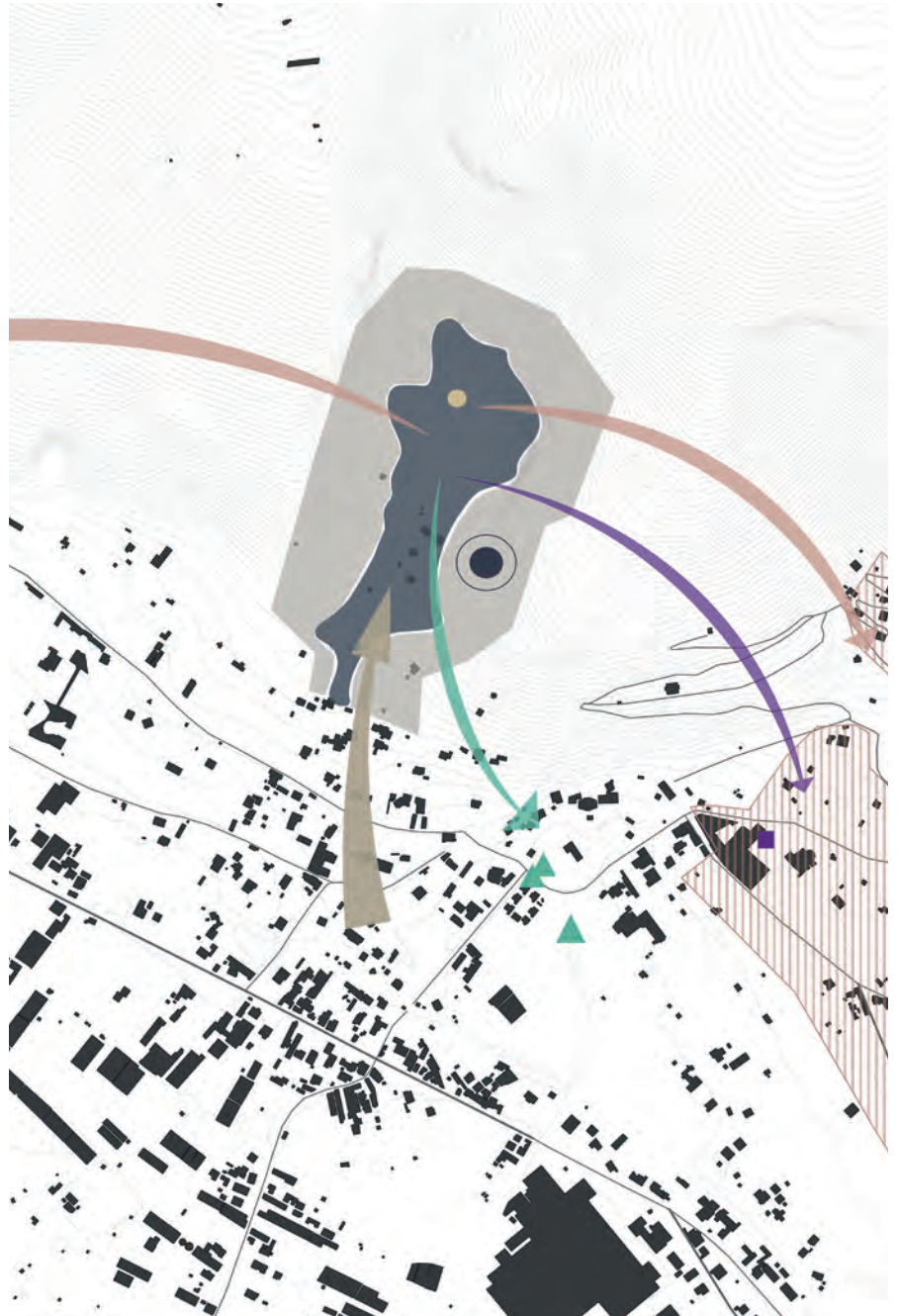
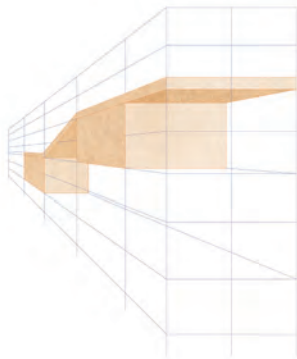
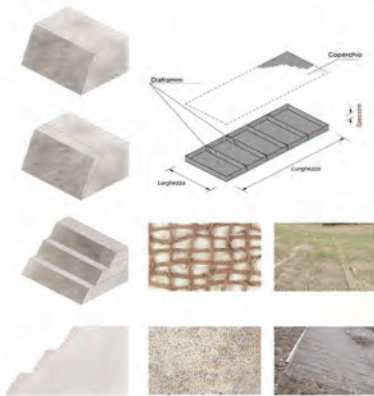
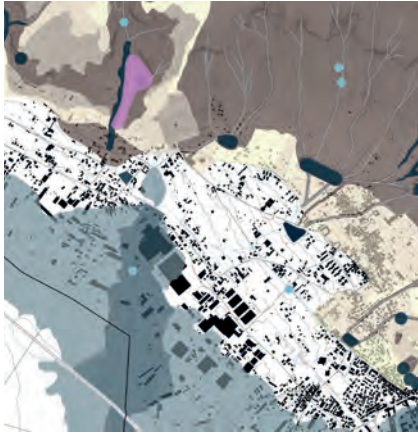
72

of archaeological excavations. It establishes an intersection of spaces in total conflict with each other, due to their positive and negative nature.

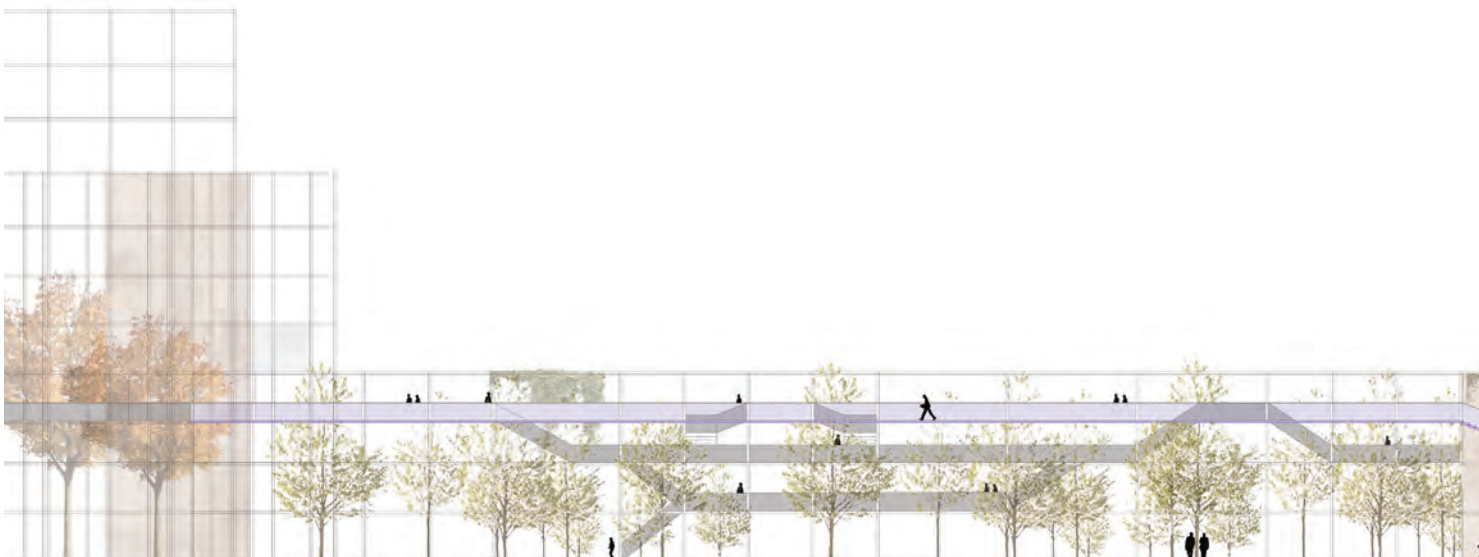
The rural landscape above the quarry looks down on areas that can have a new life, considering the “waste” that characterizes the wastescape of “resources.”

ANNIKA SARRO - “GREEN” STEEL: THE MONACO RAVINE
ACCIAIO VERDE: IL VALLONE MONACO



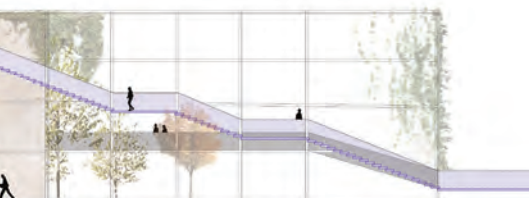


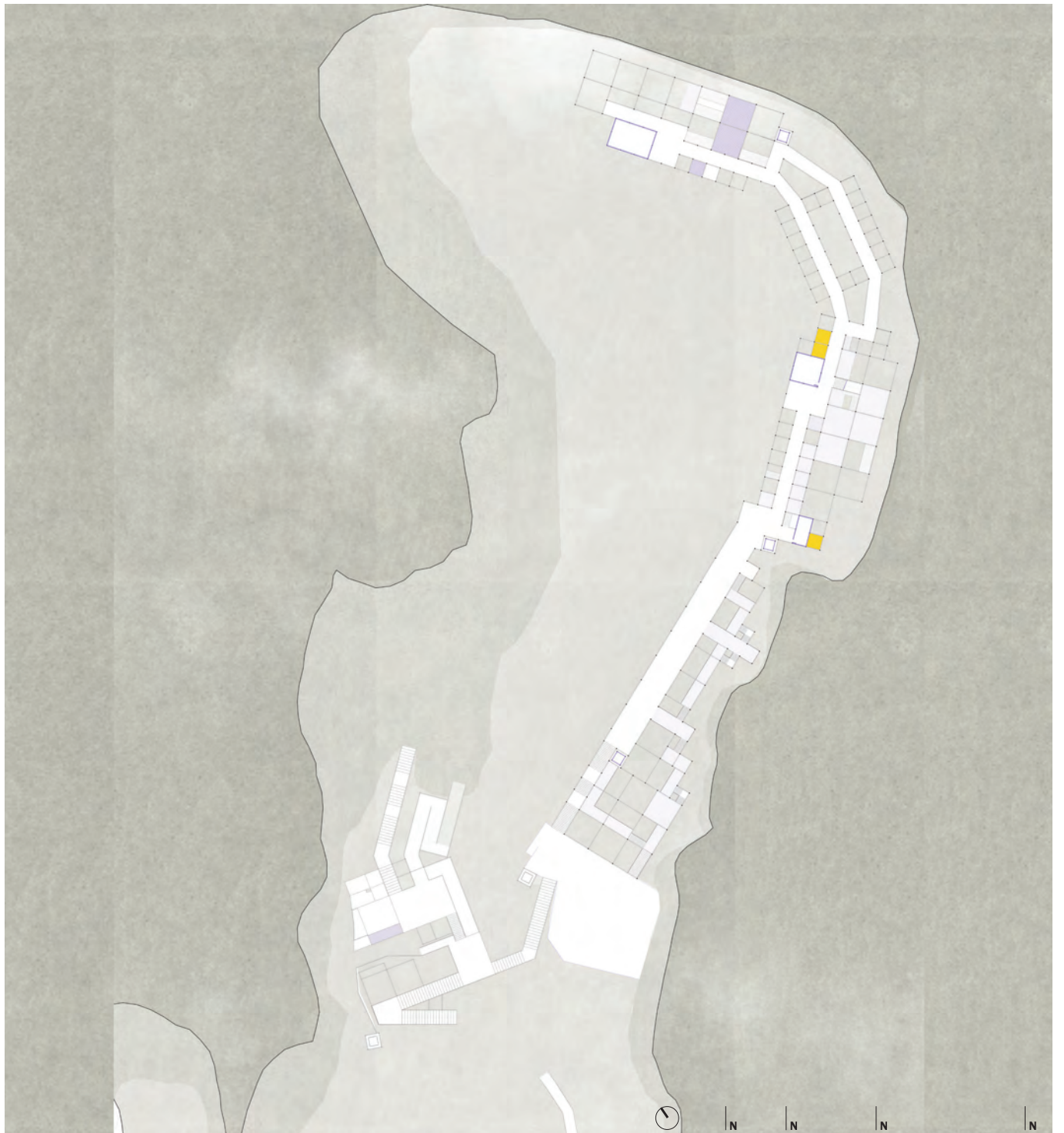
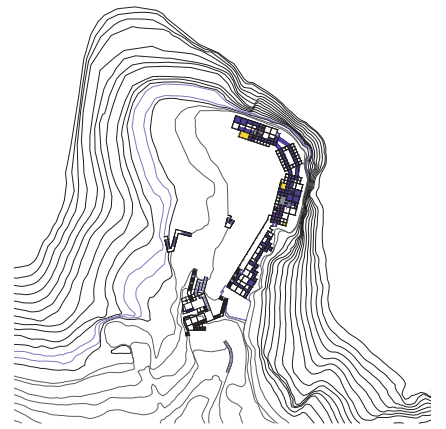
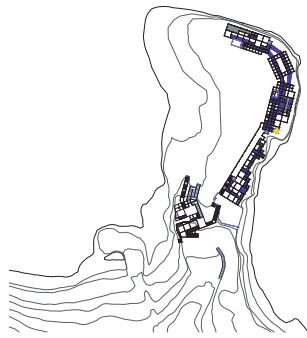
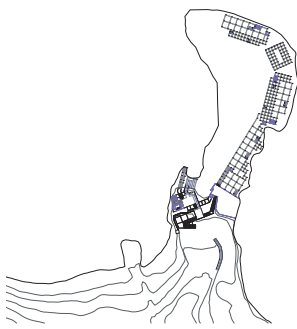
GENERAL STRATEGY

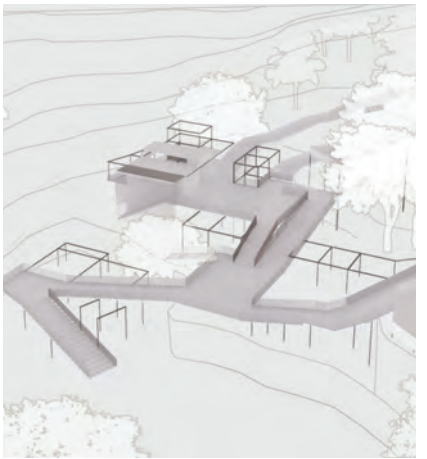
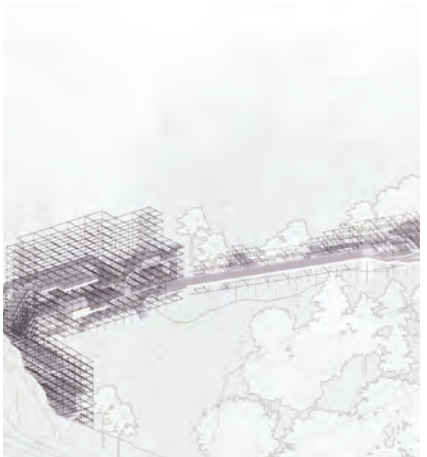
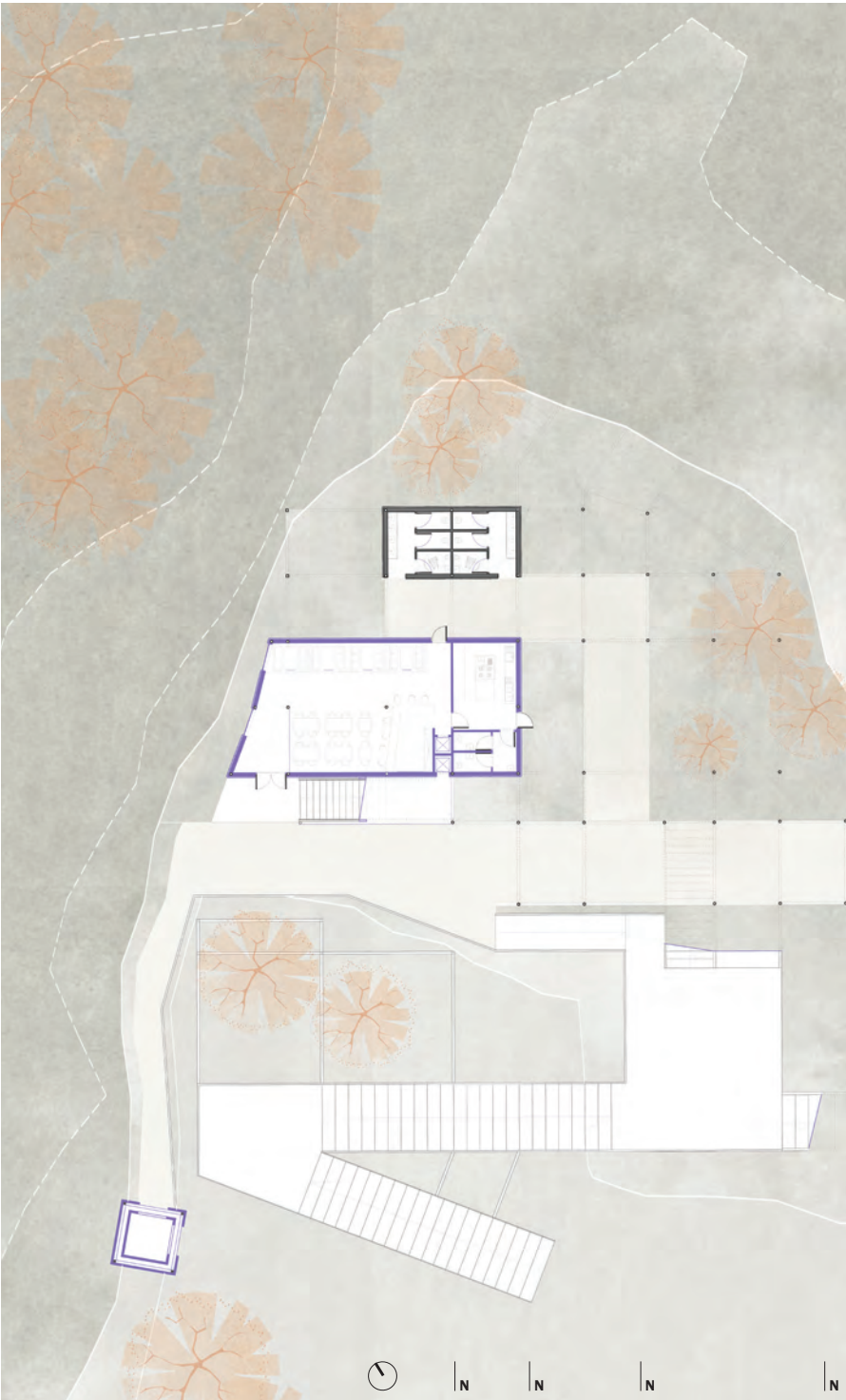
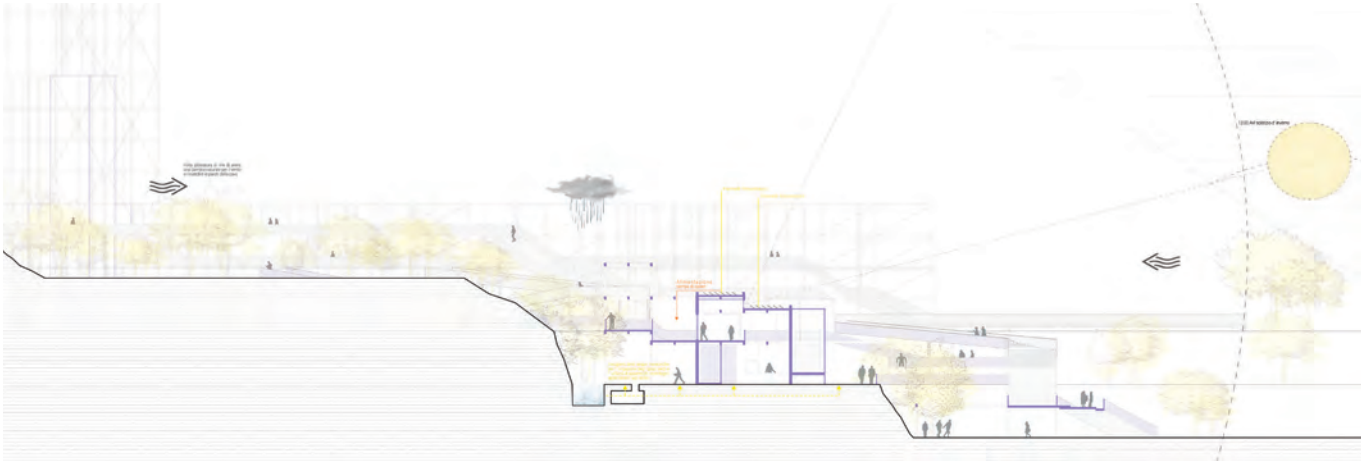


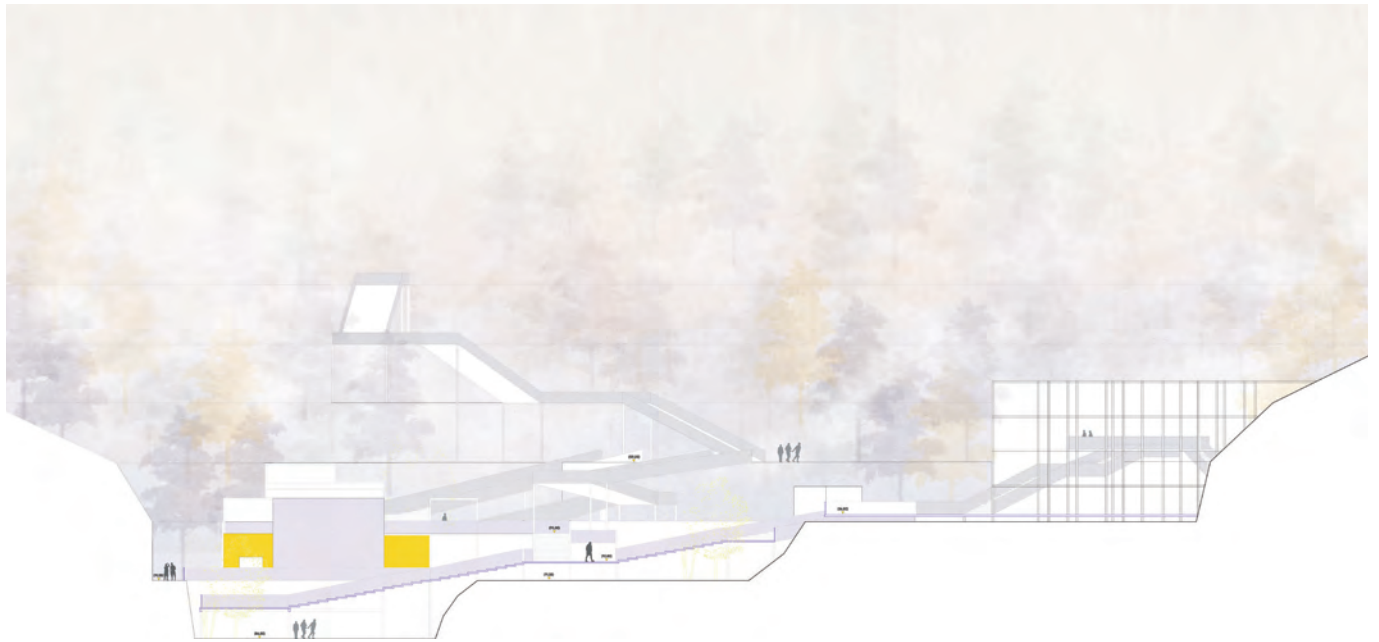
As the project is located in an area at risk of landslides, it will never be tied to the walls of the quarry but will be able to reach them with the simple gaze of the spectators who are directed towards them by the various paths created. Inside the structure, which looks like a large scaffold, volumes (like “containers”) will be erected at a later stage where workshop activities and support for the maintenance of the quarry will take place.

The structure consists of various paths that relate the different elevations of the quarry in order to enhance the “natural” profile of the site. Already at the lowest elevation, the first ramps and green spaces are encountered, which gradually follow an increasing climax in both number and size. The structure is built on alternating solids and voids that define the space and make the structure alive and constantly developing; it could grow or it could shrink until it almost disappears. The paths follow well-defined directions and relate to the Quarry constantly by implementing a game of “ascent and descent” that makes the walk more dynamic. Inside the scaffolding, the site will be progressively greened, thus creating usable green spaces; the paths will thus be part of a system that interacts closely with nature, so as to make the spectator aware of its importance. One of the volumes belonging to this system will be examined in depth: a café, located at the intersection of the various paths. This can be taken as an example to understand how the remaining volumes can be realised. The café continues the reasoning of the structure: it is born from an elaborate reasoning on voids and solids, making the structure “moving”. It has a double height and exposed beams inside, so that the sense of “empty” but “full” is constantly perceived. Full-height windows frame a limestone backdrop that, appearing like a painting, becomes part of the building. The various terraces then offer different views and viewpoints in order to enhance the landscape aspect.

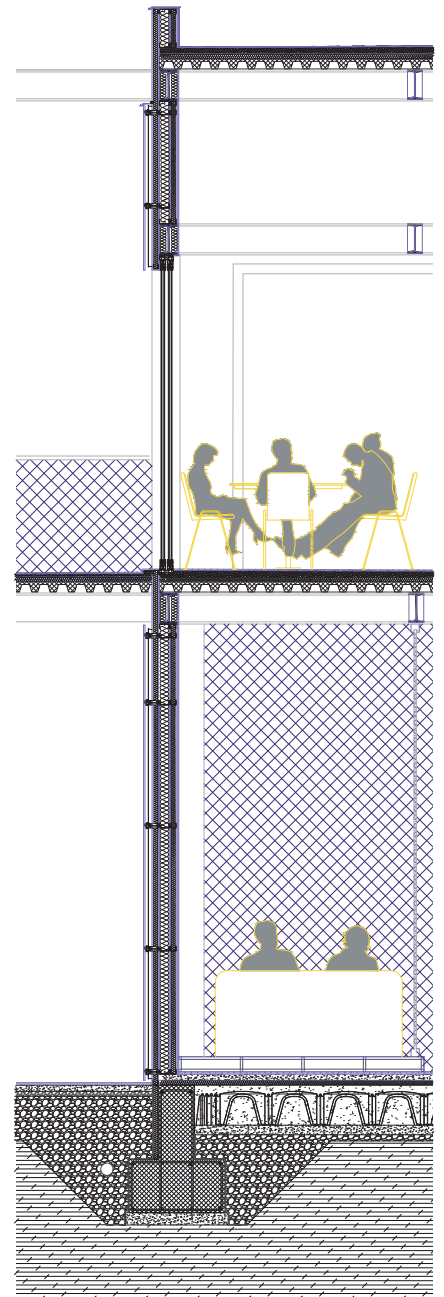
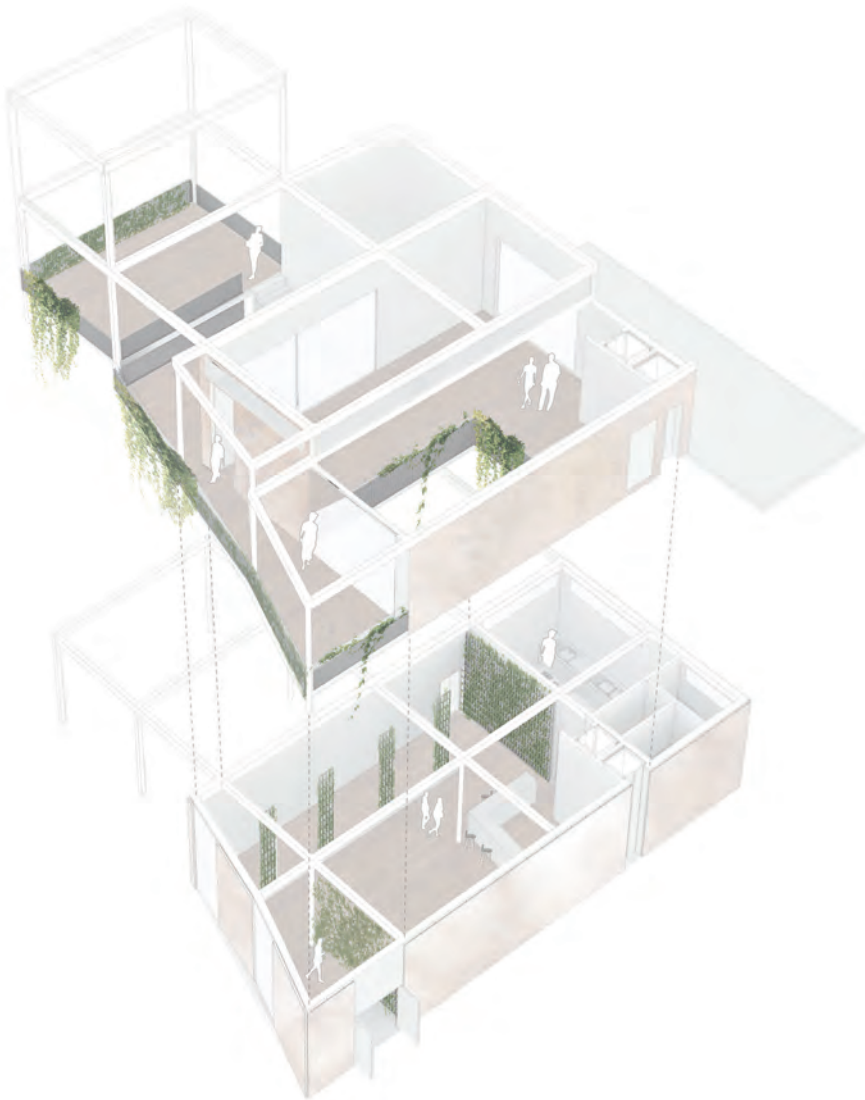


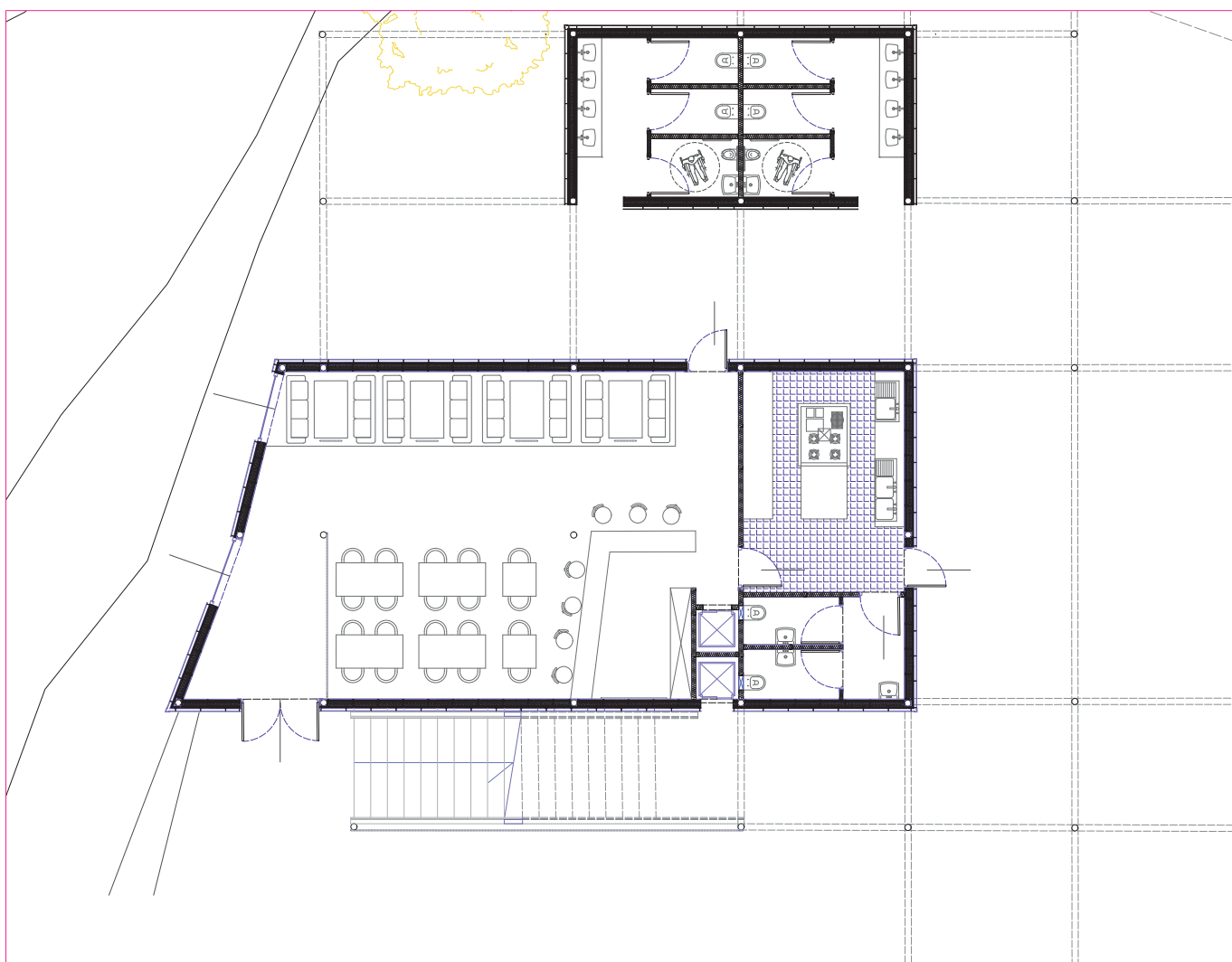
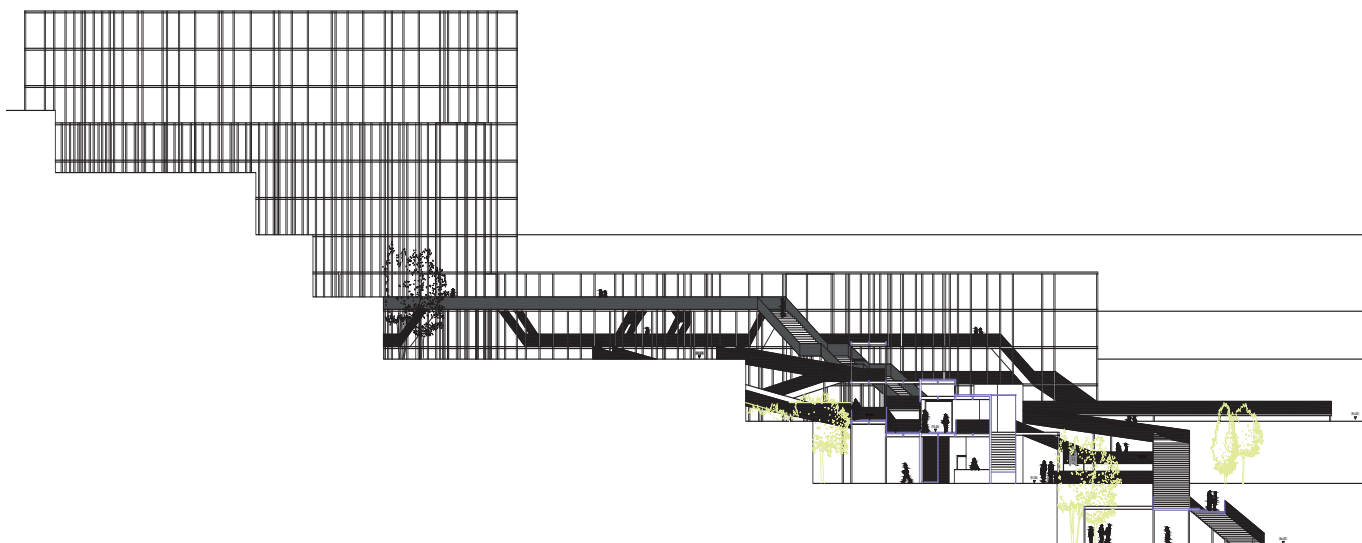






78





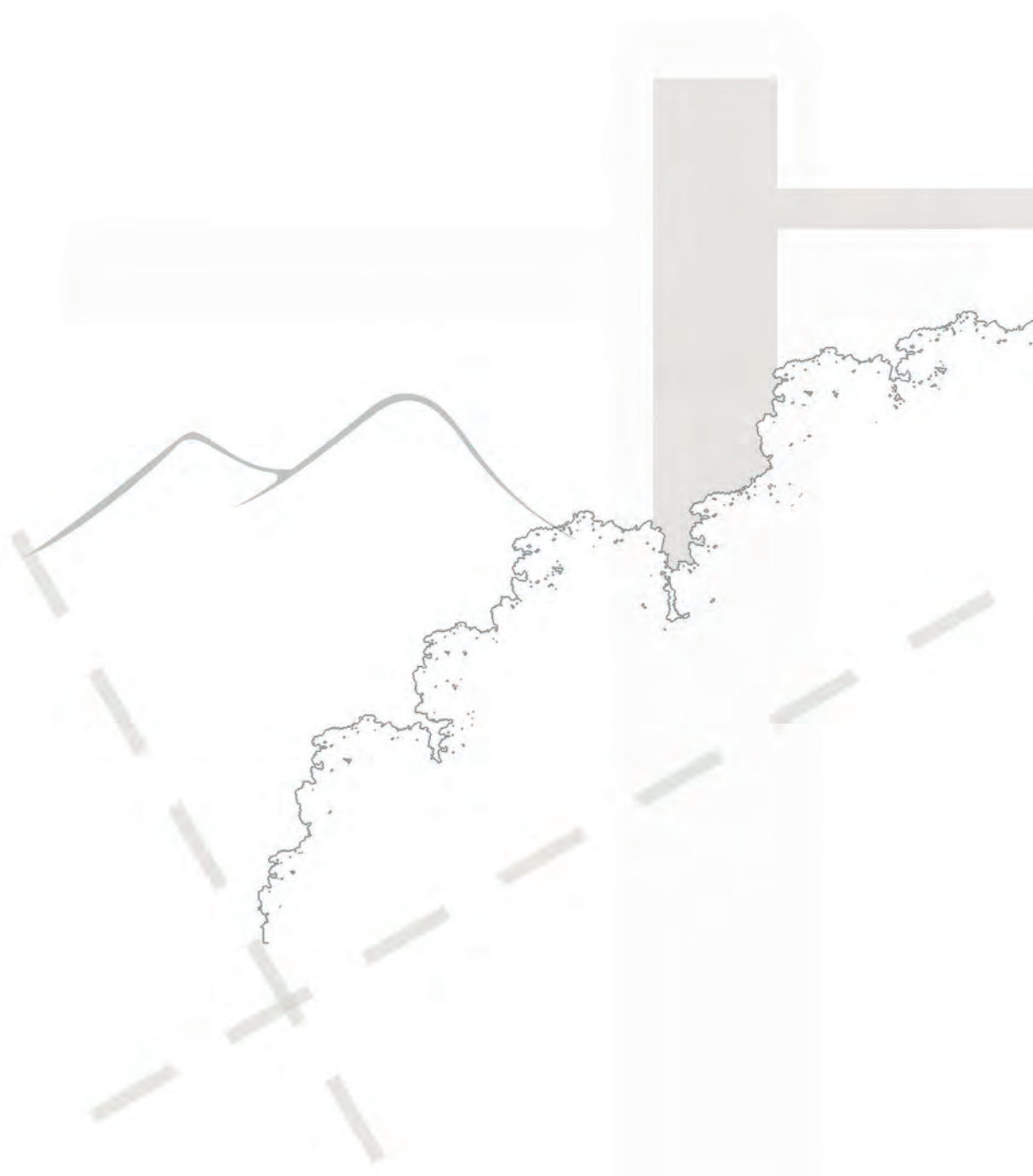
Sarno's territory boasts several natural components that should be improved and enhanced. The mountain range surrounds the town as if to embrace it and the Sarno river flows through the town creating enchanting little spaces, and few areas can boast such a wide view of the entire Gulf of Castellammare. Unfortunately, over the years there have been natural disasters due to torrential rains that have caused a number of problems in the town. This has led to the underdevelopment and increasing abandonment of the area.

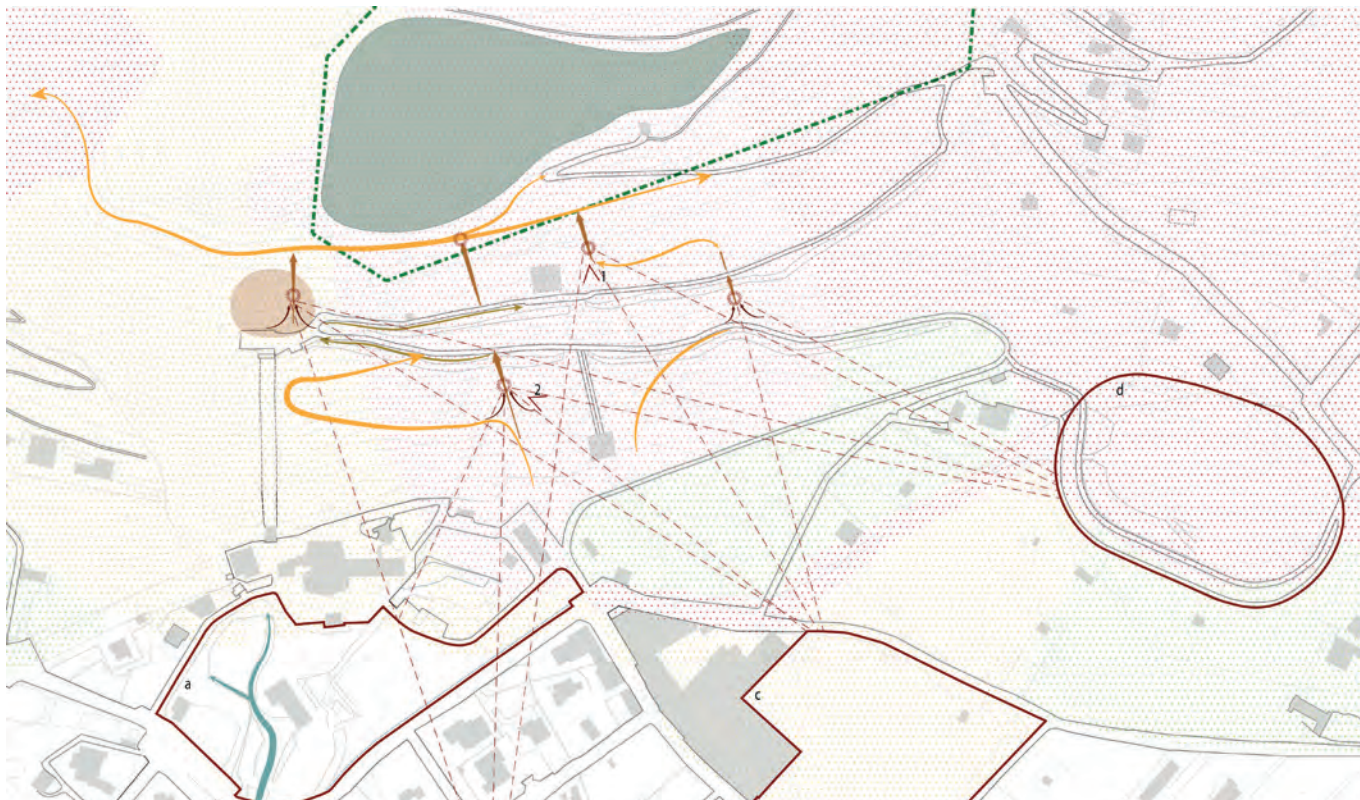
The project aims to redevelop the abandoned areas, reintegrate them into the town and enhance the natural aspect, now lost, of the place. The part of the territory under consideration is the Monaco Ravine, a quarry located not far from the *Parco dei Cinque sensi*. Various studies have helped to define the place: the quarry, which has been disused for a short time, is now victim of vandalism and is considered a particularly polluted area. First of all, the Sarno plan foresees the expropriation of the site and the redevelopment and greening of the area. According to this, the proposed project includes several actions that will take place in two phases. The first phase envisages the mitigation of the risk inside the quarry, in order to guarantee a certain percentage of stability in an area with a high and medium landslide risk. To do this, an all-steel structure has been designed, developed on well-defined modules, which allows workers to interact with the mountain walls. The quarry will then be made safe through provisions delegated by the Basin Authority (decrease of the slope, construction of terracing, insertion of support equipment such as biodegradable materials and micropiles, etc.). The second phase envisages that the structure will not be removed, but volumes will be inserted, thus giving life to the structure. In the volumes there will be laboratories and equipment necessary to prevent the maintenance of the quarry and the greening of it. We can therefore say that the project proposes to redevelop the site through a sustainable project, implementing cutting-edge technologies and readily available materials in order to find the right balance with nature.

**VANDA MASCIA NOTARO - LANDMARK & LANDSCAPE.
THE AQUEDUCT'S PUBLIC INFRASTRUCTURE**

LANDMARK & PAESAGGIO.

L'INFRASTRUTTURA PUBBLICA DELL'ACQUEDOTTO

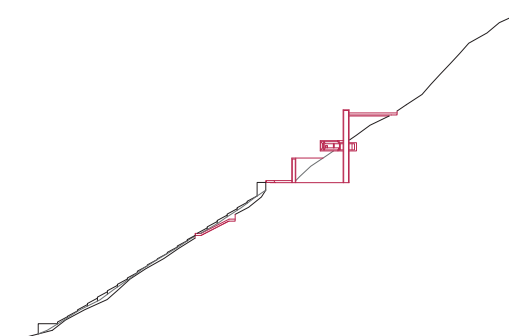
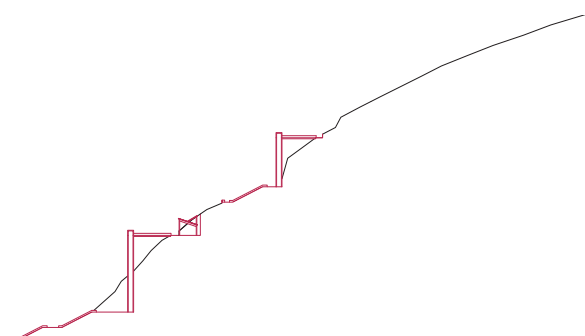
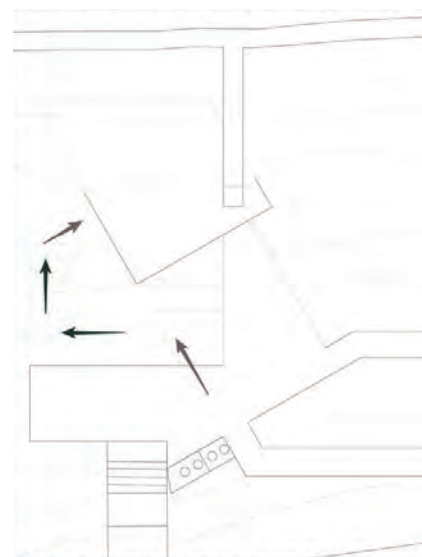
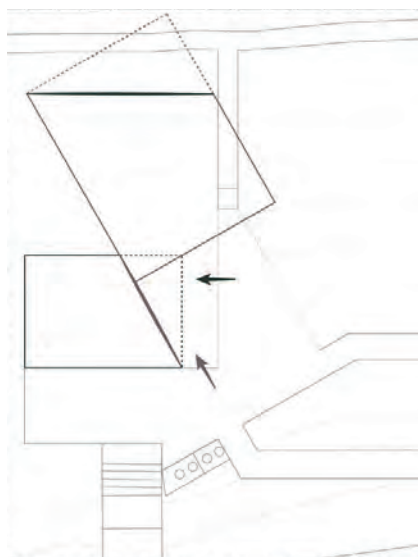
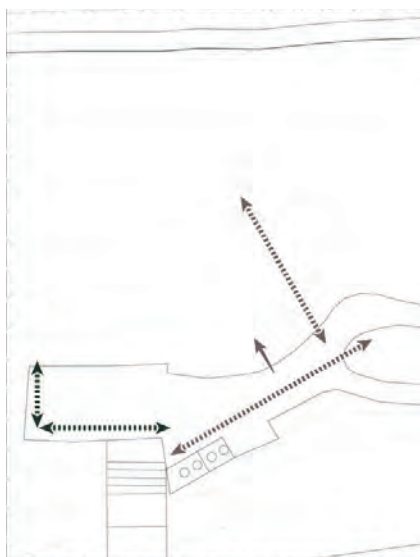


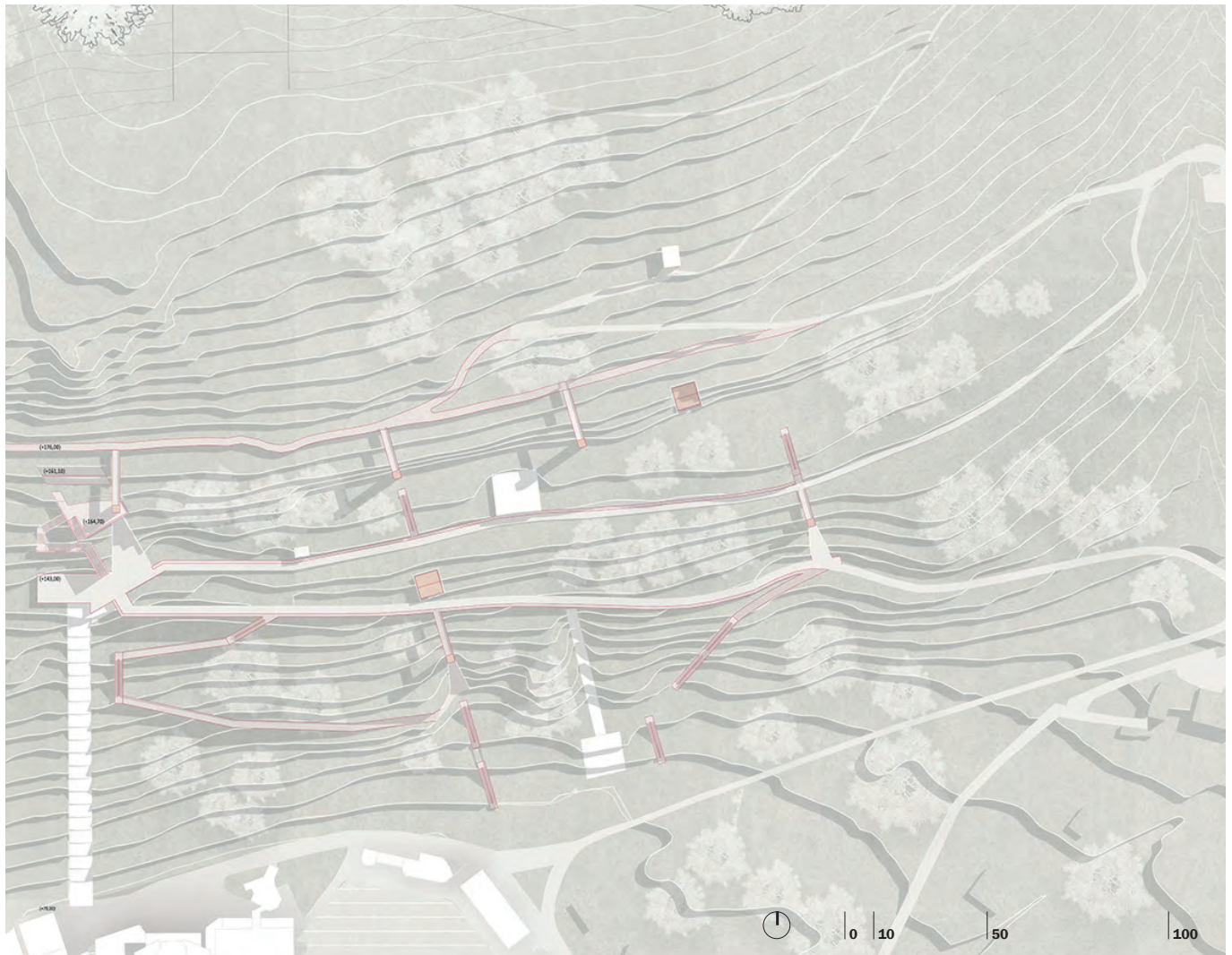


GENERAL STRATEGY

The project proposes to define a directionality transversal to the hill, already partially marked by the aqueduct itself. This system is part of a broader reasoning, which includes the creation of this axis, which is grafted into a project route that runs longitudinally along the hill.

82





83

URBAN & ARCHITECTURE FRAMEWORK

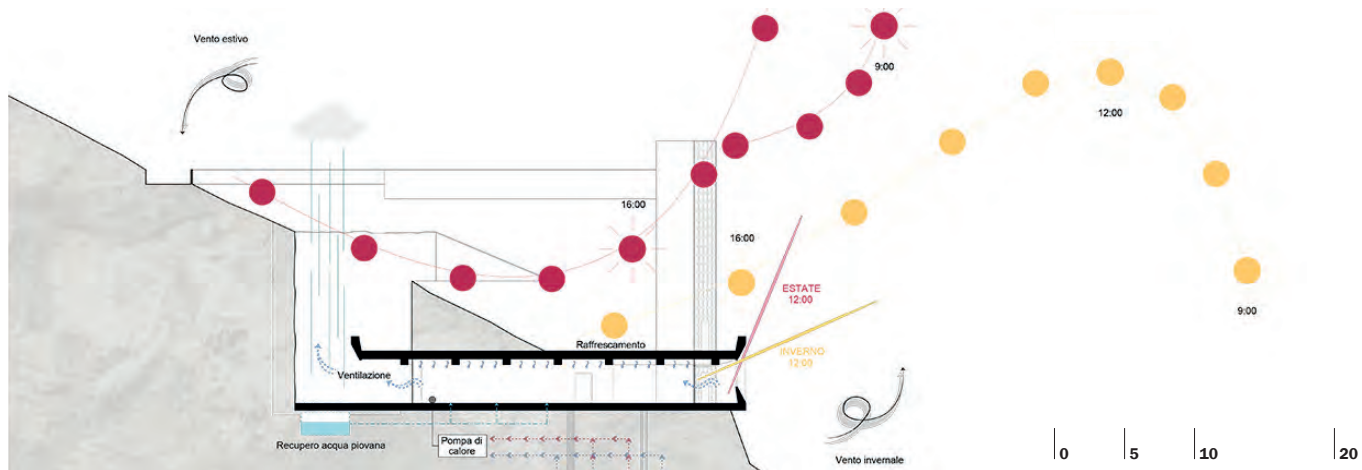
Program exhibitions, headquarters for associations and communities

Covered area	775m ²
Outdoor area	870m ²
Above-ground floors	3
Built volume	2700m ³
Estimated cost	2490000€

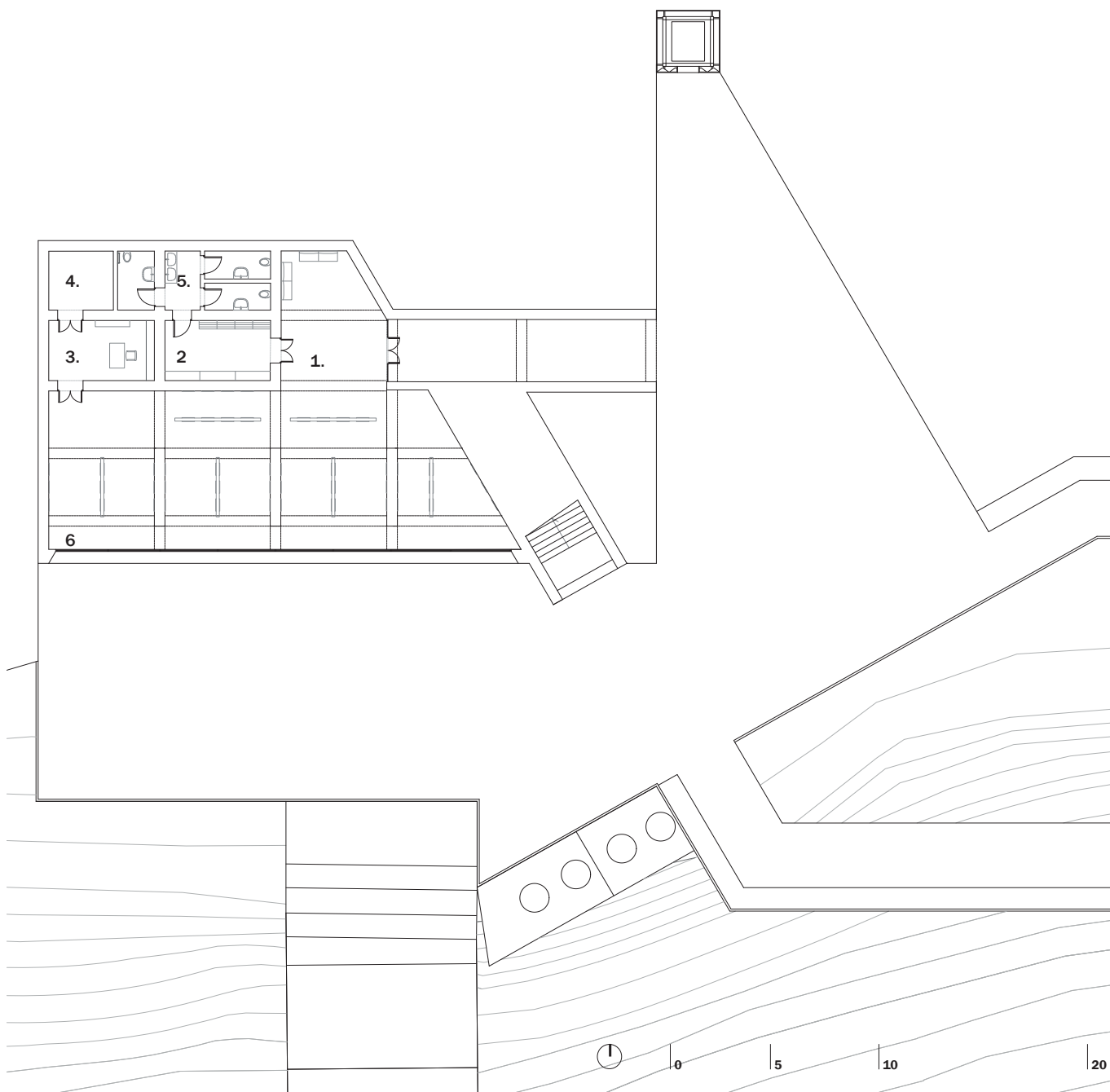
The project aims to define new paths both connecting elevations and connecting visually. The intervention, in fact, envisages the creation of distinguishable elements in the hill, but at the same time integrated with it. Following the path between the different elevations, the program is conceived as follows: a system of temporary exhibitions and permanent exhibitions is designed, defining an itinerary that ends in the longitudinal axis of the project. The building that is grafted into the pre-existing is the element that defines the headspace of the aqueduct, and is the element at the base of the system as well, which is developed following two directrices identified by the analysis of the current morphological

state. The directrices define the orientation of the volumes, and of the elements that compose them, making the lines of the project perceptible, even from the inside. The compositional reasoning carried out in the plan is also taken up in the elevation: the buildings are read as horizontal elements that contrast with the verticality of the elevator and result as frames toward panorama. The building at the upper elevation also presents a close relationship with the hill: the horizontal directrix marks a cut in the back of the building leaving a wall of exposed limestone rock and a vertical connection with the exterior overlooked by the roof plane of the walkable roof



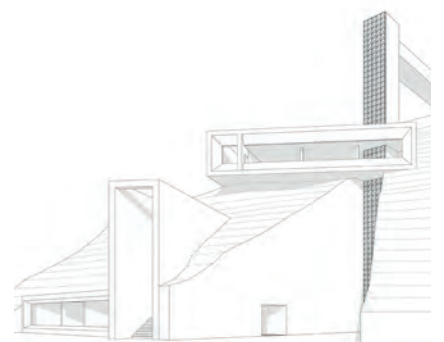
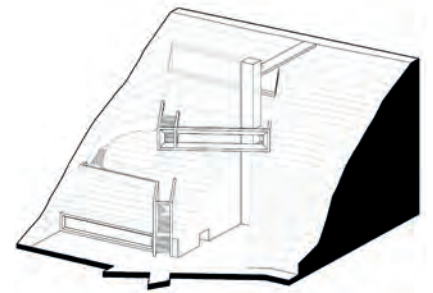
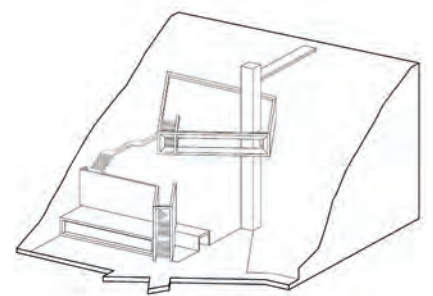
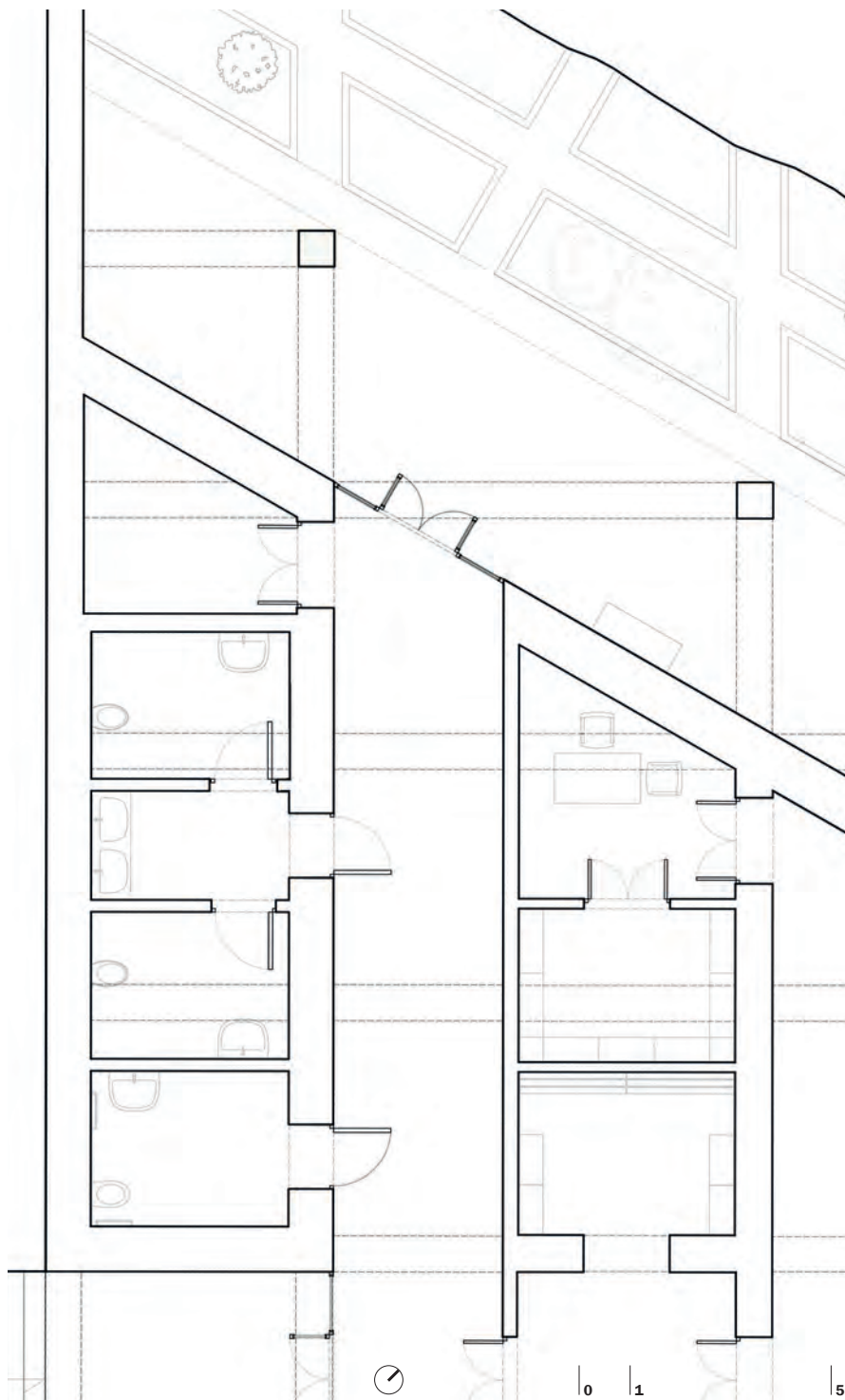
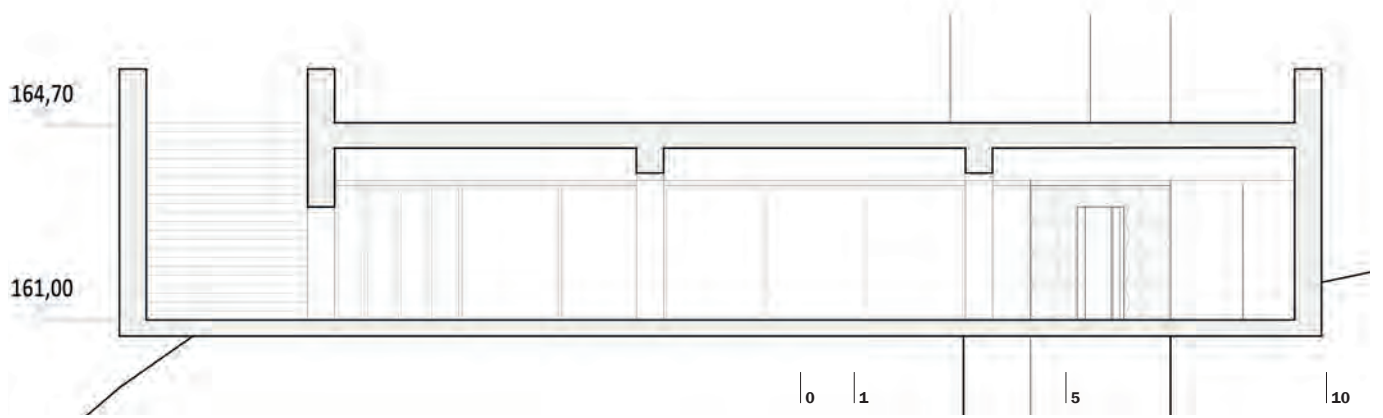


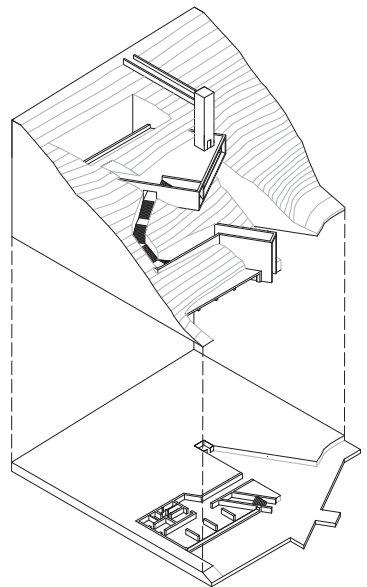
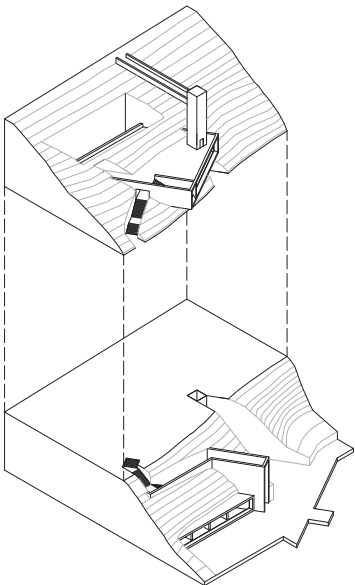
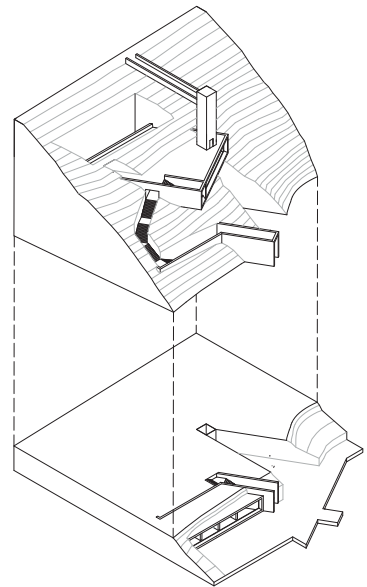
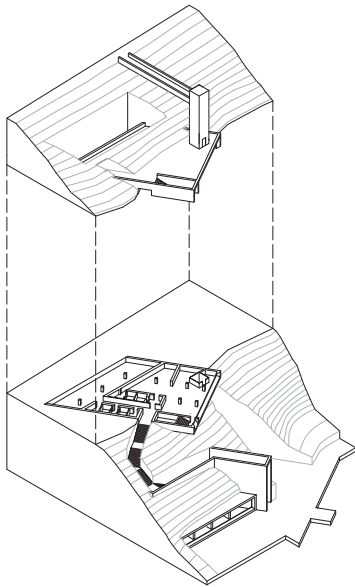
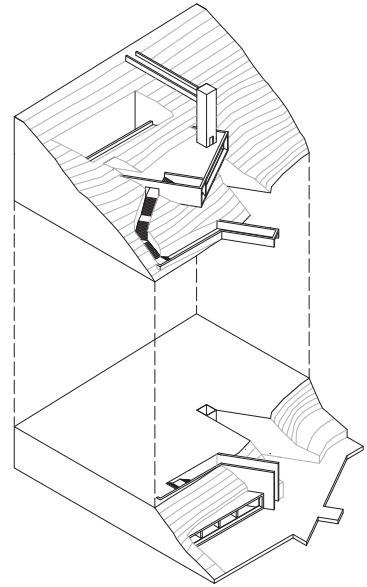
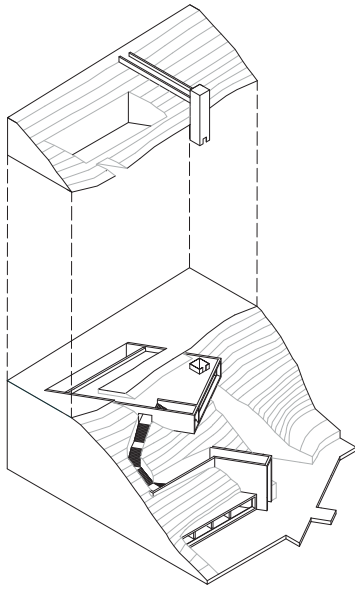
84

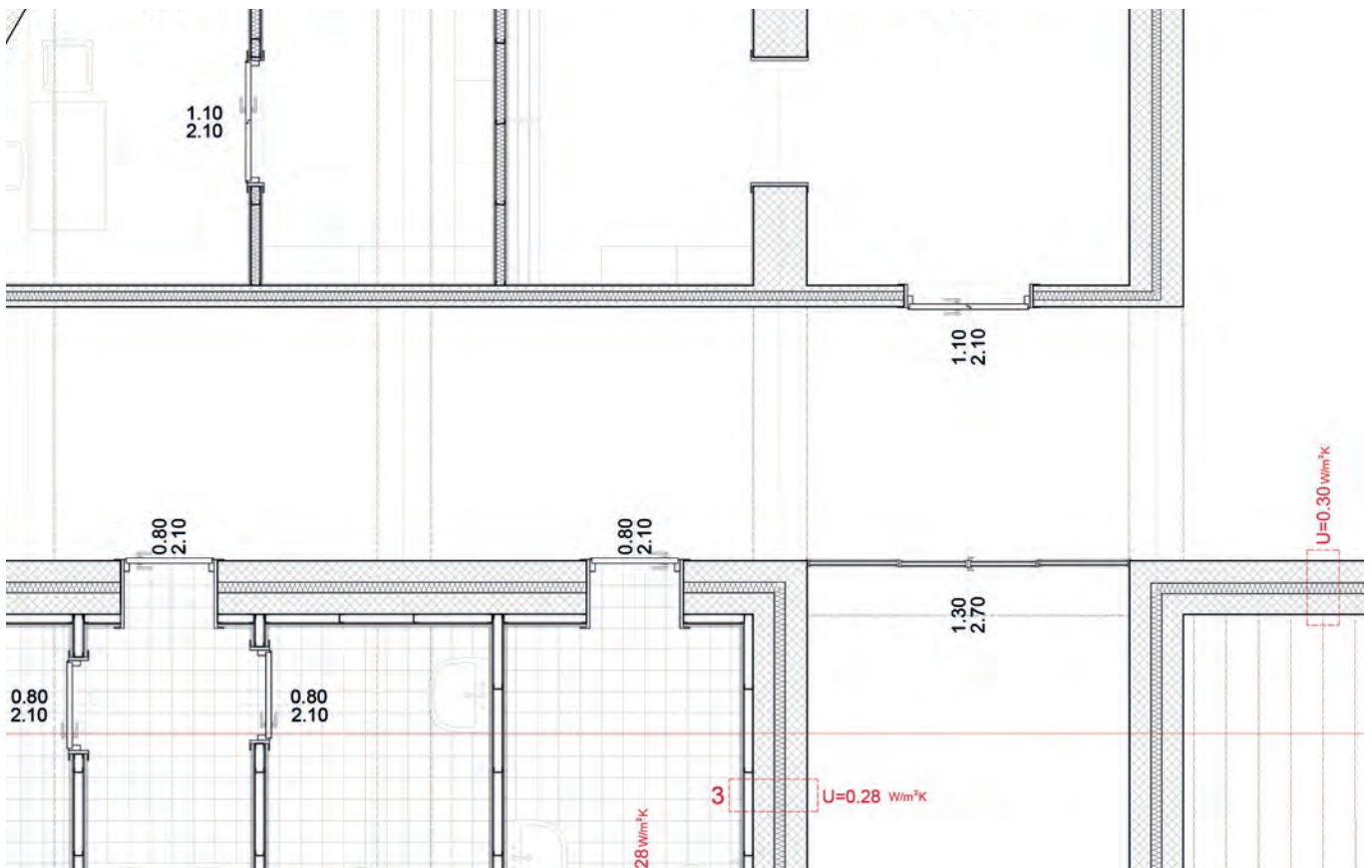
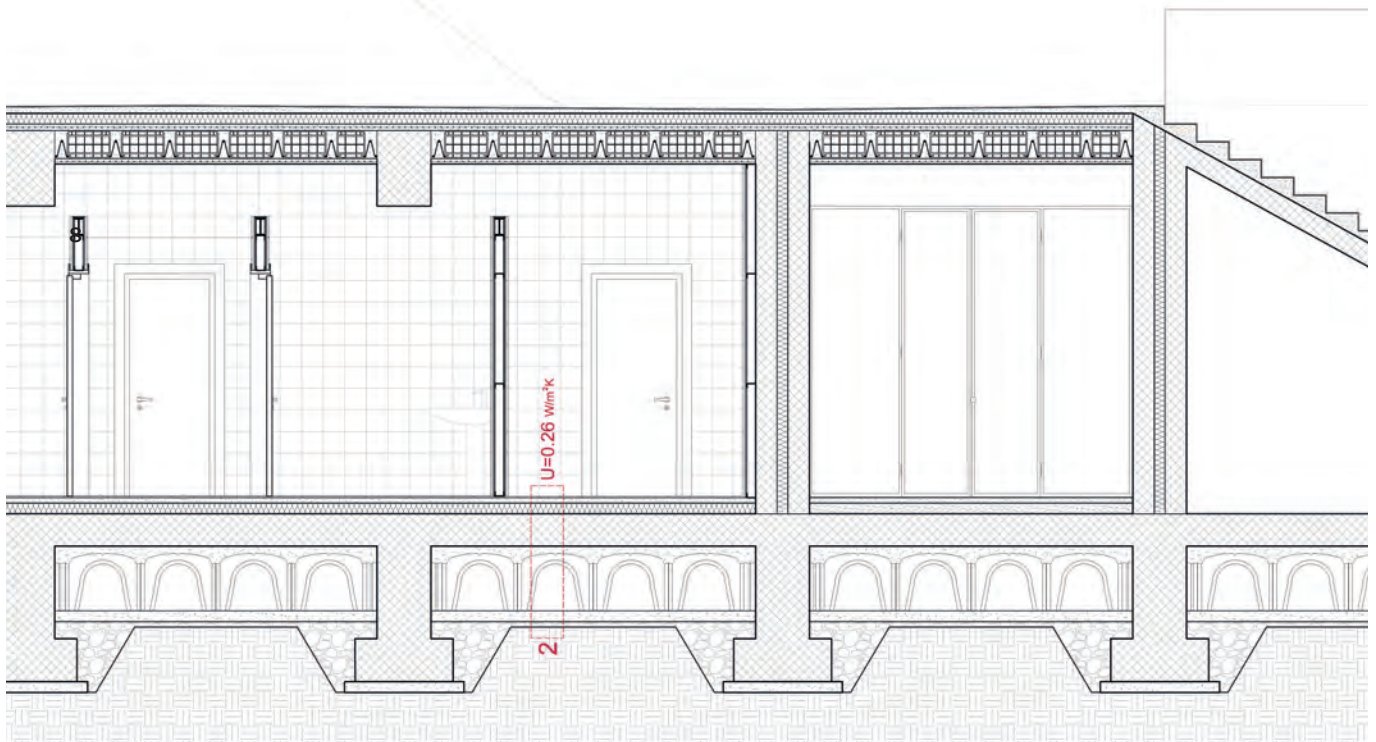


1. Hall
2. Changing rooms
3. Office
4. Storage

5. Toilets
6. Exhibition hall







The project is located on the western slopes of the hill of the municipality of Sarno, in Foce area. It is grafted into a pre-existing system of ascending along the hillside. The pre-existing system connects the “Parco Cinque Sensi” to a higher elevation, corresponding to the end of the aqueduct, which is flanked by an ascending path. Thus, the project envisions the construction of a pedestrian lift system, which complements the pre-existing one and has a dual development: a slow system, consisting of paths and escalators; and a fast system, consisting of elevators. The placement of the elevators in the overall system is the result of the desire to identify privileged viewpoints to the territory to ensure that the project is not only an element to look at when at the lower elevation, but also an element from which to look when at a higher elevation. This results in a series of vertical elements that are partially embedded in the hill and partially emerging, as opposed to horizontal elements made of reinforced concrete. The material used for the elevators is corten steel so that they stand out from the context. At the same time, the modules that make up the elevator have an opening that widens at the points where the view is open to the territory.

This reasoning is also taken up in the realization of a header element for the aqueduct, which develops from the pressistant widening, integrating a system of two buildings, following two different guidelines, placed on two different heights to the rising system. The first building, intended for spaces dedicated to the function of exhibitions relating to the aqueduct and to the Sarno river, almost entirely hypogeous, is placed at the altitude of the pre-existing square. The second, intended for the creation of a headquarters for associations and communities, “embedded” in the hill, is placed at a higher altitude and is accessed through a double system composed of stairs and elevator. The project elements thus become a Landmark in the landscape.

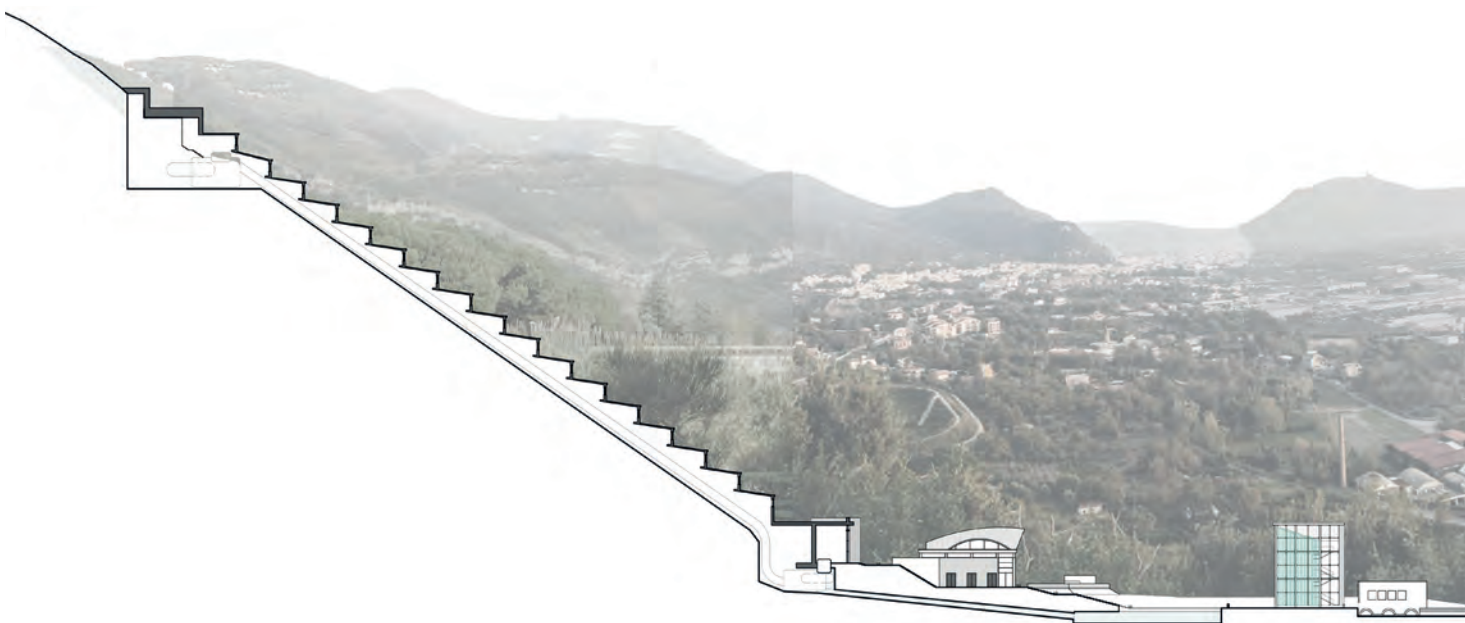
SJRIA IMPROTA - RI|ACTIVATE THE RIVER PARK. A WATER MUSEUM
RIATTIVARE IL PARCO FLUVIALE. UN MUSEO DELL'ACQUA

89





GENERAL STRATEGY



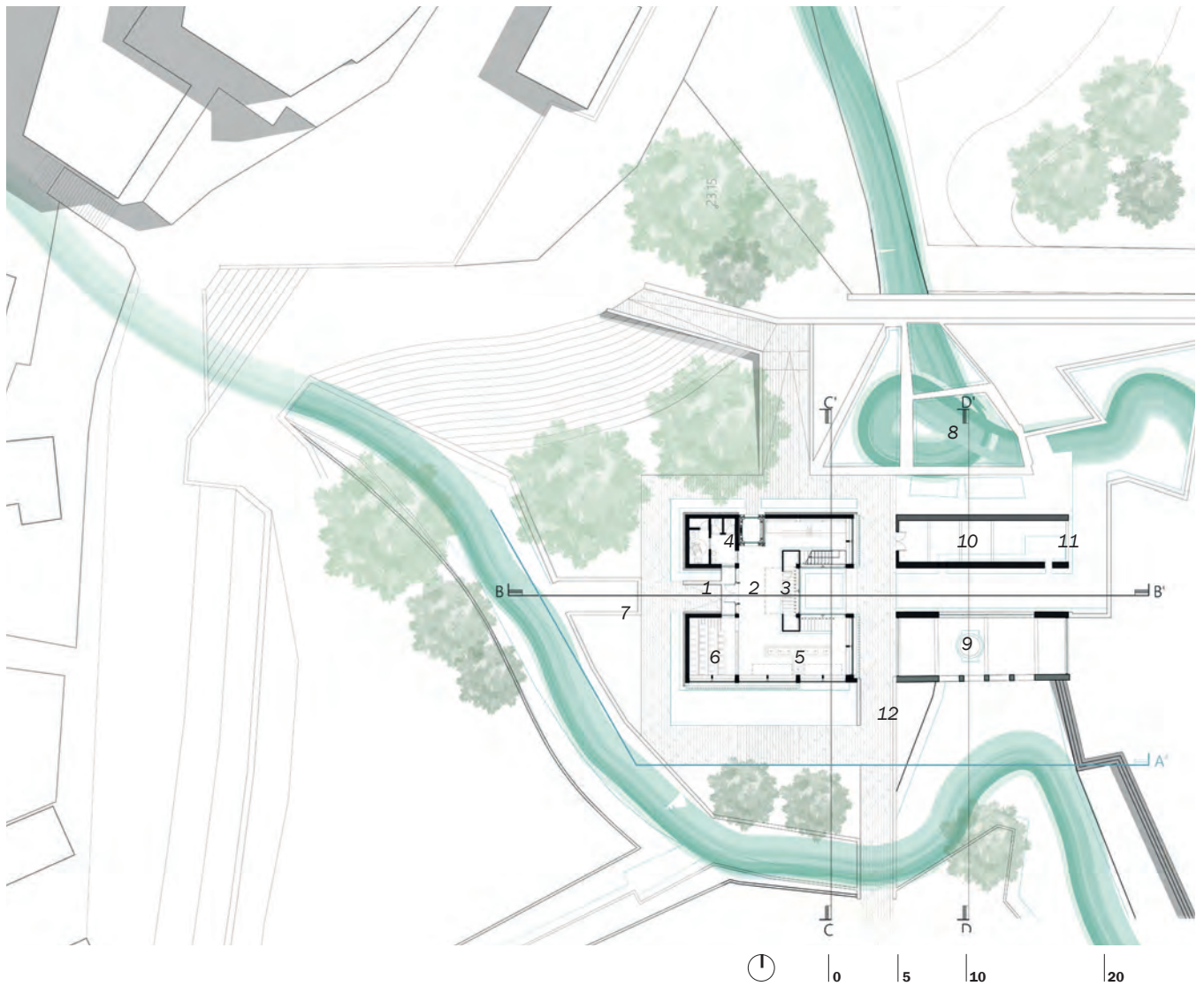
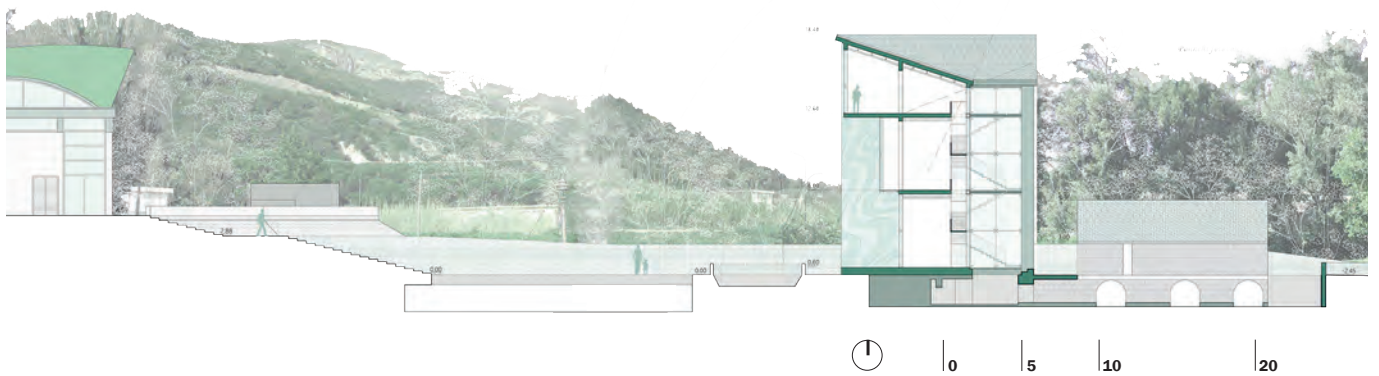
The river corridor, in the context of strategic planning of the city plan, reveals itself as a great resource capable of reconnecting the natural heritage of biodiversity of the mountainous agro-forestry area and the agricultural one of the plain of the Sarno river.

The project theme is located north-west of the municipality of Sarno, in the hamlet of Santa Maria in Foce. The area is configured as one of the main water junctions of the Sarno river, together with the source of Rio Palazzo and Santa Marina in Lavorate. This is articulated close to the mountain range and below the aqueduct, re-emerging towards the surface for the first time in the Parco Cinque Sensi.

The area has already aroused strong interest at the first site inspections, even if this is hidden from the public by visual barriers. The former twentieth-century reinforced concrete aqueduct soars upwards, like a large scar on the mountain ridge, indelibly marking the landscape. At the foot of the aqueduct is the Park, an area of just over two thousand square meters, whose history has been shaped by water.

The project deals with the reactivation of the nineteenth-century function of the park and its construction as a hydroelectric micro-station, capable of responding to the users of the park in its activities outside and inside the building, using the aqueduct as a strong point and new tool of energy supply, and expanding, thanks to a series of design choices for the park (grounds and permeable tanks), and for the water museum (the impluvium, the washhouse and the collection station), the expansion of the river, and the interaction with the natural resources of the area.

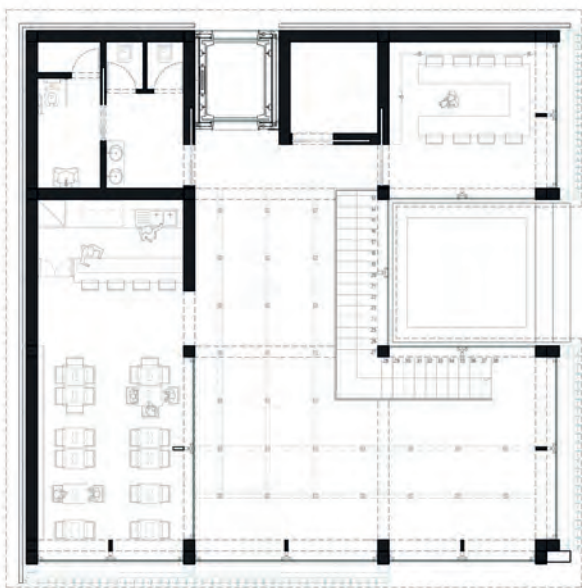
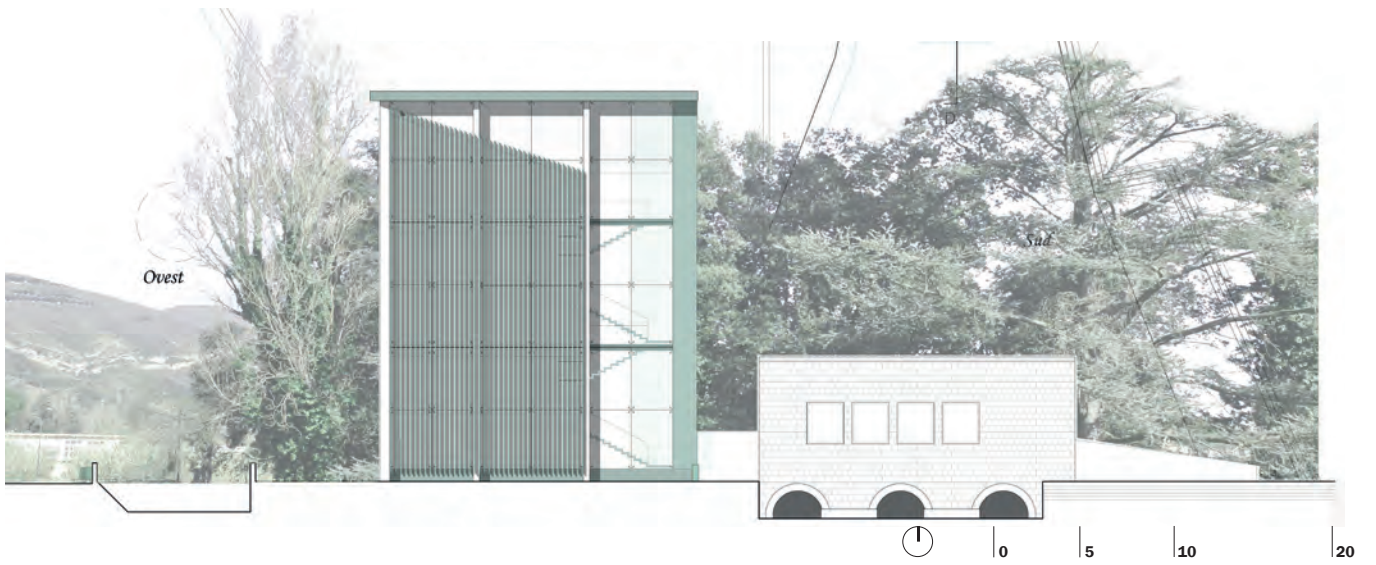




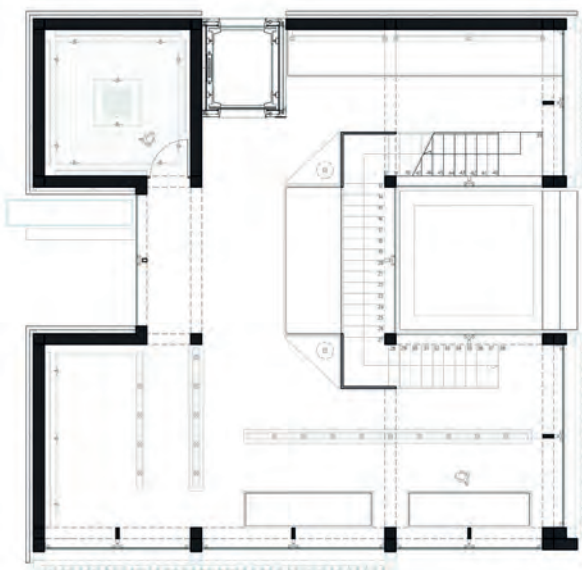
1. Entrance
2. Lobby
3. Welcome desk
4. Toilets

5. Exhibition space
6. Cinema hall
7. Entrance garden
8. Water tanks

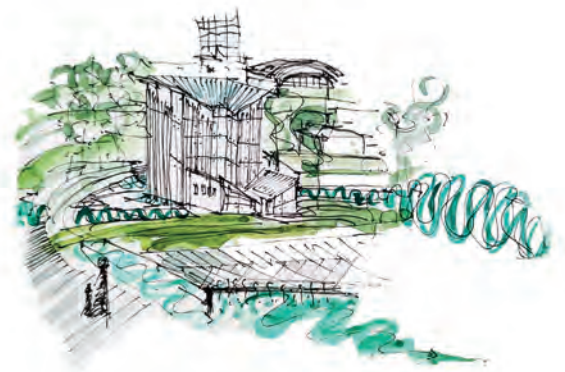
9. Historical mill
10. Technical room
11. Water management room
12. Connections



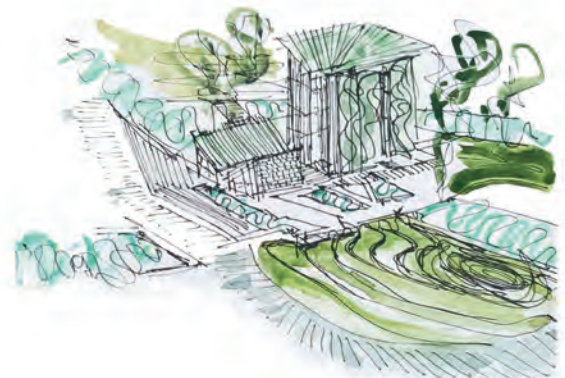
Second floor

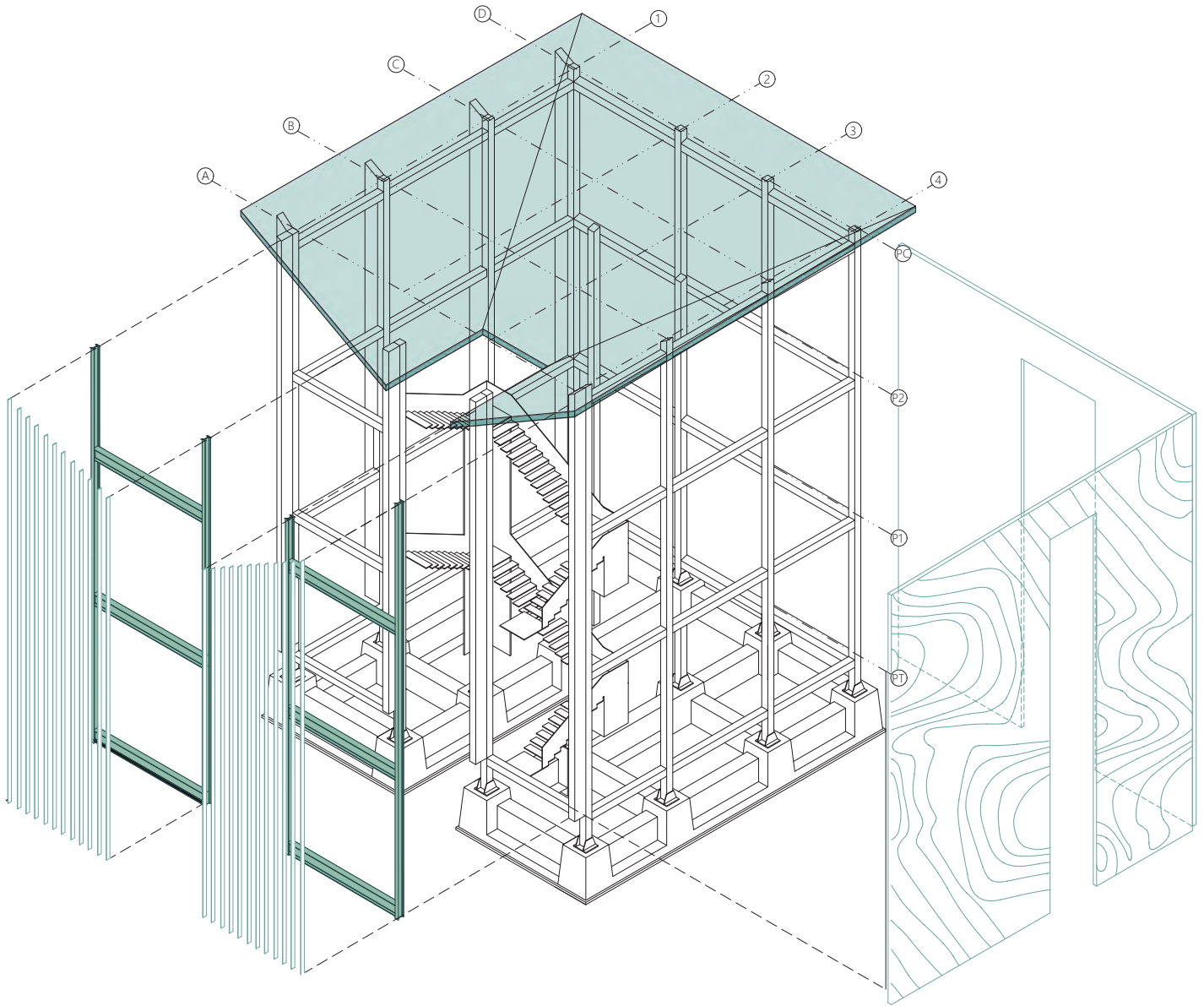


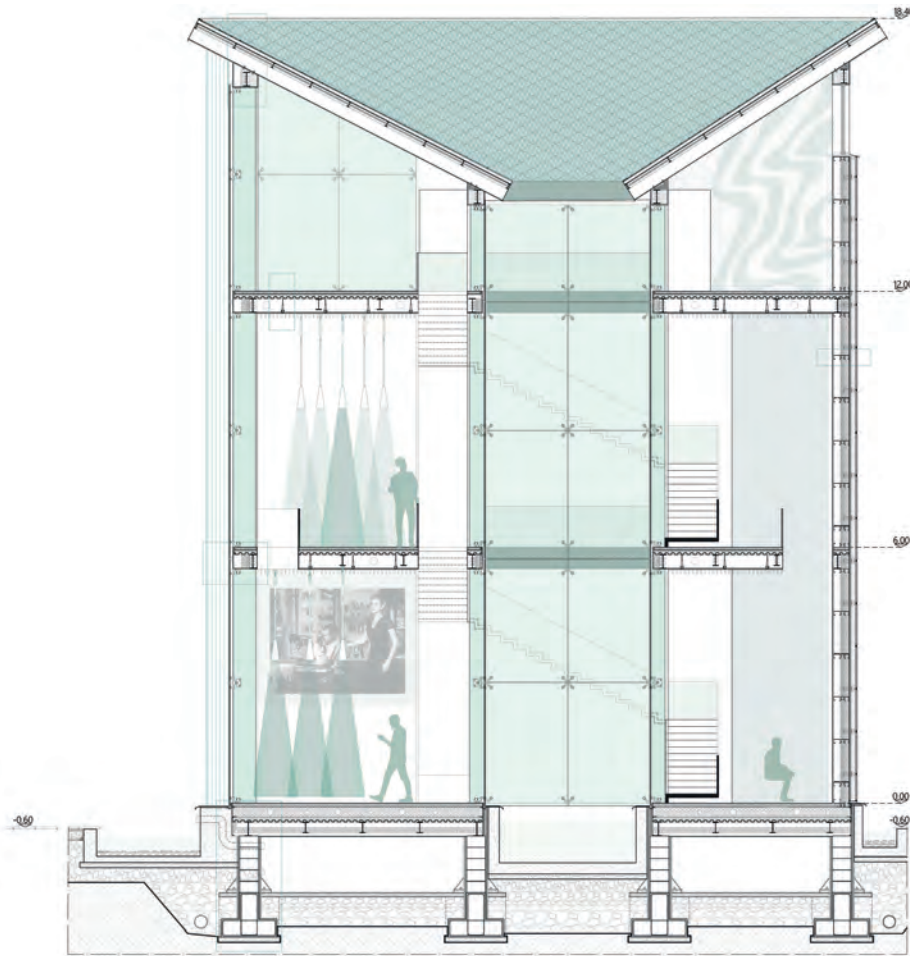
First floor



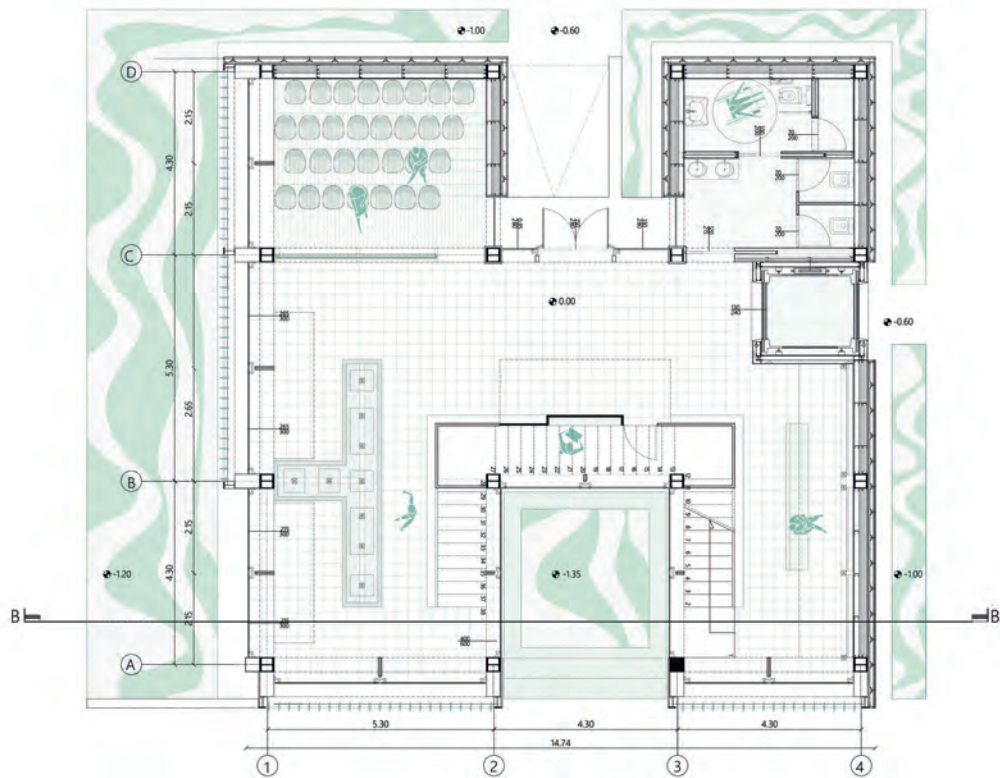
93







95



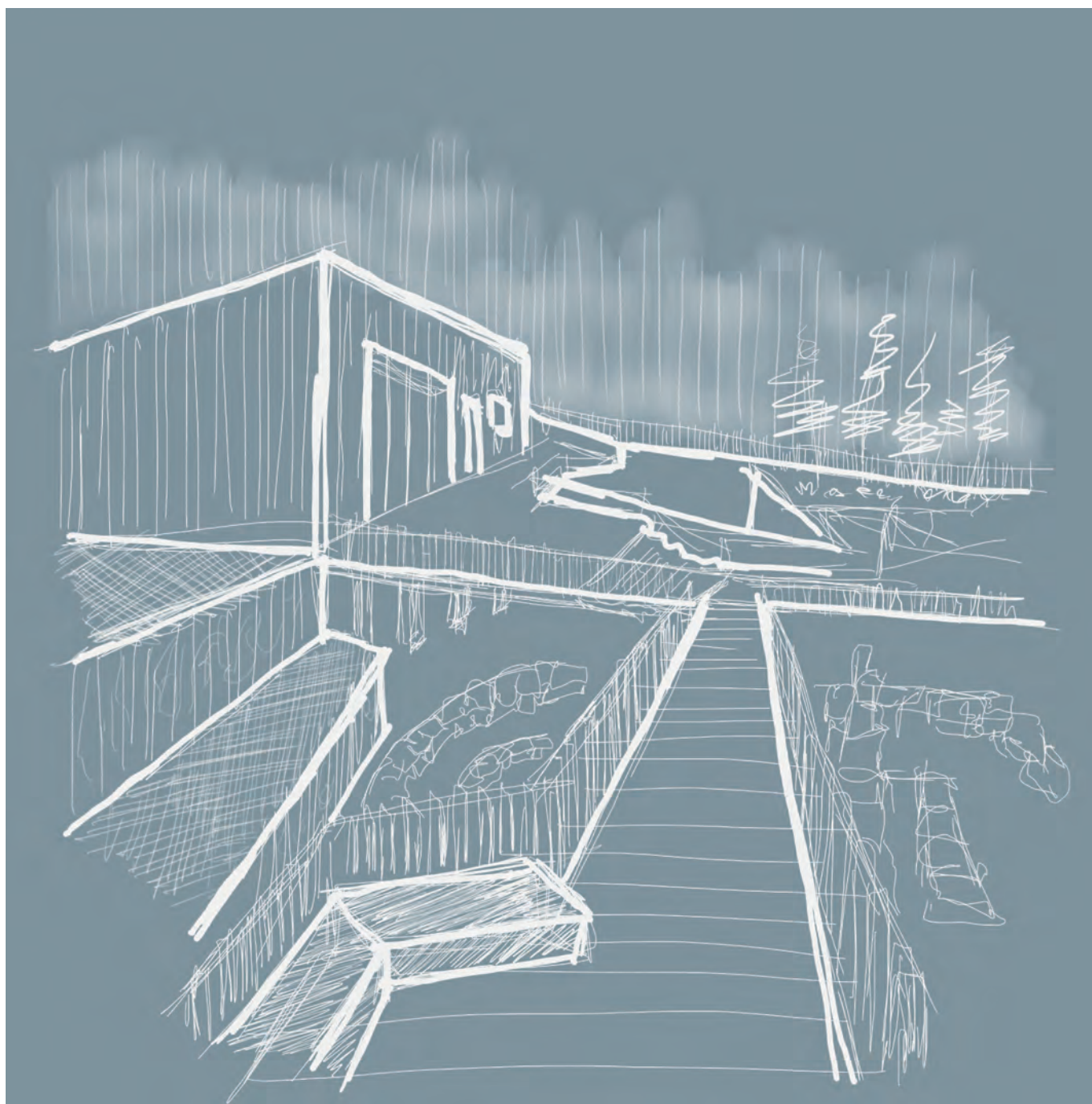
INDOOR/OUTDOOR RELATION SCALE 1:50

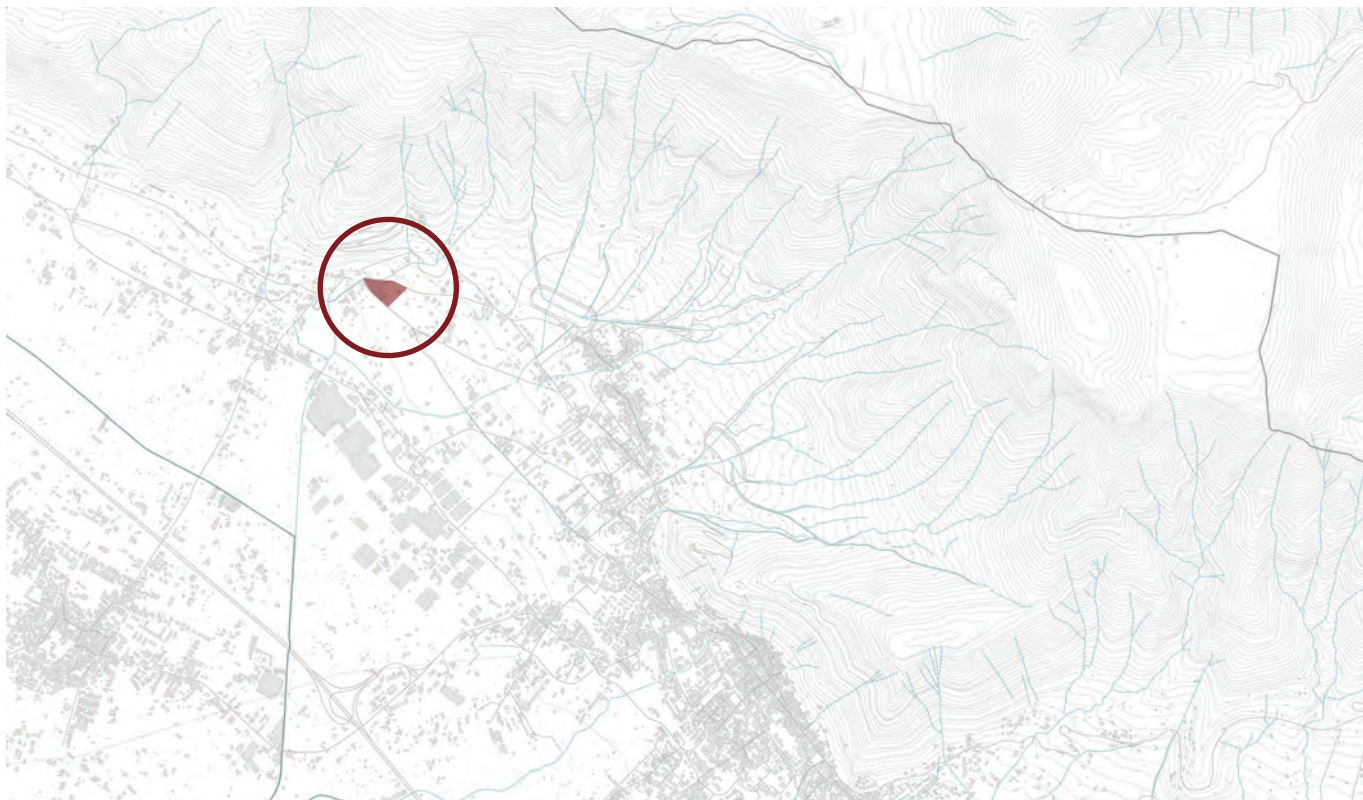
In the project “Ri|Activate The River Park. A Water Museum”, the relationship with the pre-existence is continuous and indissoluble. Hence the choice is to recover the former hydroelectric plant, as a control station for the influx of rainwater and hydroelectric energy, but also as a museum space. The first body will occupy a flat area of about 270 mq towards the end of the old building, partially replacing it and taking the form of an impluvium rainwater storage tower, with a 30 mc storage tank. The building, intended as a water museum, will follow the traces of the old factory, grafting into a structural steel network. The museum project develops with a tower conformation: the building is spread over three floors with a square plan, each of which is glazed along the two sides facing south, suitably shielded with steel slats. The structural mesh is repeated with a regular pitch between 4.30m and 5.30m, to form a network of beams and pillars which incorporate the ancient well and define it as a new impluvium and allow the rooms to develop autonomously but open and communicating with each other.

96 Each environment, with the exception of the services and refreshment points, develops around the impluvium, set back from the edge of the south-east elevation and completely glazed, into whose tank, at the base of the building, rainwater is conveyed, thanks to the steep slope of the roof.

The design choice of using steel and glass is motivated by the need for museum activities to have contact with the outside, with natural light, with the green foliage of the park and with water, whose outflow borders the base of the building through channeled paths above and below the visible surface, like a modern moat which directs the path of the user, leading to discover the tower on all its sides until he reaches the north-west entrance. The tower building is in constant relationship with the park, which has been designed throughout its external area, from the gardens to the ponds. The transparency and lightness of the materials immerse the user in a walk between the exterior of the park and the retrospective interior of the green context. Every sense of the user is guided by the flow of the water.

ALESSANDRO VERGATI - SARNO NEW ARCHAEOLOGICAL PARK
IL NUOVO PARCO ARCHEOLOGICO DI SARNO

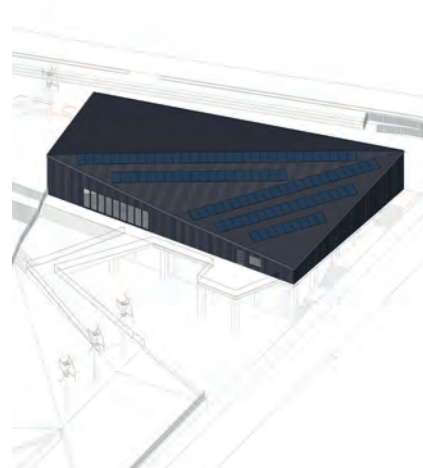
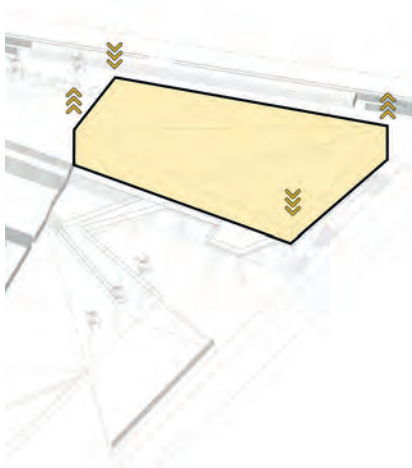
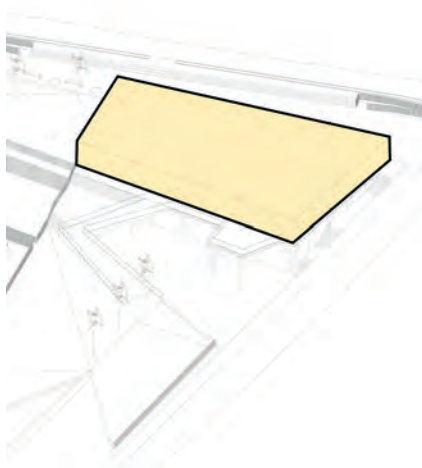


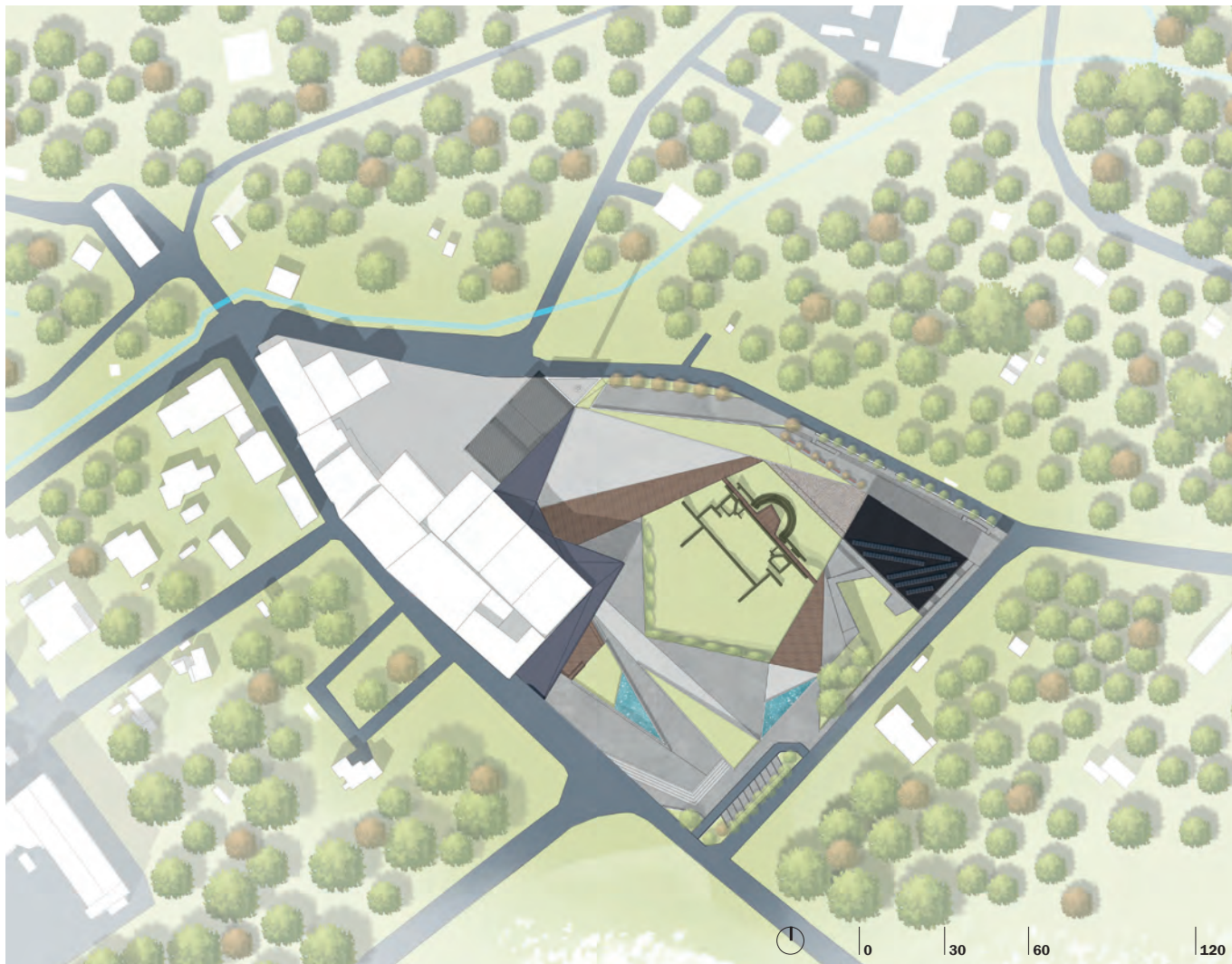


GENERAL STRATEGY

The goal of the project is to upgrade a currently unused and abandoned area in which there are remains of important archeological findings and make it become a new nevralgic center of the city outside of the historical center.

98





99

URBAN & ARCHITECTURE FRAMEWORK

Program
urban park, social and culture center,
laboratory

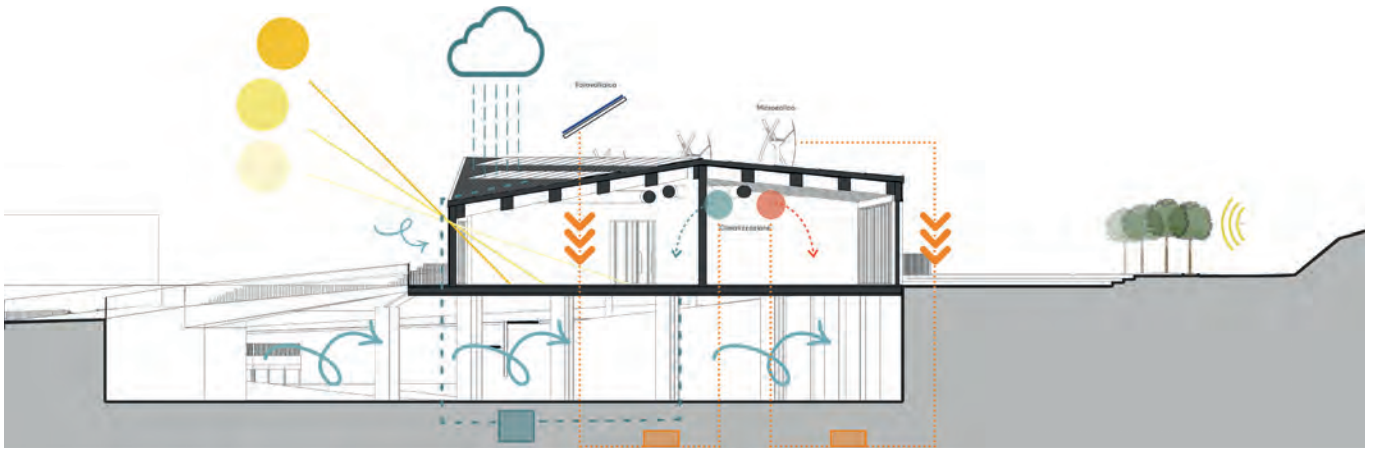
Covered area	2.431m ²
Outdoor area	14.790 ²
Above-ground floors	1
Built volume	420m ³
Estimated cost	2.830.000,00€

The context is that of a seldom-frequented suburb. There are no services and the area is dislocated from the historic and consolidated center. However, the area has great potential because of the rich history that characterizes it and the strategic position of connection between Sarno and Palma Campania, as well as the presence of one of the source of the Sarno river. The area is subject to archaeological restrictions due to the remains of a Hellenistic theater, along with many other findings collected at the National Archaeological Museum of Sarno.

The project involves the construction of a park that connects the area to the

surrounding streets, with bike sharing and food services. A museum building is designed inside the abandoned factory at north-west while a new architecture located at north-east will host an operative archeology laboratory and various multifunctional spaces, co-working area, teaching room and a library. The project is surrounded by accessible roads and lots of vegetation which has a central role for the context. Very important is the respect of the ground about permeability because the hydraulic risk is high. The shape of building helps the integration with the landscape and the functional use of passive technologies.

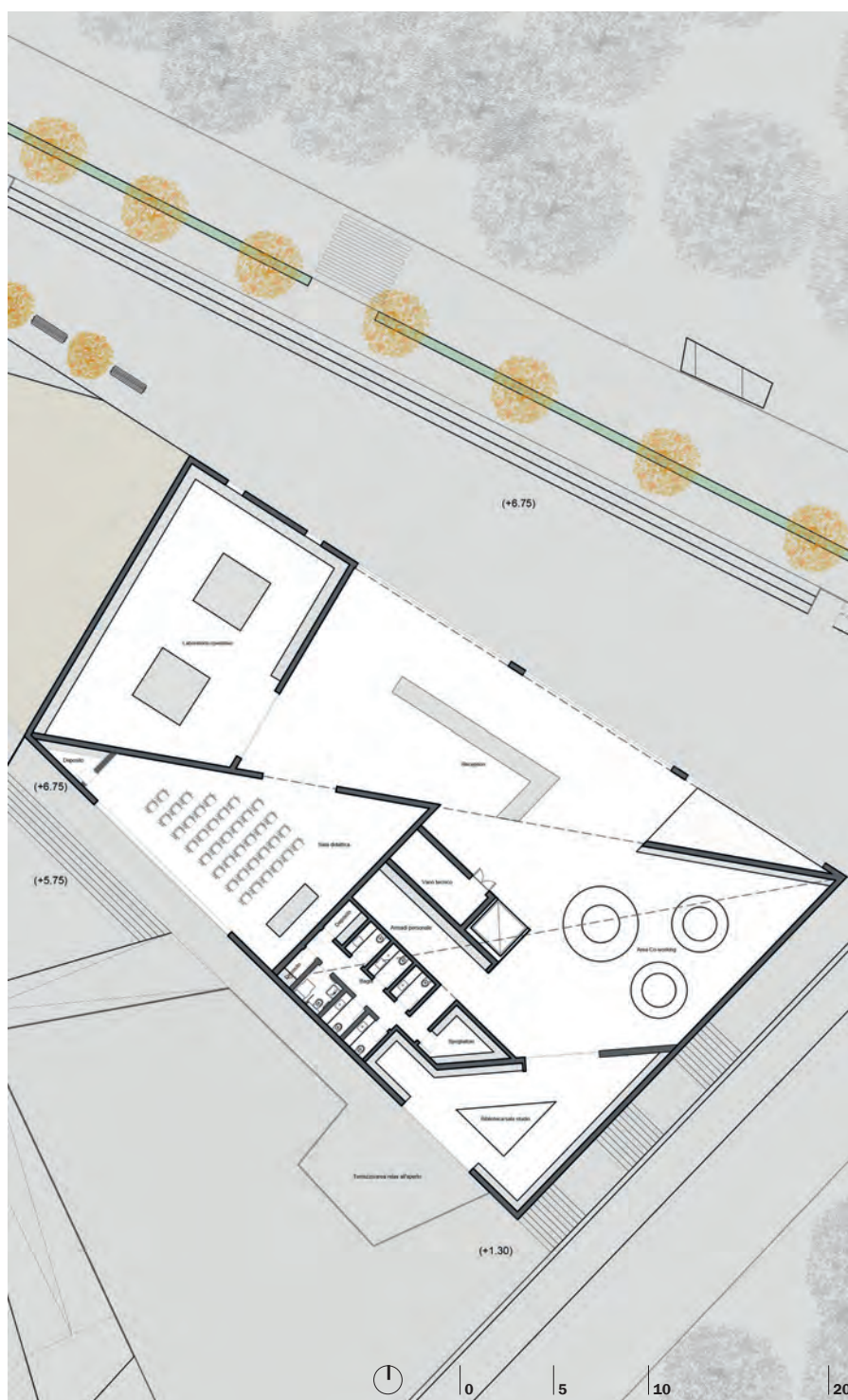
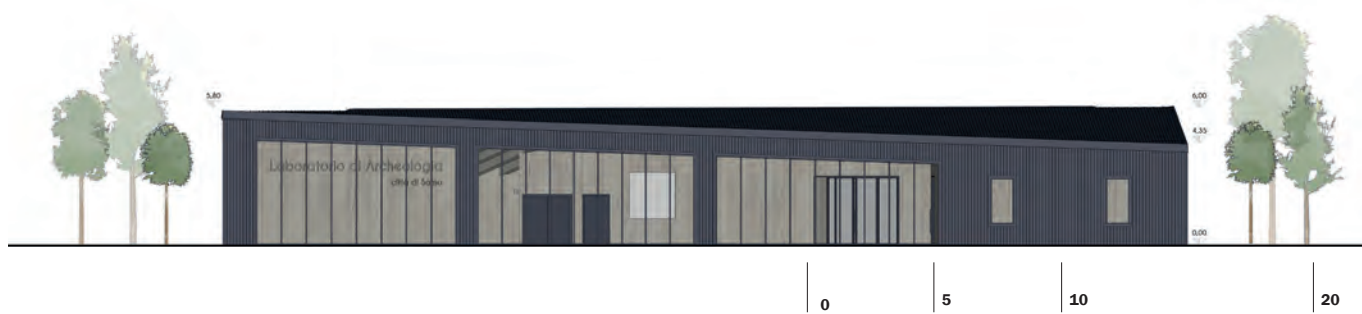




100



- | | |
|------------------------|---------------------------------|
| 1. Services | 5. Hellenistic theatre |
| 2. Covered dining area | 6. Parking entrance |
| 3. Park access | 7. New archeological laboratory |
| 4. Museum | 8. Terraces |



101







0 1 3 5



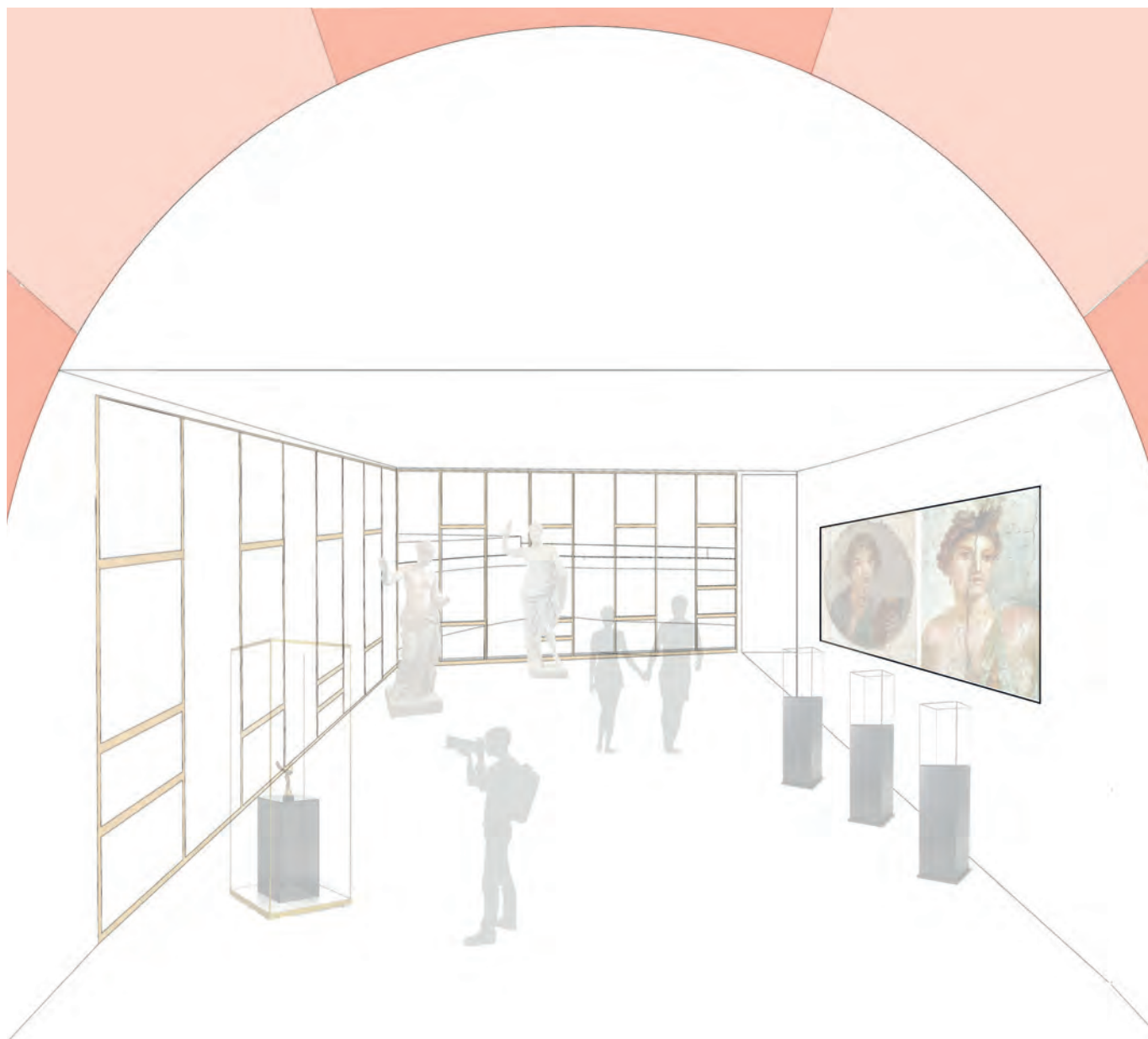
0 2 5 10

INDOOR/OUTDOOR RELATION

The project for the new archaeological park of Sarno is located in the “mouth of the Sarno” area, north-west of the historic center of the city. The intervention involves the redevelopment of a currently abandoned area in which there are the ruins of a Hellenistic theater and an abandoned industrial building. The aims of the intervention are multiple and vary according to the reference scale. From an urban point of view, the redesign of an abandoned area aims not only at the more banal (but no less important) aspect of giving new life to a place that is currently not used and is considered as a waste-scape, when it could be a point of enhancement of the territory. More than this, there is the overall idea of reactivating a nerve center for the city of Sarno which could restore interest in the river mouth area with new equipment and attractions, expanding communication with nearby cities and implementing sustainable mobility. From a historical point of view, giving due consideration to archaeological works can only bring prestige and value to the city, becoming a possible area of interest not only for those working in the field of archeology, who could take advantage of a dedicated space, but also for the entire community of Sarno and its surroundings, being able to visit fascinating finds of immense cultural value, as well as solving a practical problem of having more space to dedicate to the display this heritage.

The central point of the project is the operative archeology laboratory where experts can work directly on the finds, where it is possible to organize events in the multipurpose spaces and have gathering places like the library.

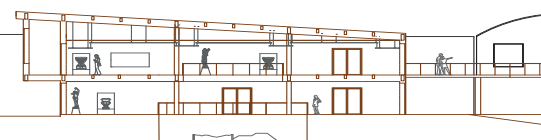
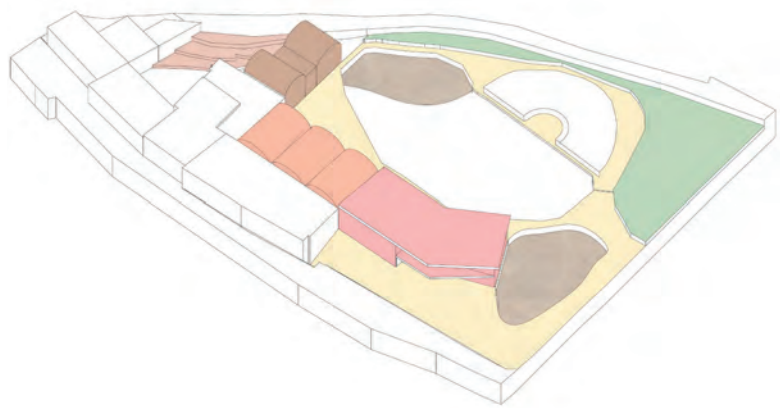
ALICE RUGGIERO - ARCHAEOLOGY IN PROGRESS
ARCHEOLOGIA IN DIVENIRE

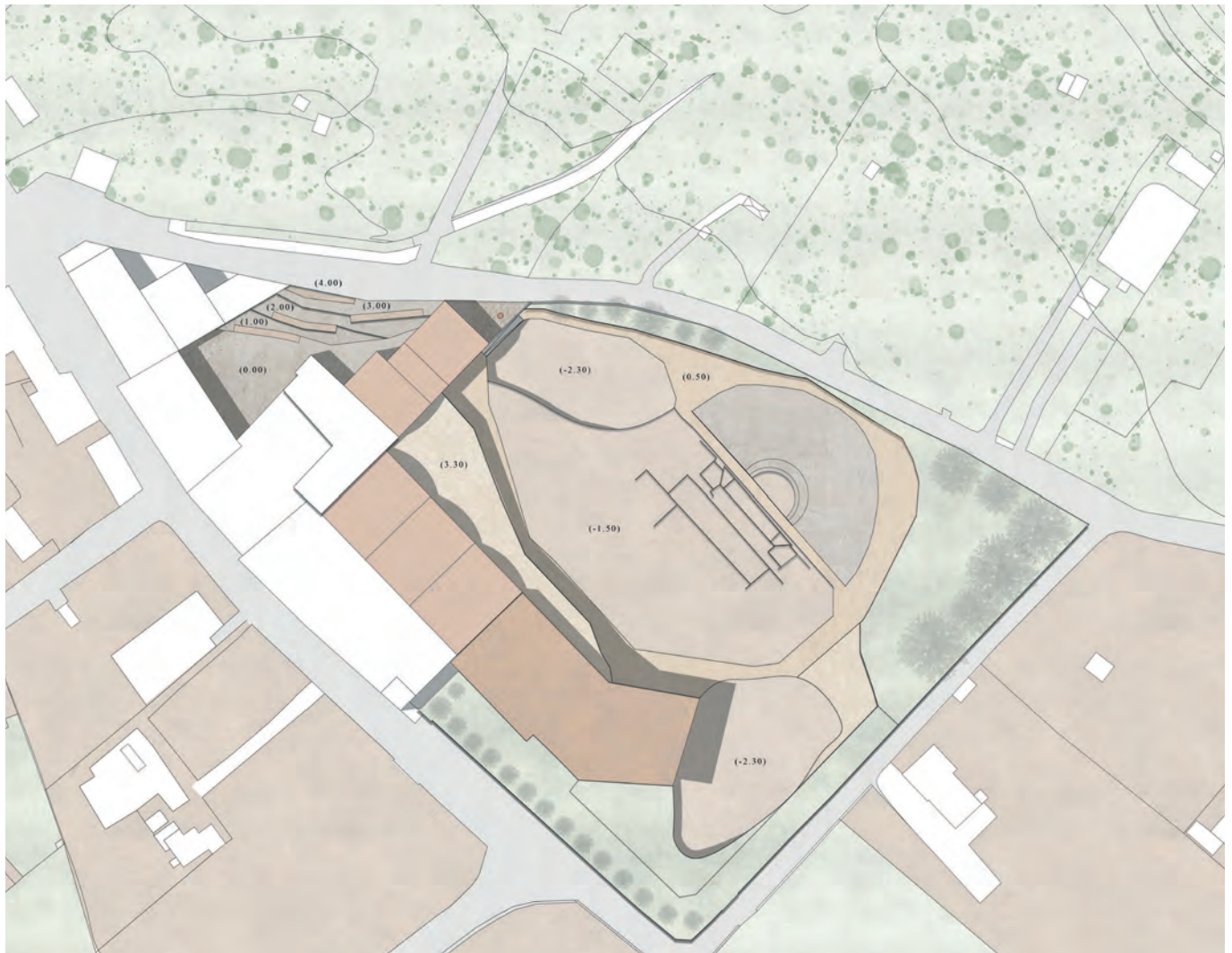




GENERAL STRATEGY

The area covered by the project is the area of the Hellenistic Roman theatre of Sarno. The theatre is located in a peripheral area of the municipality, precisely in the area known as Santa Maria in Foce. Due to its location, as a marginal site in relation to the centre of Sarno, the site has been left to neglect.





107

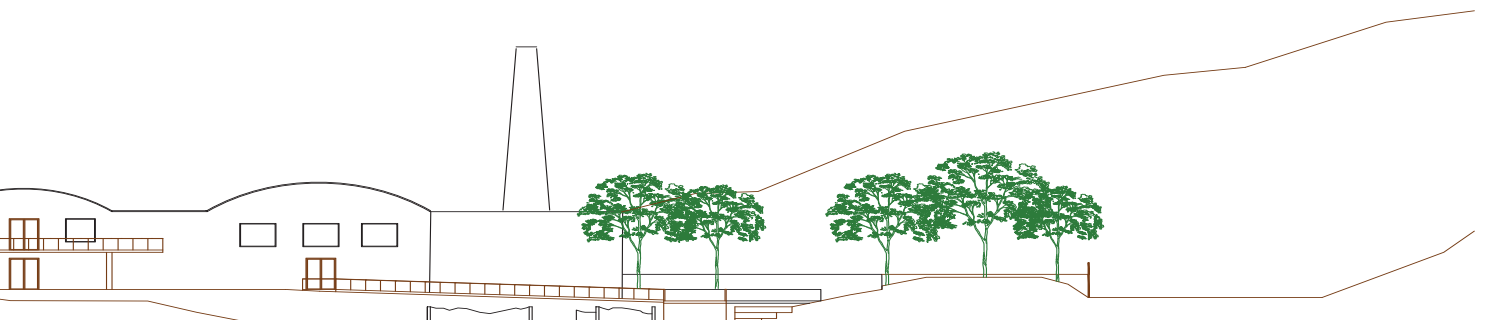
URBAN & ARCHITECTURE FRAMEWORK

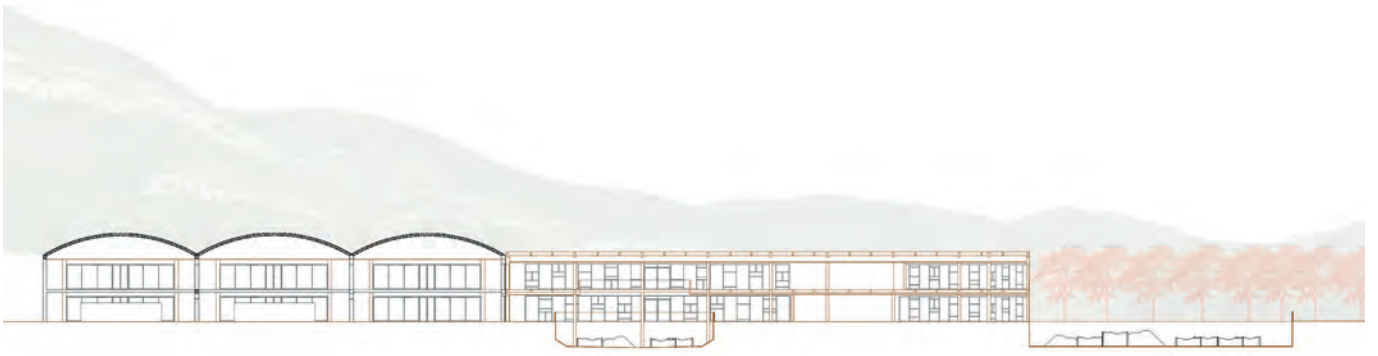
Program
archaeological urban park,
exhibition center

Covered area	996,5m²
Outdoor area	11460m²
Above-ground floors	2
Built volume	9000m³

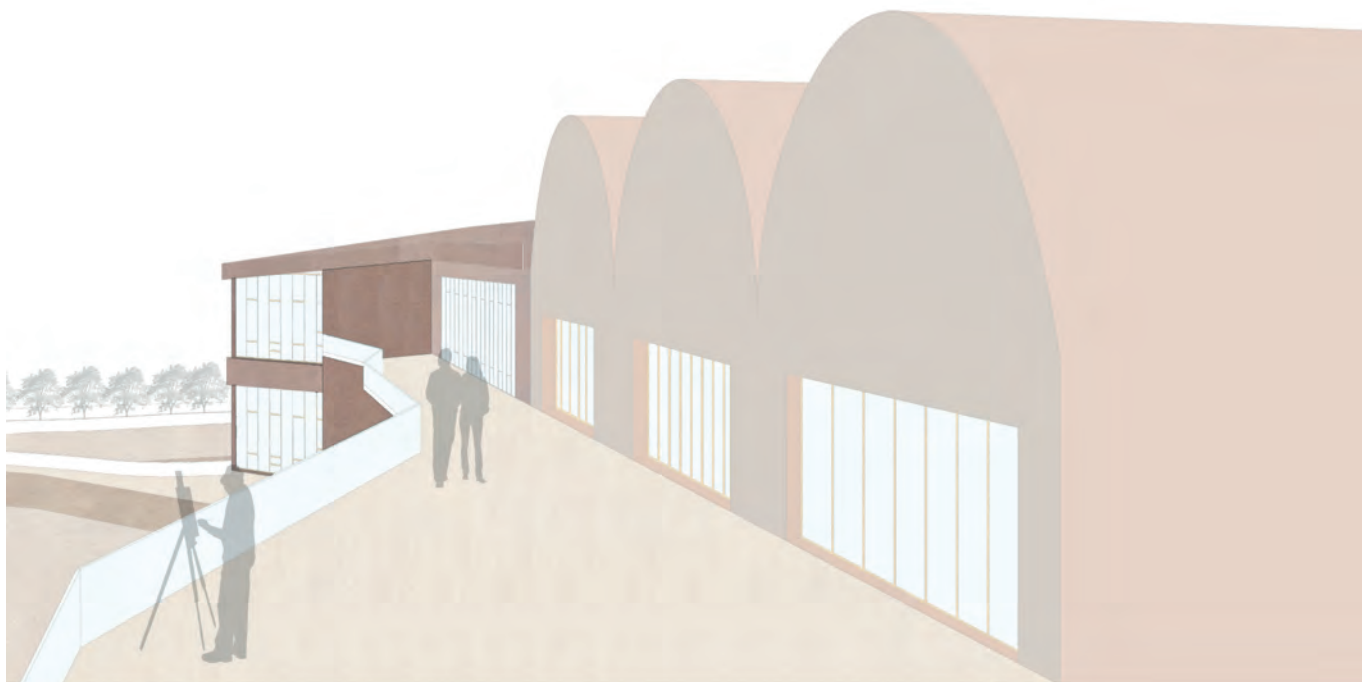
The archaeological site of the Hellenistic-Roman theatre, the first phase of which dates to around 100 BC, was discovered in the 1960s following an excavation for the construction of the STAR industry. The area was most probably part of a votive sanctuary dedicated to the Goddess of Abundance, a hypothesis supported by the discovery of numerous artefacts from a votive tomb. Currently visible of the theatre is the cavea, the stage, the two entrances and the proedria with tuf blocks forming the first row, with the back and side supports representing a winged figure.

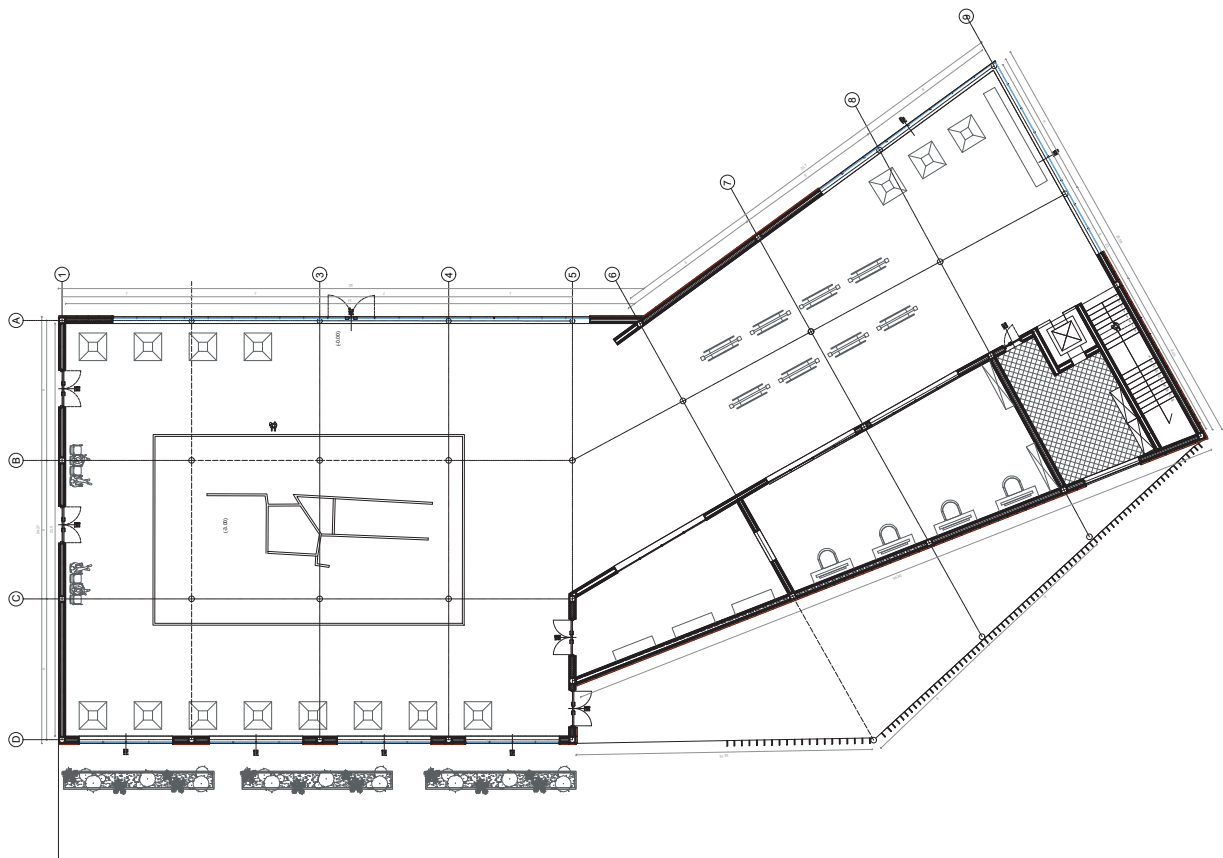
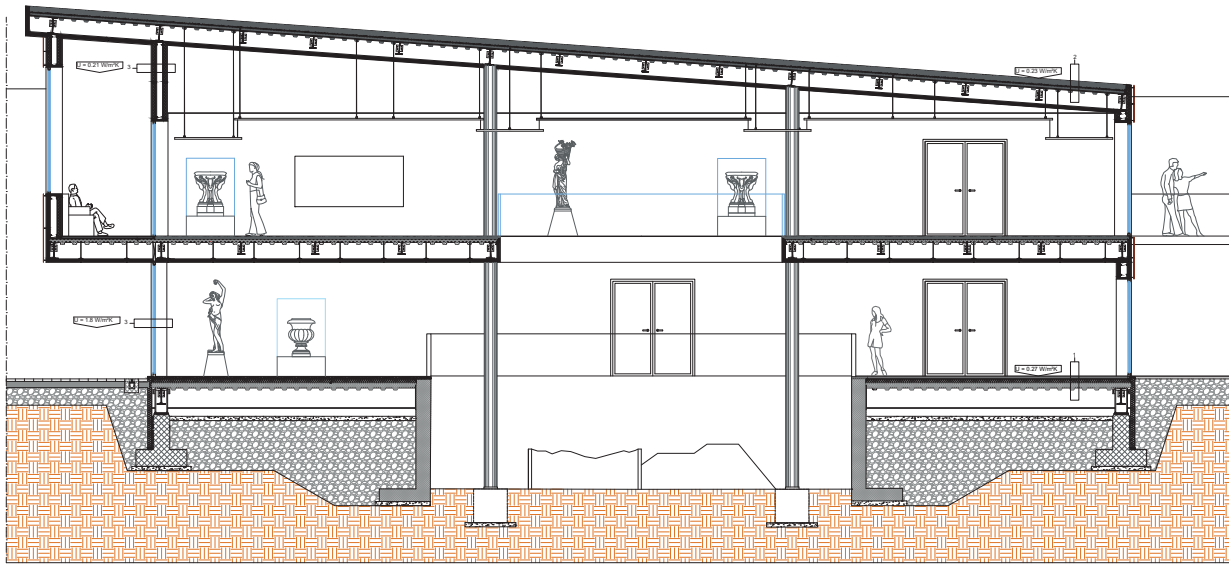
One of the points of the project starts from the abandoned industry, not to see these buildings to be eliminated, but as opportunities from which to start again, to create a sort of link between different times. For the buildings in question, therefore, where possible, recovery work is envisaged, through a consolidation and reutilisation of the existing structures, making them an integral part of the archaeological park. To complete the project, in addition to the reuse of the existing building, a new construction is designed.











INDOOR/OUTDOOR RELATION SCALE 1:50

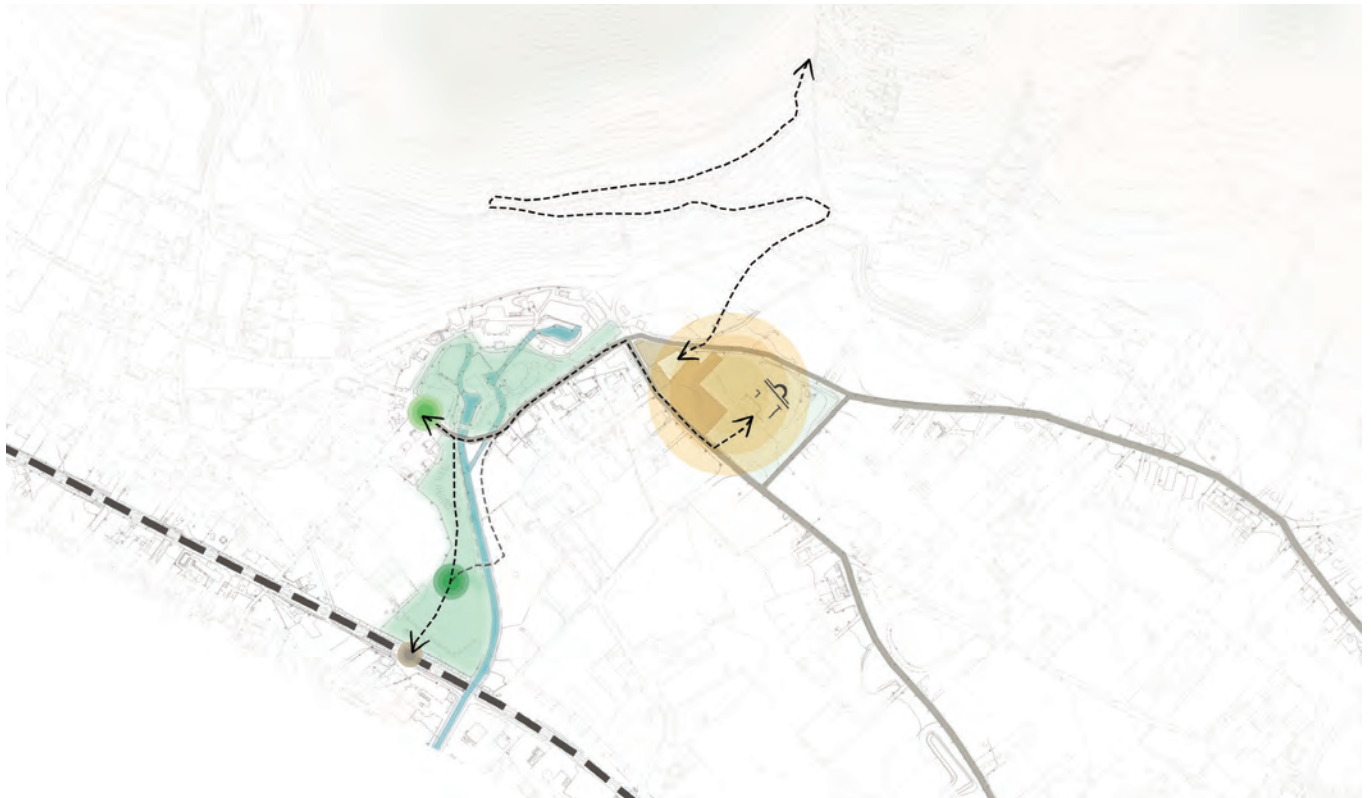
On an urban scale, the project area is at the centre of a nevralgic node of Sarno, being directly connected to the main axis of the municipality, which traces the ancient via Popilia of the Roman era and leads directly to the historic centre of the city. Moreover, the area of the theatre is located near several naturalistic areas, such as the Parco Cinque Sensi and the Rio Foce, which strategically allows the park to be part of a broader design, of a true cultural nature trail, which crosses the entire municipality and allows it to touch all of Sarno's most important places.

The area where the theatre stands is characterised by a particular morphology. In fact, the theatre is now surrounded by industrial buildings, several of which are disused. One of the points of the project starts precisely from this element, that is, not to see these buildings simply as disused and degraded to be eliminated, but as opportunities from which to start again, to create a sort of link between different times, with a path that holds them together, enhancing the positive aspects of each. For the buildings in question, therefore, where possible, recovery work is envisaged, through a consolidation and reutilisation of the existing structures, making them an integral part of the archaeological park.

To complete the project, in addition to the reuse of the existing building, a new construction is designed, with the intention of musealising the new archaeological excavations in situ, breaking down the barrier between indoors and outdoors, creating a unique itinerary, characterised by the alternation of open and closed, covered and uncovered spaces.

DAVIDE APREA - SARNO VALLEY EXHIBITION HUB
L'HUB ESPOSITIVO DELLA VALLE DEL SARNO





GENERAL STRATEGY

The understanding of Sarno and of the project area allowed the recognition of the centralities of this intervention, including the Rio Foce river park, the Cinque Sensi nature park and the archaeological area, fulcrum of the entire design project.

114





URBAN & ARCHITECTURE FRAMEWORK

Program
exhibition hub, playground,
social and culture center

Covered area	2975m ²
Outdoor area	13350m ²
Above-ground floors	2
Built volume	14900m ³
Estimated cost	€4702630

The study of Sarno's archaeological area and its history guided the various design processes in order to achieve a project that would meet society's needs.

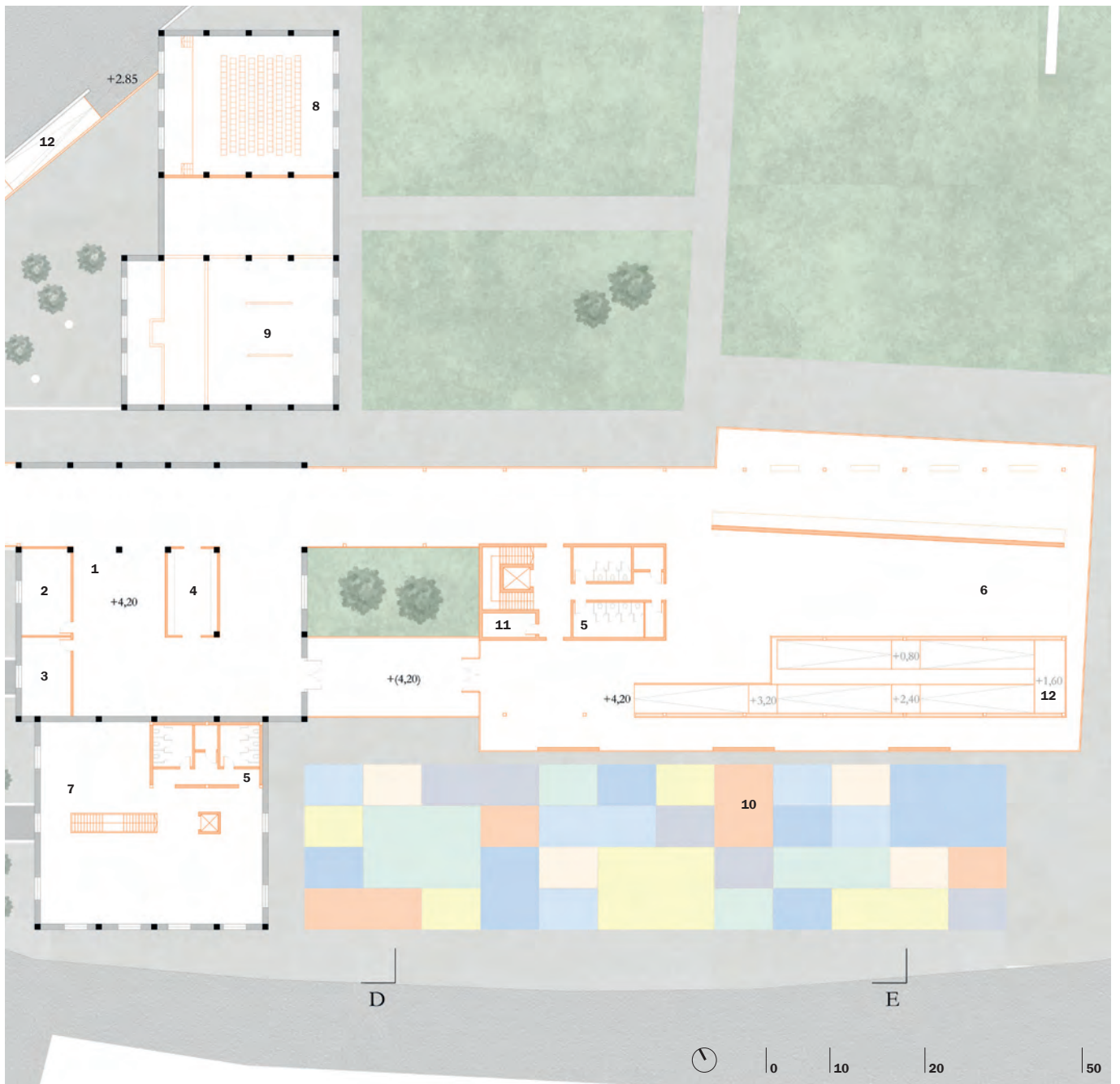
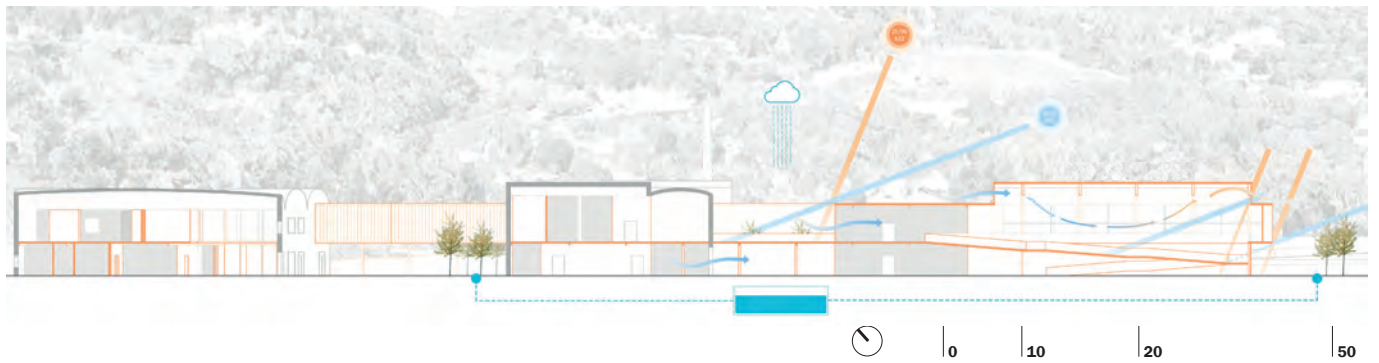
The new building was designed following the layout of the remains of the Hellenistic Roman theatre in order to create a strong relationship between the present and the past. The upper floor of the exhibition area juts out from the lower floor so as to make this connection with the ancient even stronger.

Another key point of the project is to give open spaces back to the inhabitants, that

can be meeting, leisure and easily accessible places.

These spaces are made up of two large squares, a trapezoidal one overlooked by the bar and restaurant, and from which the exhibition route is accessed, and a rectangular one used as a playground, which relates with the street and with the educational workshops located next to it. Last but not least, the archaeological park, which now becomes easily accessible and visitable, thanks to paths guiding the visitor from the street level to the orchestra of the Roman theatre.

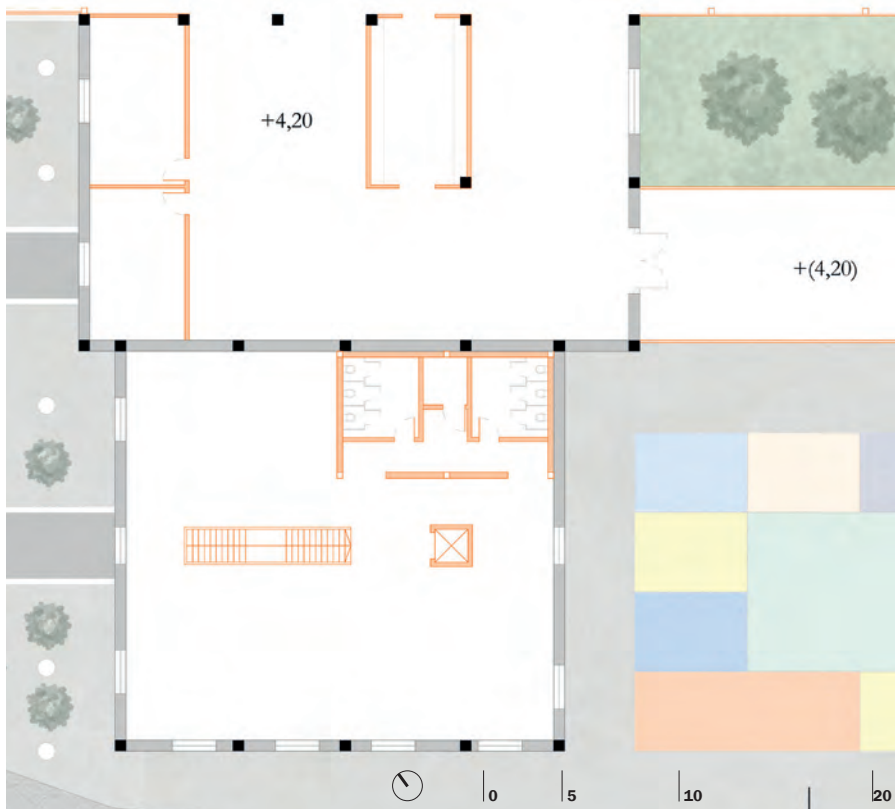
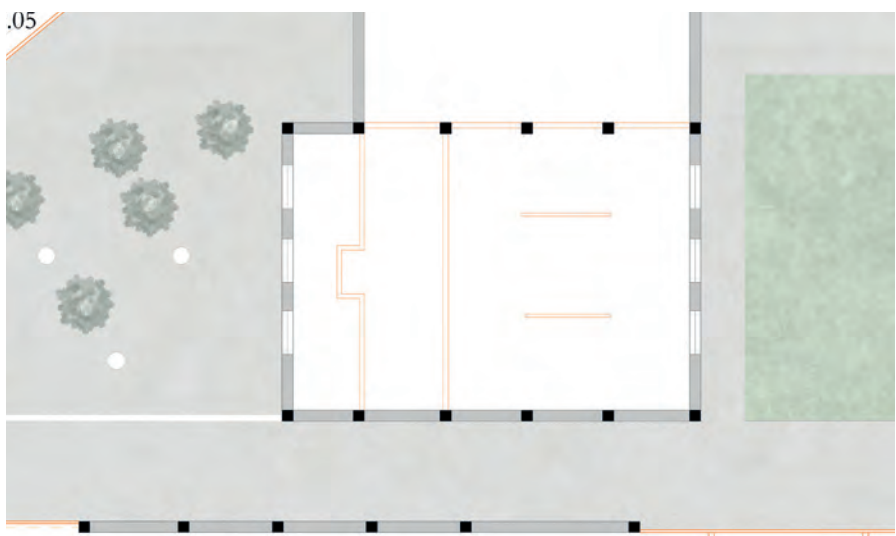




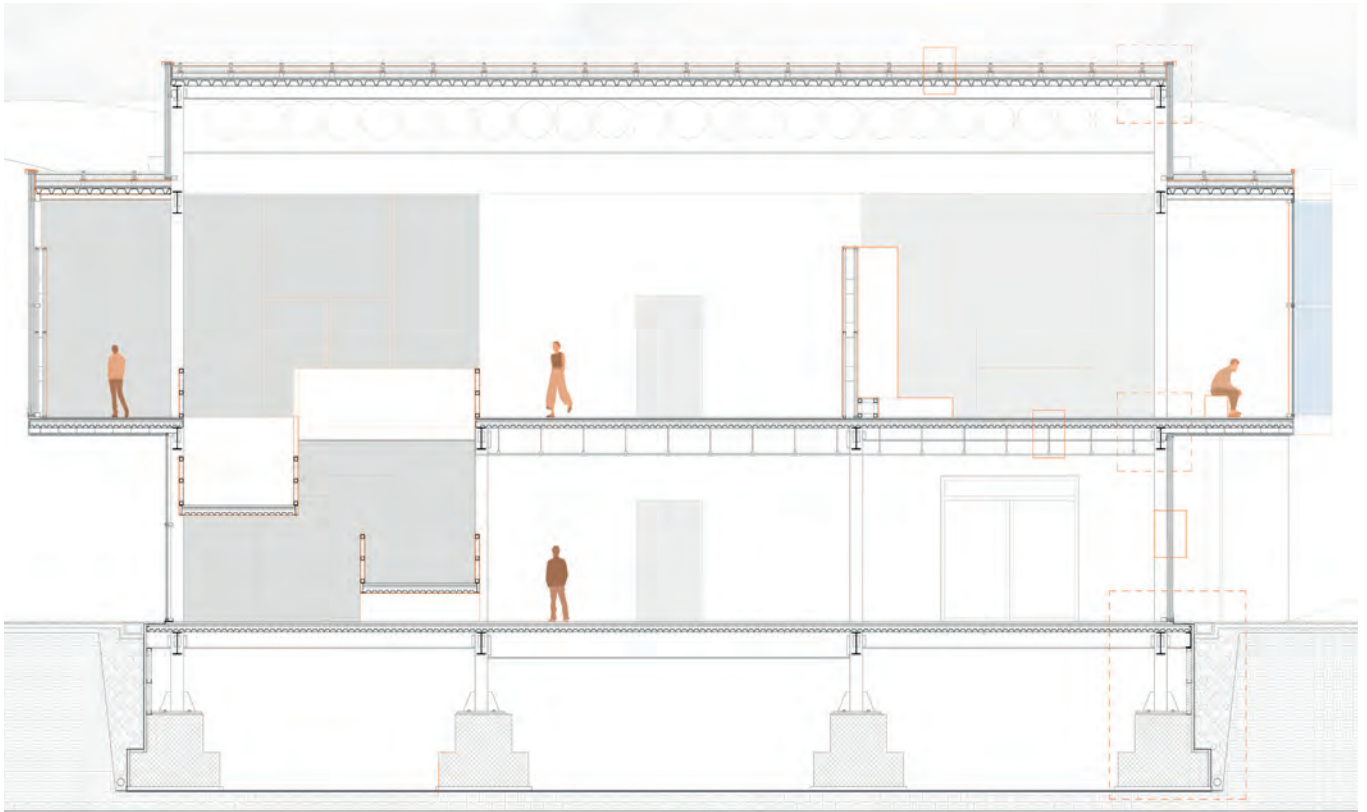
1. Reception
2. Security
3. Archive
4. Coatroom

5. Toilets
6. Exhibition hall
7. Co-working
8. Meeting room

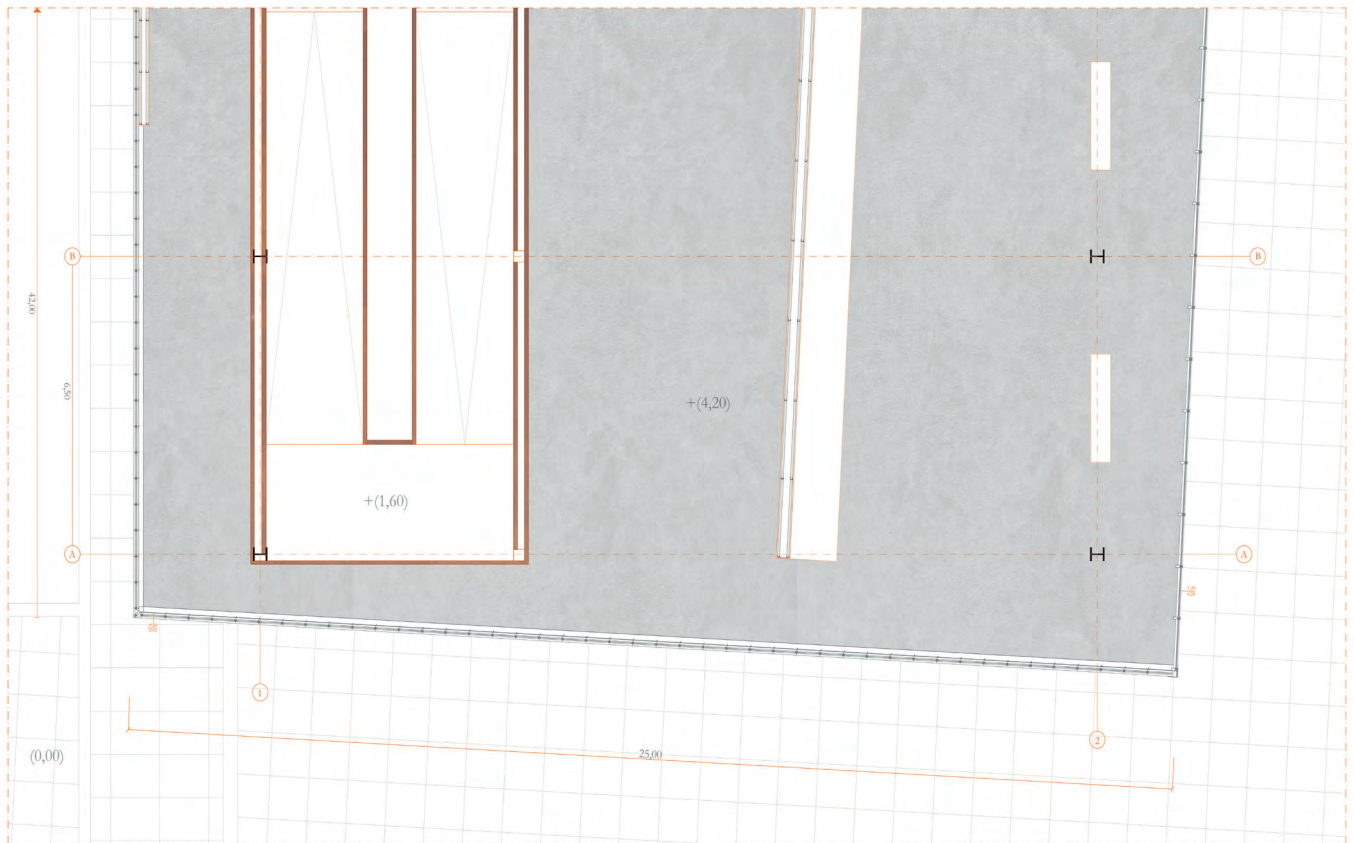
9. Temporary exhibition hall
10. Playground
11. Storage
12. Connections







119



INDOOR/OUTDOOR RELATION SCALE 1:50

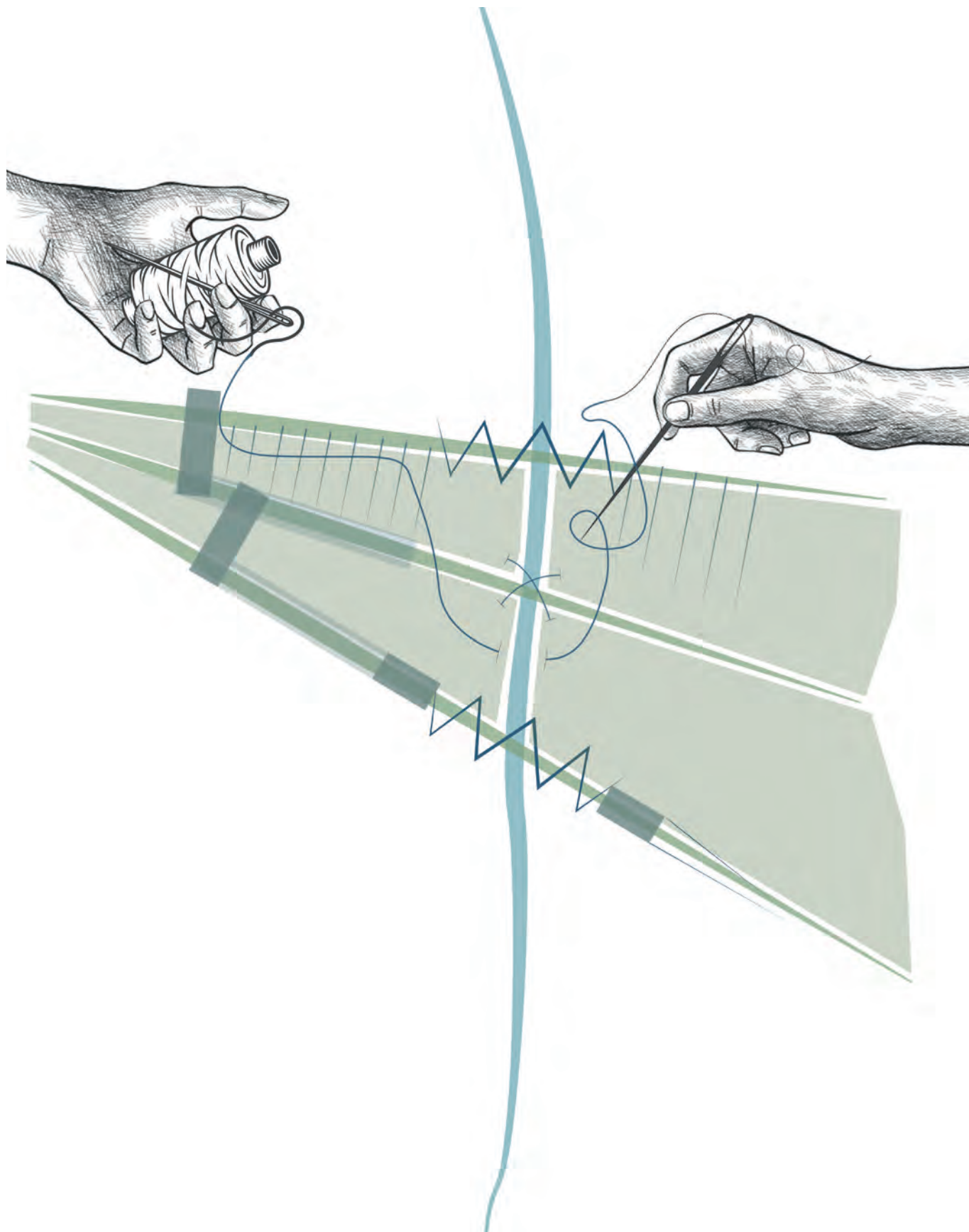
The project is located within the archaeological area of Rio Foce in Sarno, near the naturalistic park. Here there are industrial pavilions, some disused and in an obvious state of disrepair, overlooking the remains of the Hellenistic Roman theatre dating back to 100 BC.

The project aims to revalue the archaeological area, making it accessible to the community and to return this undervalued portion of the territory to the citizens. The project envisages the partial demolition of the industrial buildings and the consolidation of the remaining ones, to make way for a new volume as museum, which relates to the remains of the Roman theatre.

Peculiar is the new bridge that connects the two disused industrial blocks and then flows into the new exhibition hall designed in steel, glass and polycarbonate, which make the space bright and spacious. It is a hall-like plan, free of pillars (except for the perimeter ones), in which the exhibition walls are arranged. The north-east façade has a glazed wall projecting from the ground floor, oriented according to the layout of the archaeological site, so as to make the cavea visible from above and to create a direct relationship between context and contents. The remains of the theatre are easily accessible by a series of ramps starting from the street level and arriving at the level of the orchestra. The aim of the project is therefore to give back to the community a series of functional, accessible and modern spaces that relate past, present and future, through a series of design choices compatible with the context of particular historical value in which they are inserted, and that give development to the entire surrounding area.

**BENEDETTA TRAMONTANO - TRANSITIONAL LANDSCAPES:
RECONNECTING AND INHABITING MARGINAL AREAS**

*PAESAGGI DI TRANSIZIONE:
RICONNETTERE E ABITARE AREE DI MARGINE*

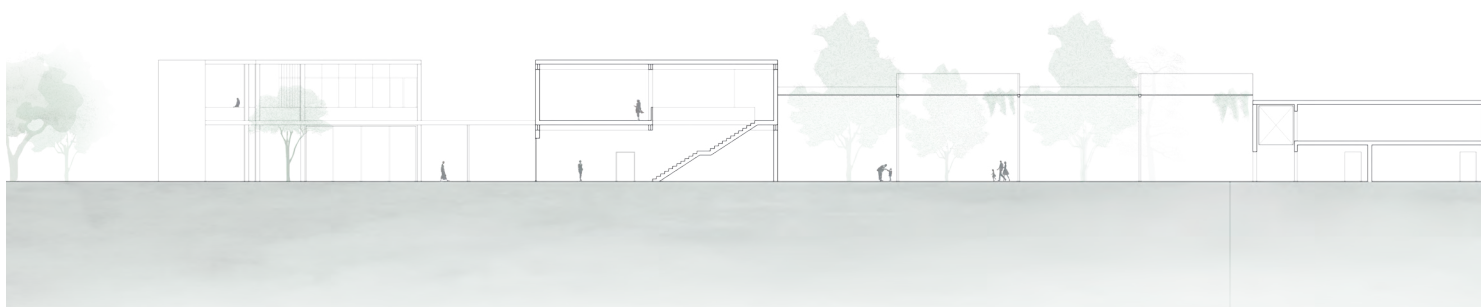
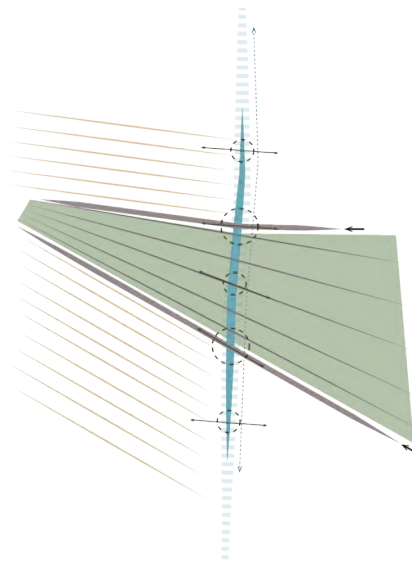
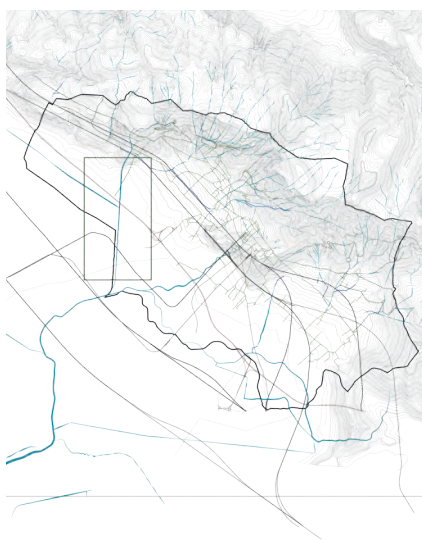


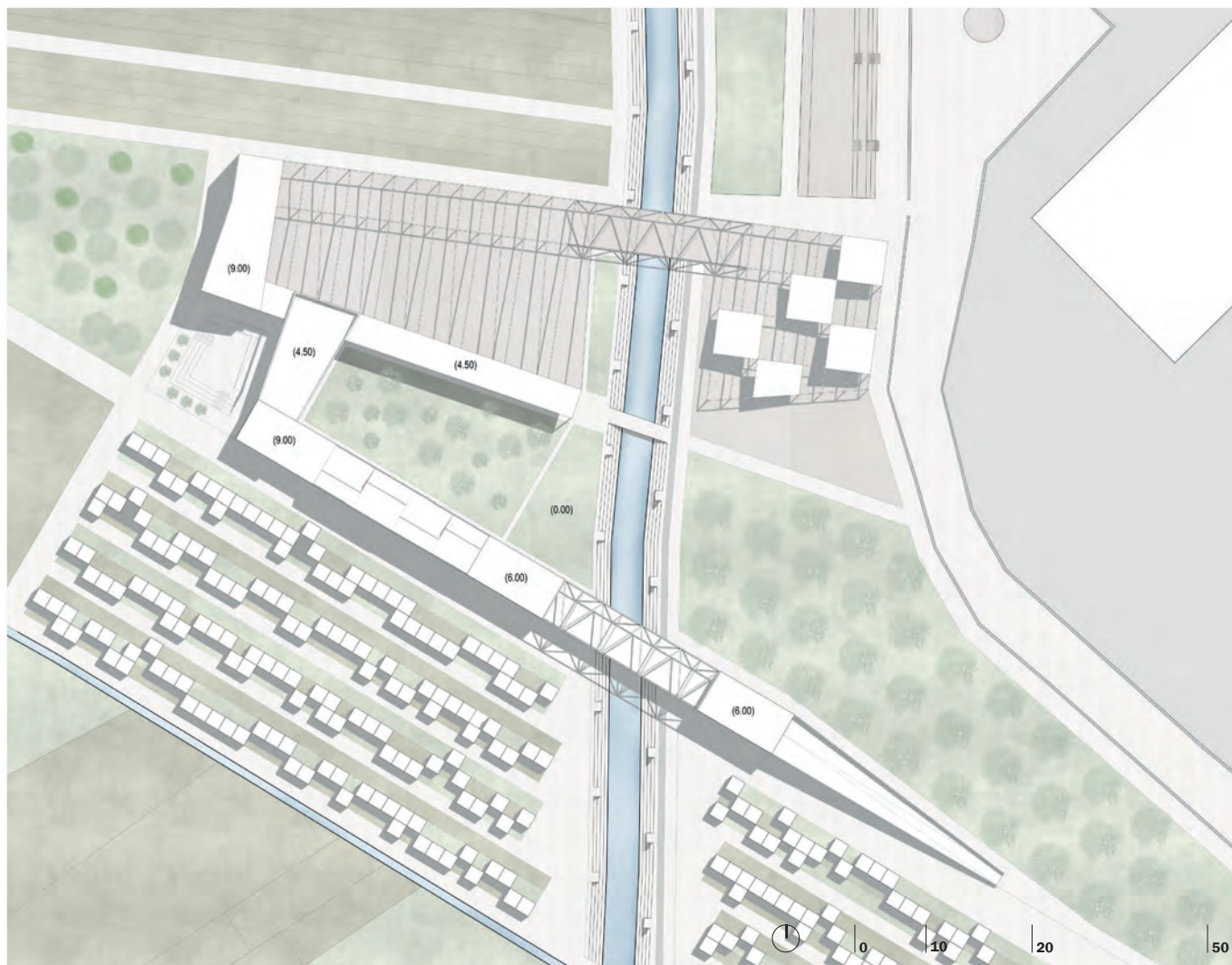


GENERAL STRATEGY

The design intervention planned in Sarno starts from an urban and territorial reasoning to then reach the architectural scale. In this sense, the analysis of the places has proved to be fundamental. The latter immediately highlighted the main potentialities and, at the same time, the major criticalities of the study area.

122





123

URBAN & ARCHITECTURE FRAMEWORK

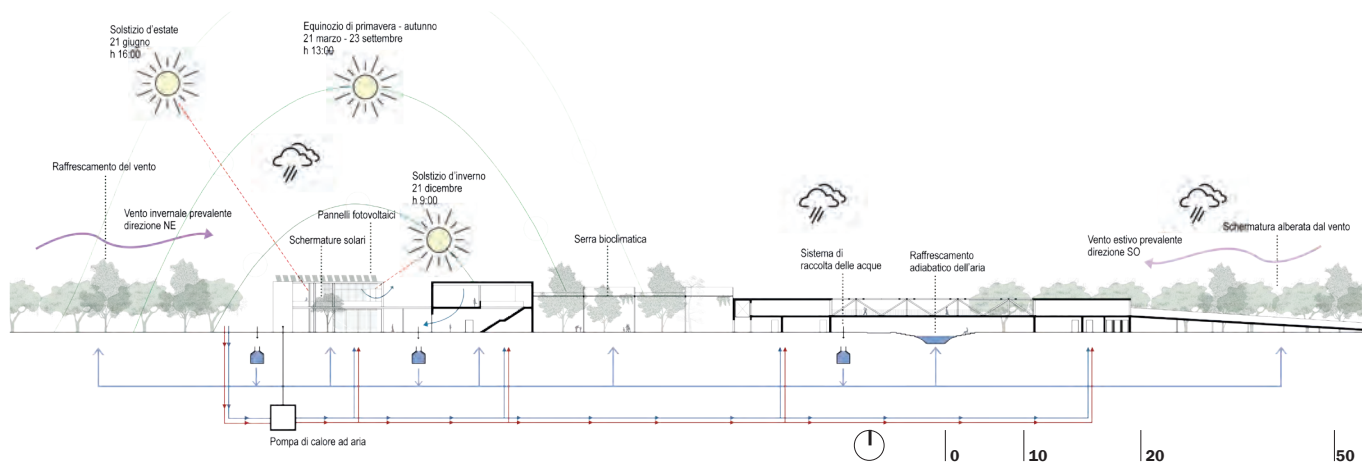
Program
urban park, social and culture
center, restaurant

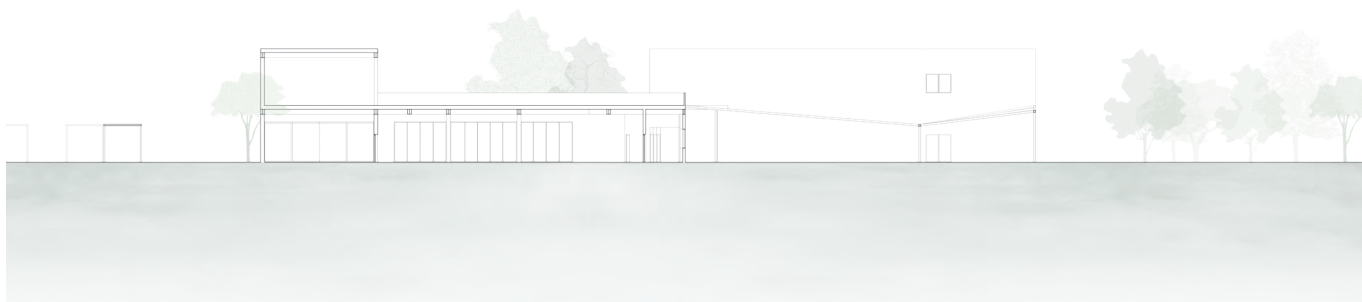
Covered area	1700m ²
Outdoor area	12500m ²
Above-ground floors	2
Built volume	14200m ³
Estimated cost	1.150.000€

Through an initial cognitive investigation, it was decided to focus the project on the intrinsic characteristics of the area. The analysis of the places has led to the identification of some fundamental guidelines, along which the design reasoning will be developed in a second moment. These start from the fundamental linear element, which totally characterises the area of interest: the course of the river. The latter has been taken as the reference point for the development of the entire project. The place, however, despite the presence of such a strong territorial sign,

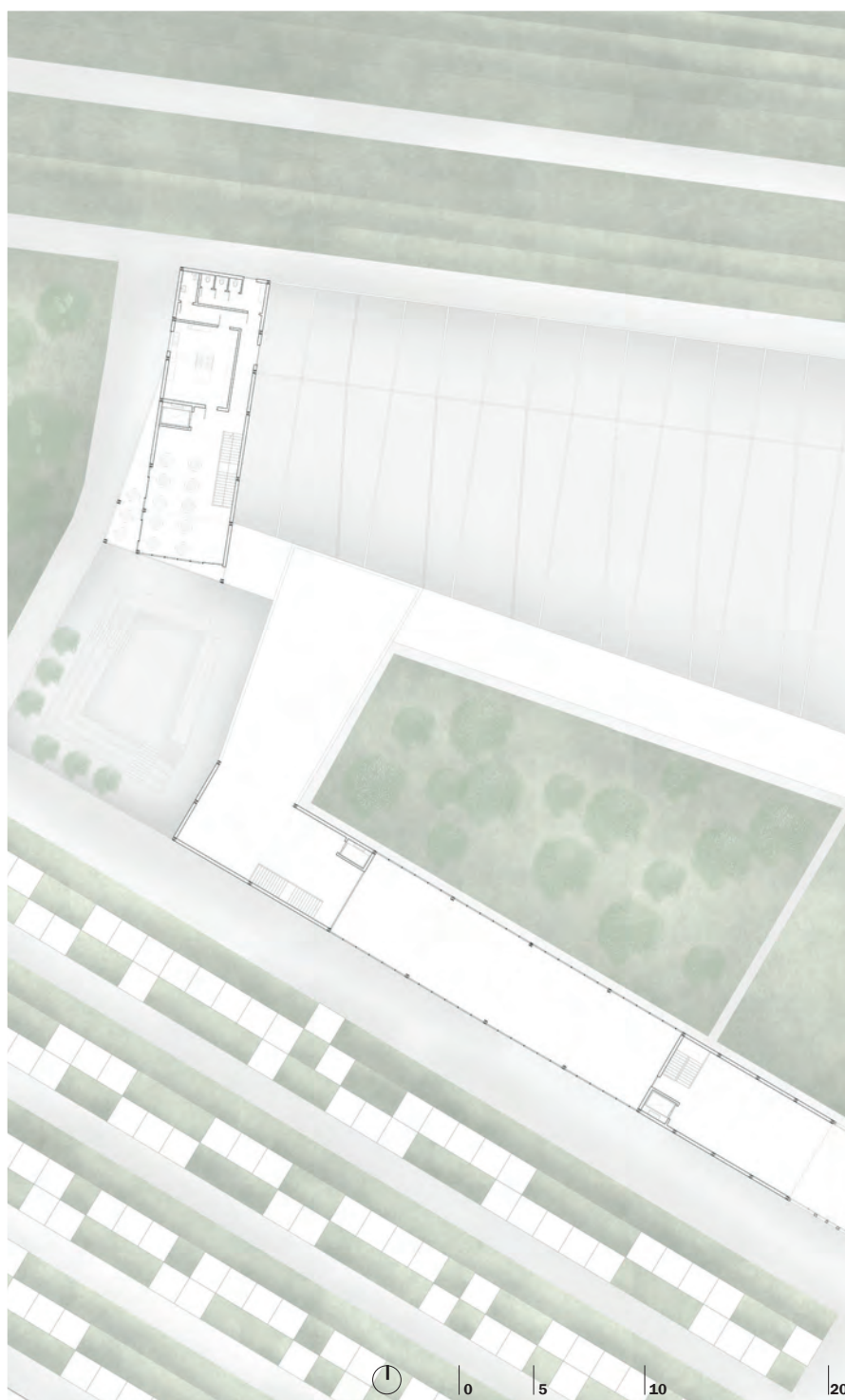
indirectly suggests new directions, two in particular, deriving from the cross-reading of the territorial analysis and an analysis of accessibility. From the latter, the two main accesses to the project area have been identified. Starting from this, and continuing along the plots of the agricultural fields, these two new linear elements are created, which will later be translated into architectural elements, and which determine a design of the area as to frame and embrace the territory in the objective of care and future development.







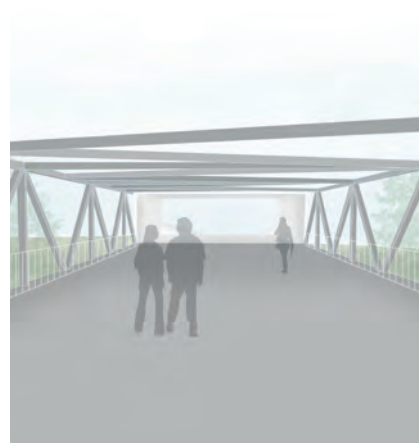
0 5 10 20

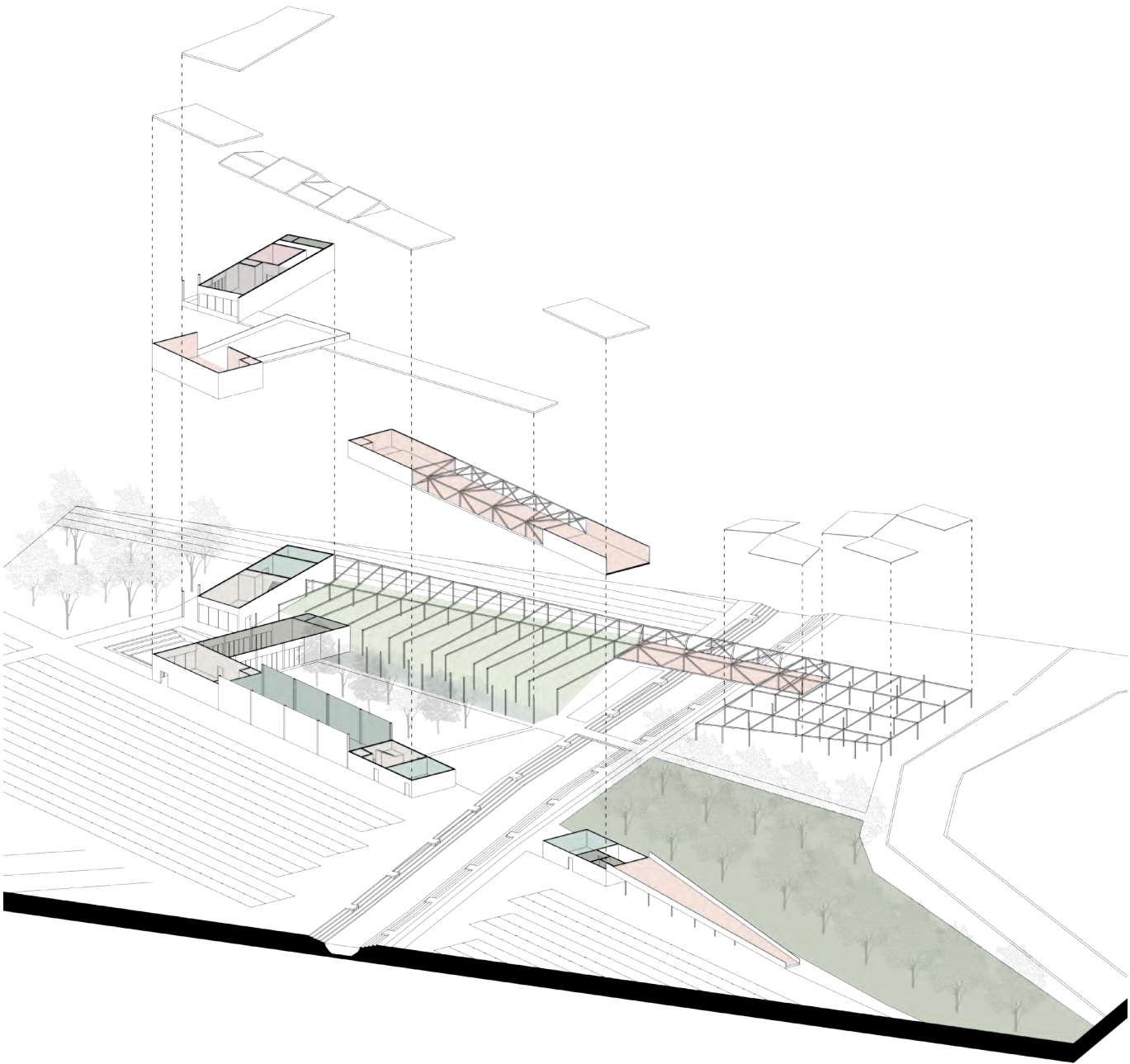


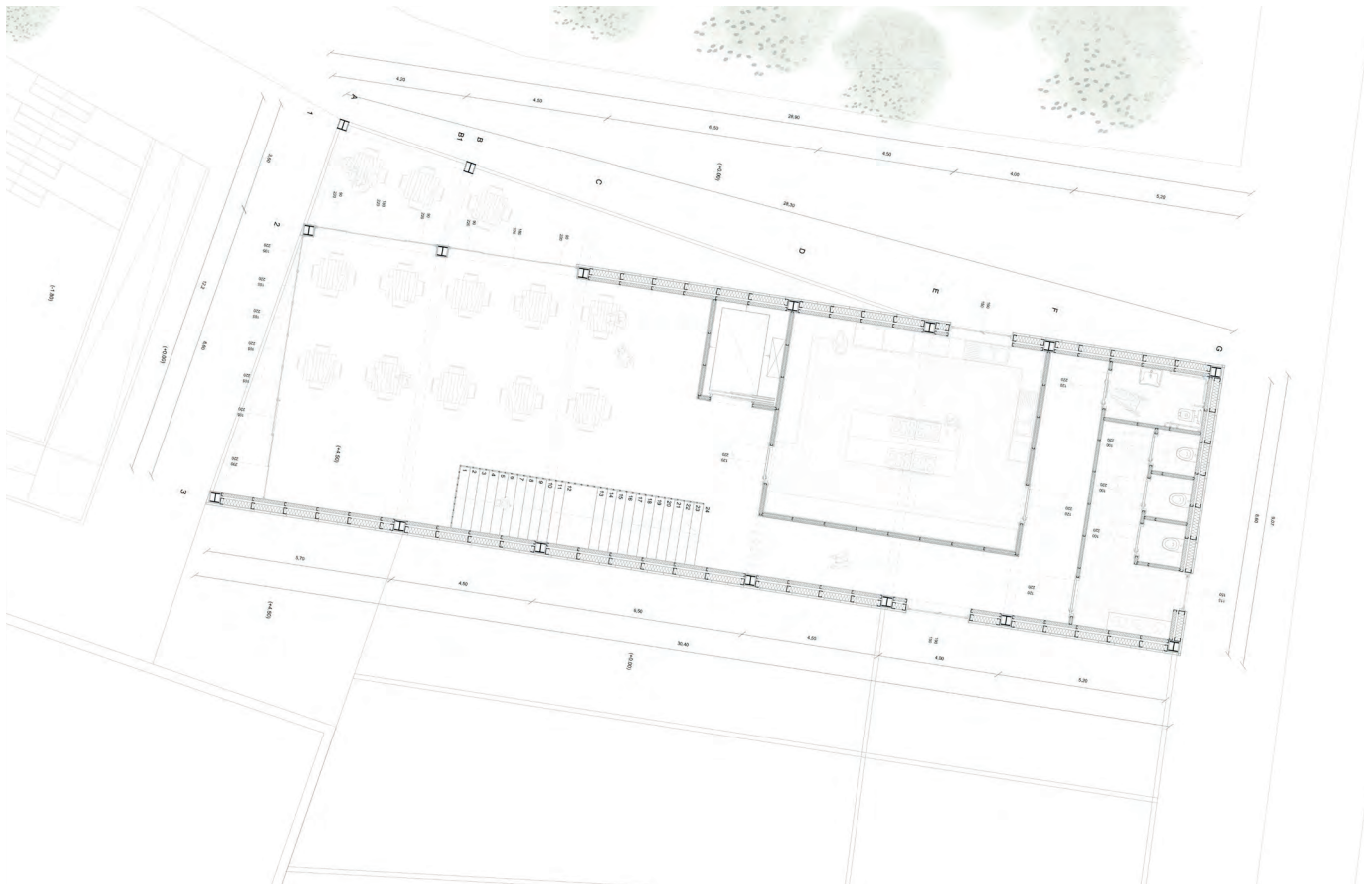
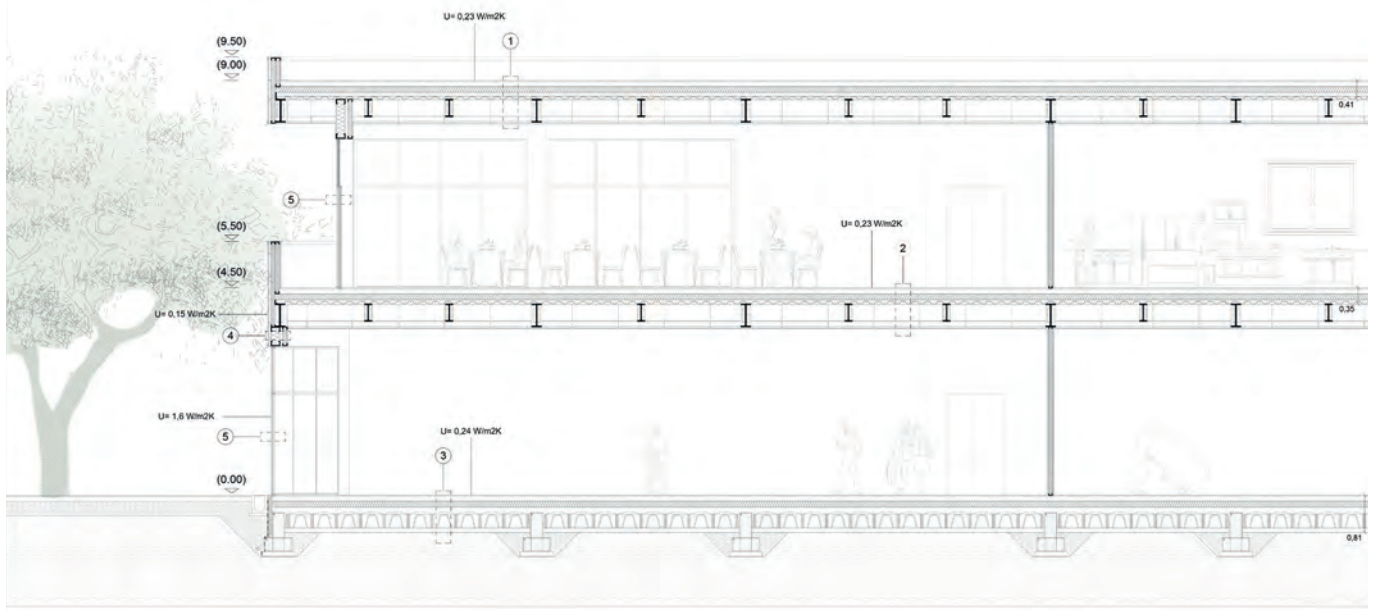
0 5 10 20



125







INDOOR/OUTDOOR RELATION SCALE 1:50

The project, as a whole, envisages the creation of a park along the Rio Focé river, acting on a portion of the riverfront bordered on one side by an industrial complex and on the other by a rich agricultural landscape: the objective is to give centrality to this portion of the city, making it a pole of aggregation and sociality, while maintaining and respecting the agricultural vocation of the context.

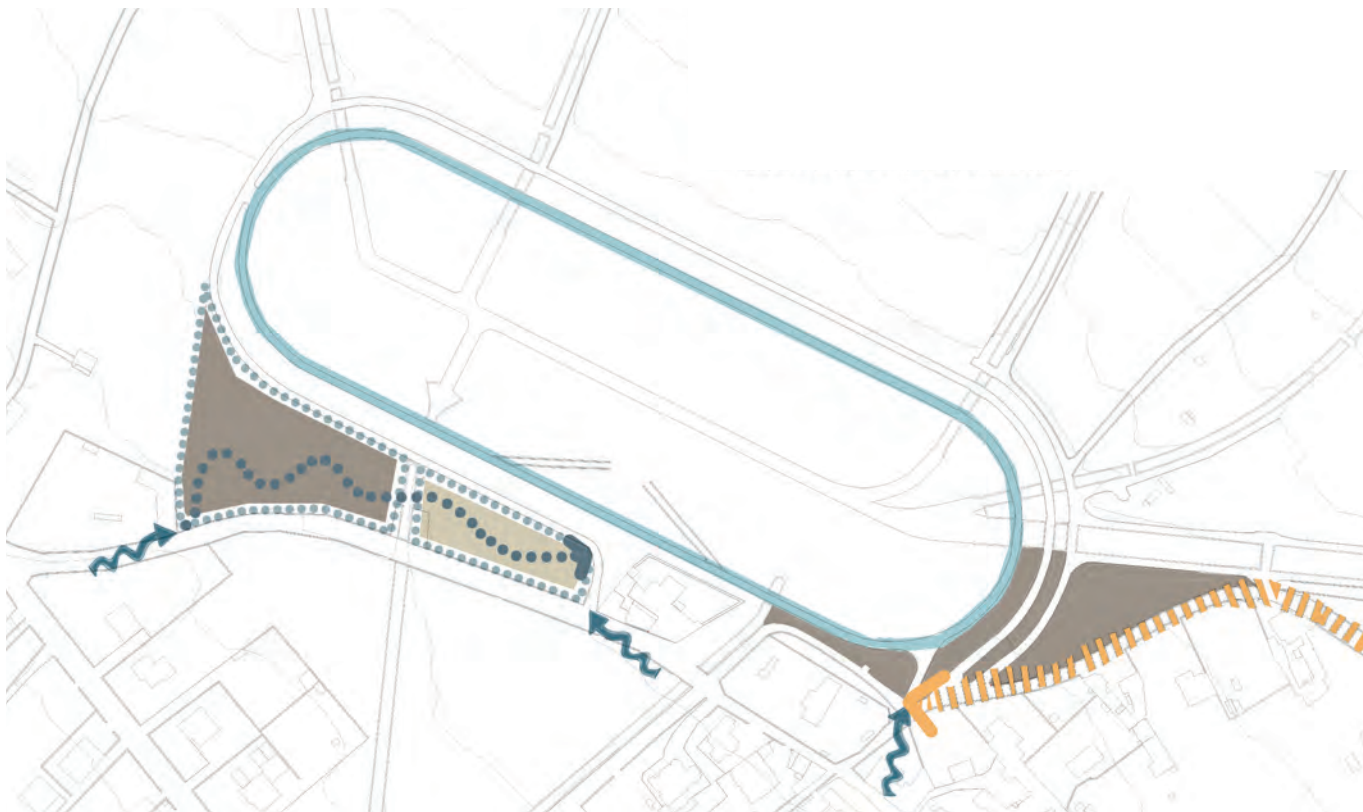
The focal point of the project are the connections between portions of the land, between one edge and the other of the river, which connect the two different areas included in the project: an area intended mainly for agriculture, with the presence of an orchard planted mainly with cherry and walnut trees, with annexed support spaces, and a second area intended for recreational, social and commercial functions.

128 These connections materialise in different ways: where the two new routes, identified from the previous reading of the territory and the identification of the accessibility points, intersect with the course of the river, the connection is materially transformed into a path, which develops through a vierendeel reticular beam, which acts as a closed box but at the same time open towards the landscape. In addition to these, there are further connections, in this case simple and subtle, which make it possible to cross the river and help to strengthen the link between the two banks. The latter is developed on two fronts: on one side there is an open space to be used as a market and for the storage and trade of locally grown produce, surmounted by a frame system which, if necessary, can be used as a support for a canvas roof. On the other side, there is an L-shaped block, mainly glazed, which houses a bioclimatic greenhouse and related educational laboratories, culminating in a solid volume at the head; then there is a further block as a closure to the entire complex.

DOLORES MASELLI - THE VASCA CURTI: A NEW SPORTS PUBLIC SPACE

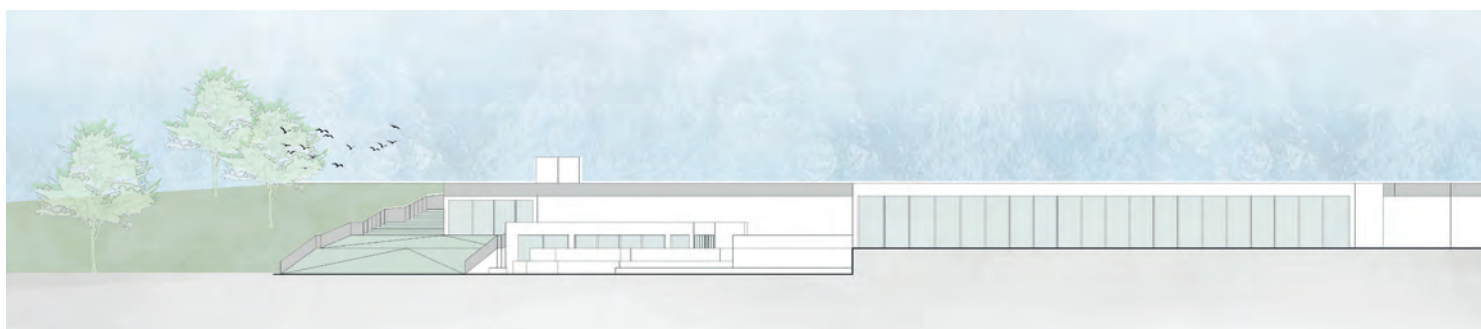
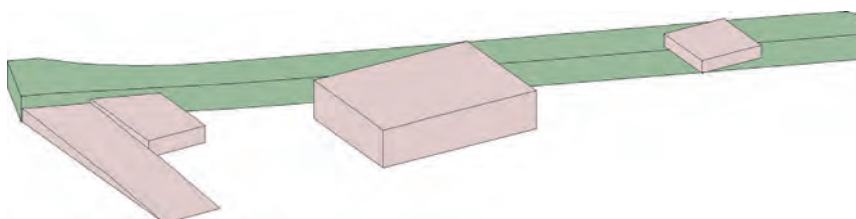
LA VASCA CURTI: UN NUOVO SPAZIO PUBBLICO PER LO SPORT

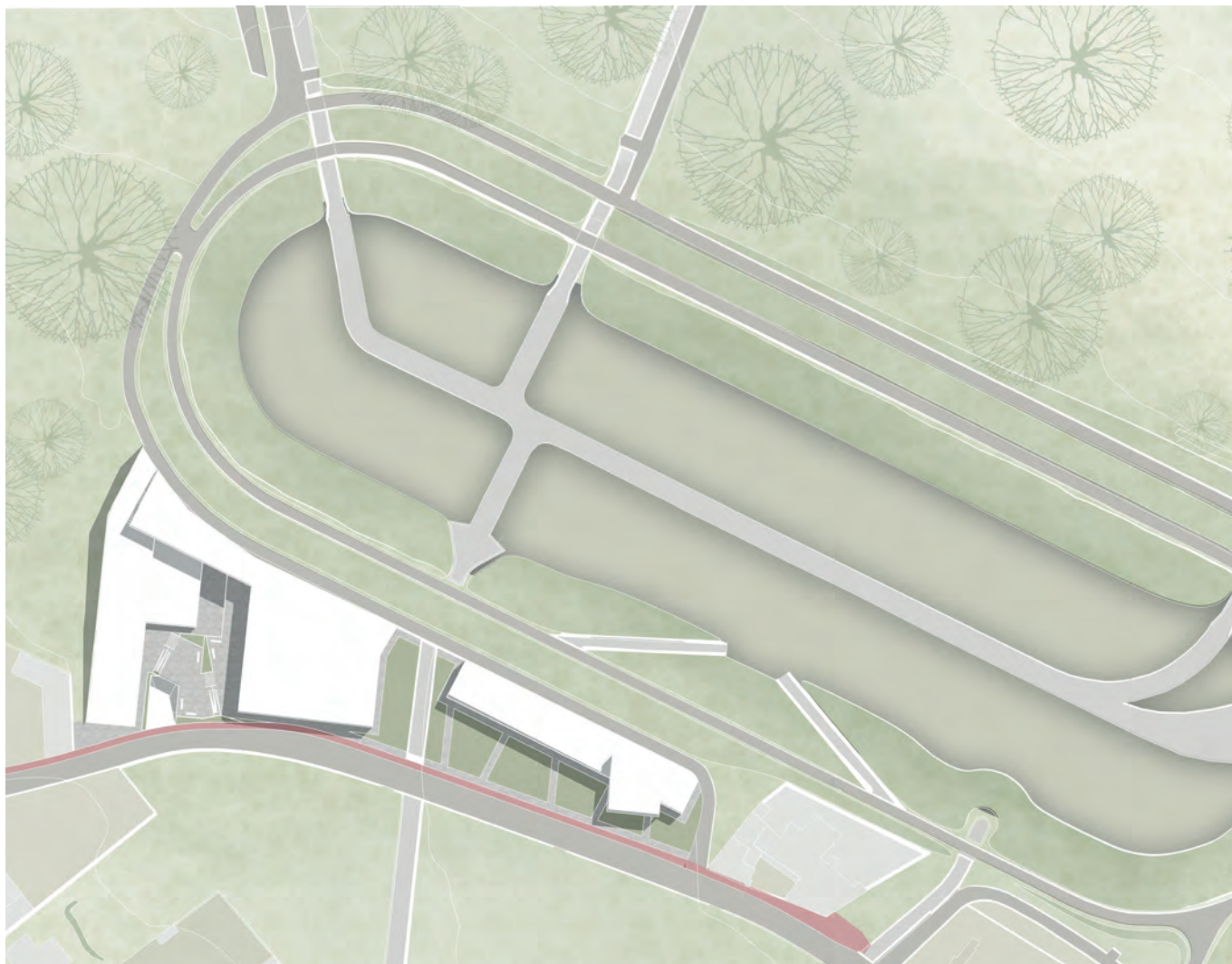




GENERAL STRATEGY

The proposed strategy for the development of the Vasca Curti starts from the idea of improving sustainable connections to facilitate access to the place. The Vasca itself will be intended to renaturalize the green and build new buildings to support the community.





131

URBAN & ARCHITECTURE FRAMEWORK

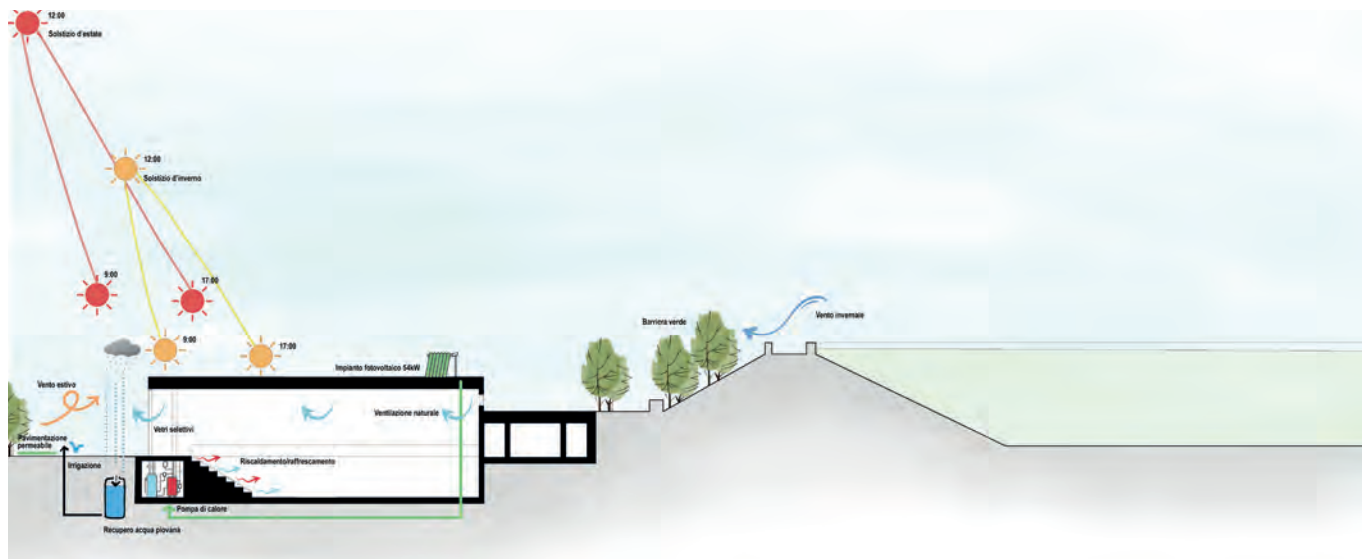
Program
sport facilities, urban park,
social and culture center

Covered area	4700m ²
Outdoor area	1550m ²
Above-ground floors	2
Built volume	14200m ³
Estimated cost	€10M

The project started by reading and interpreting the shape of the territory, as the Vasca Curti is the red thread that unites and characterizes the area. The main lines taken into consideration are those of the collection channels that lead into the Vasca and branch off from it to the south. The shape of the project follows that of the lot, positioning itself south of the infrastructure. There are two main components: the splint and the blocks. The splint follows and embraces the entire edge of the Vasca, the blocks branch off and host the main functions. The main problem faced was that of the differences in height

and the ramp responds to it. As the title of the project says, the main function of the system is sport, which also wants to respond to a social need, becoming a new pole for the community of Sarno from a social and cultural point of view. In the first block we have a multipurpose room, in the second a gym for sports competitions and in the third a classroom for sports lessons of various kinds. The splint houses the services, such as changing rooms and toilets. There is also a basement that houses parking for people. A path connecting the various buildings has also been designed, with benches for rest and a cycle route.





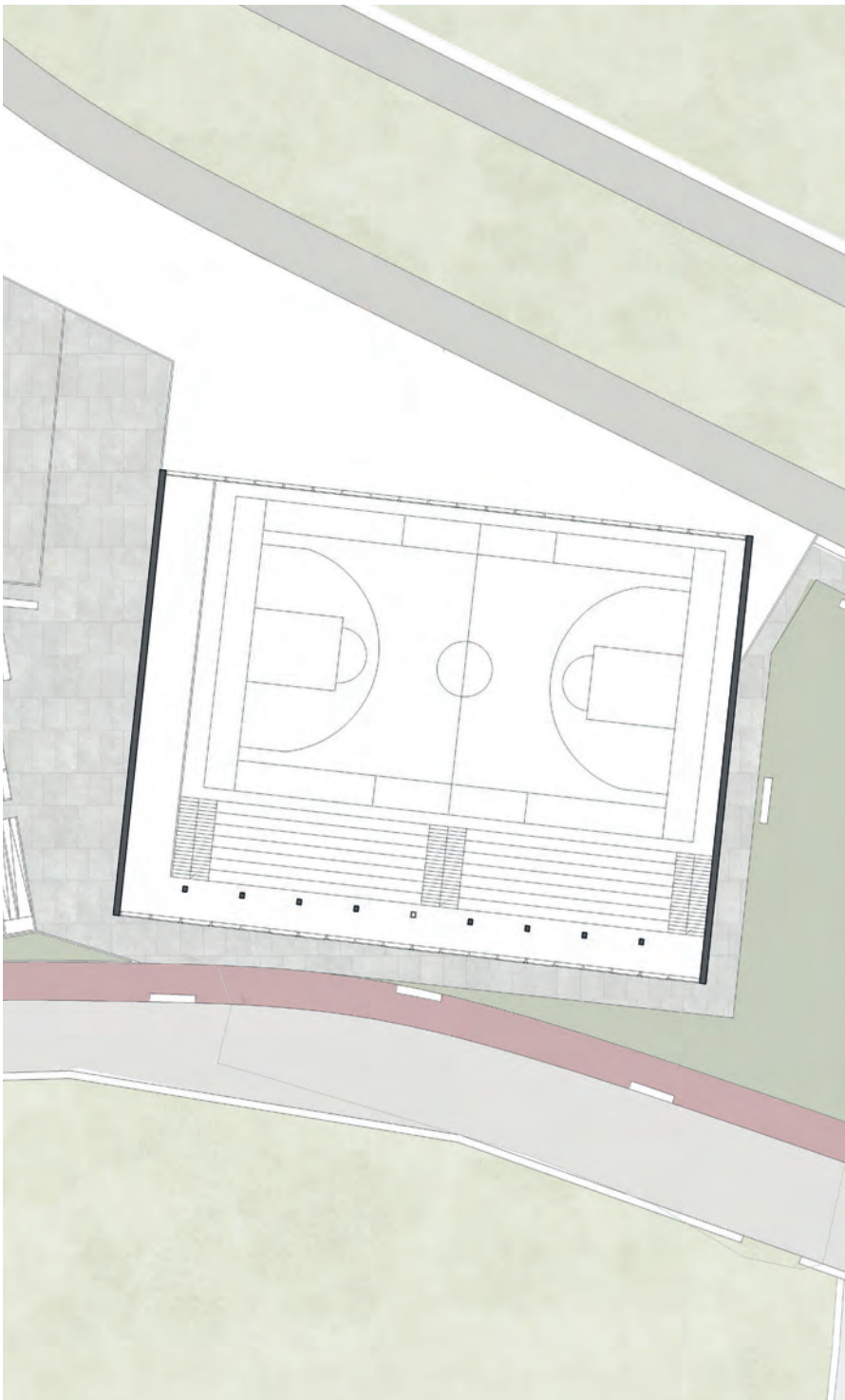
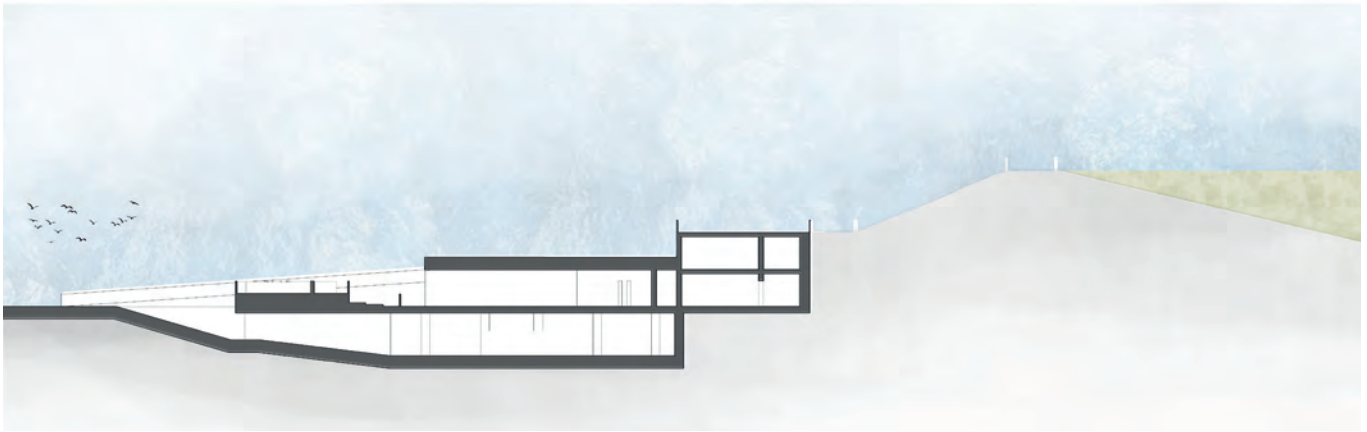
132



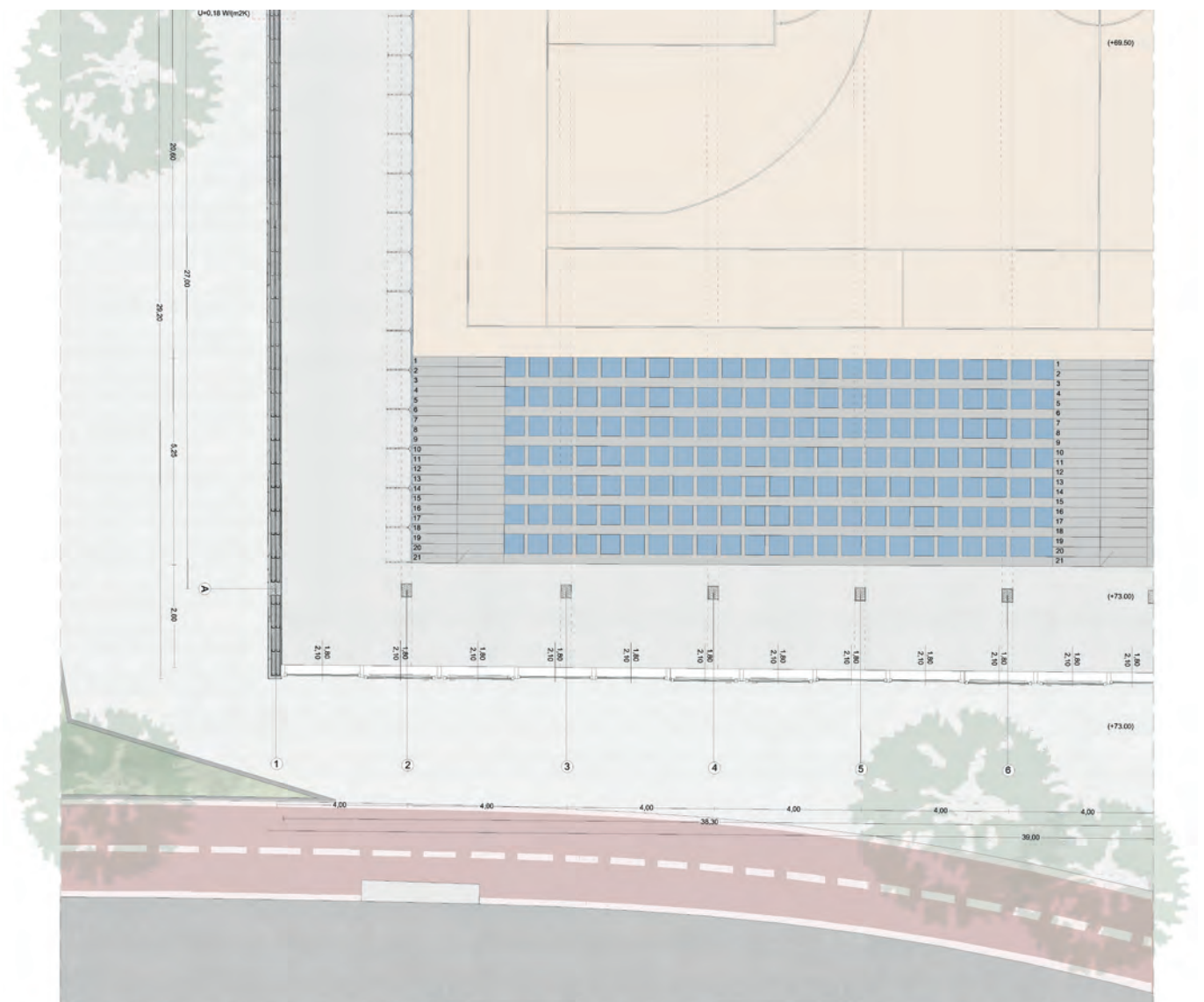
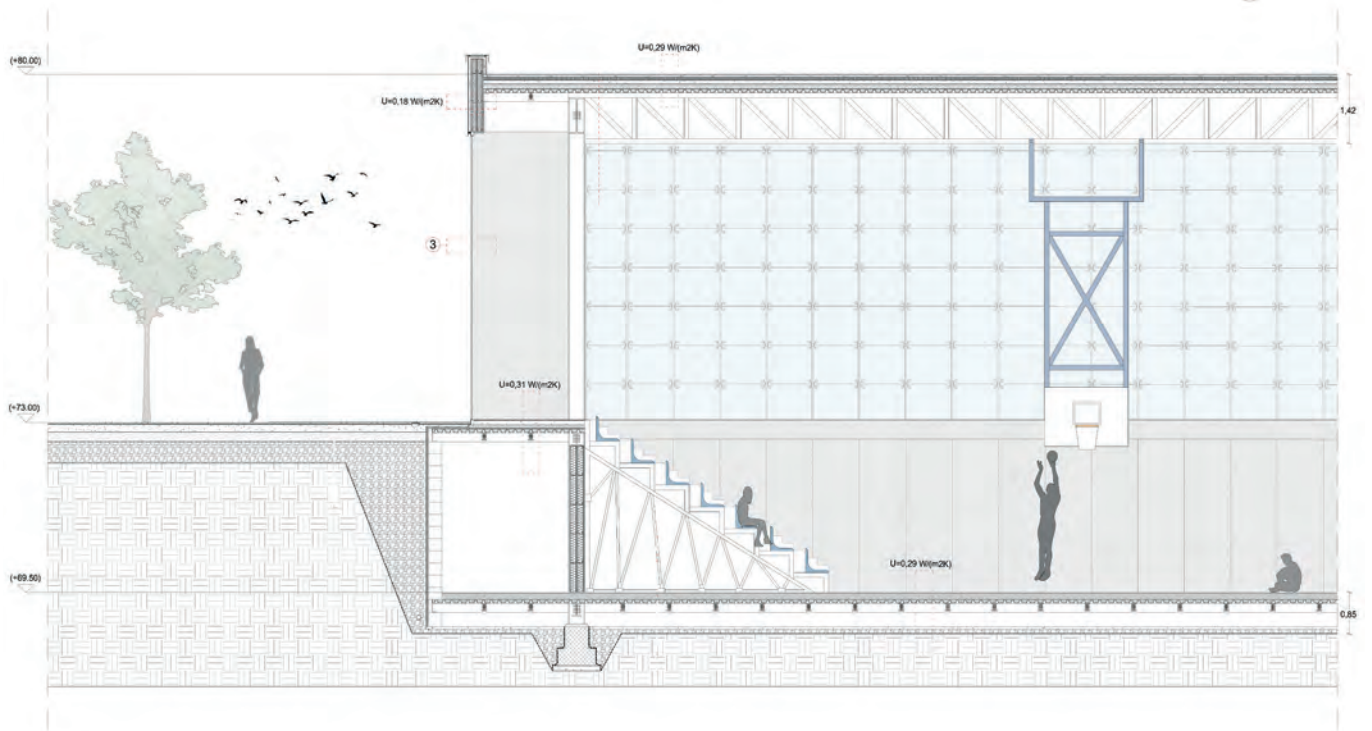
1. Connection
2. Restauration
3. Multipurpose hall
4. Gym

5. Toilets
6. Locker room
7. Techical room
8. Entrance

9. Offices
10. Toilets
11. Locker room







The project is located on the southern edge of the Vasca Curti, in the city of Sarno. The construction of the tank took place after the floods that occurred on the 5th and 6th May, 1998, and which particularly affected the municipality of Sarno.

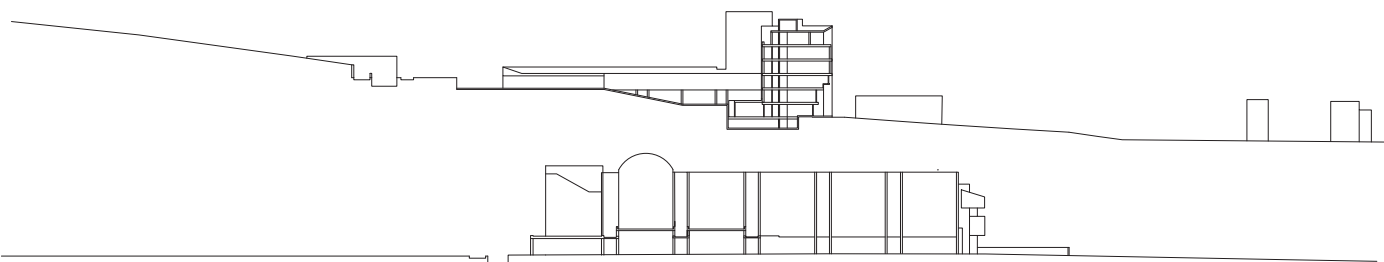
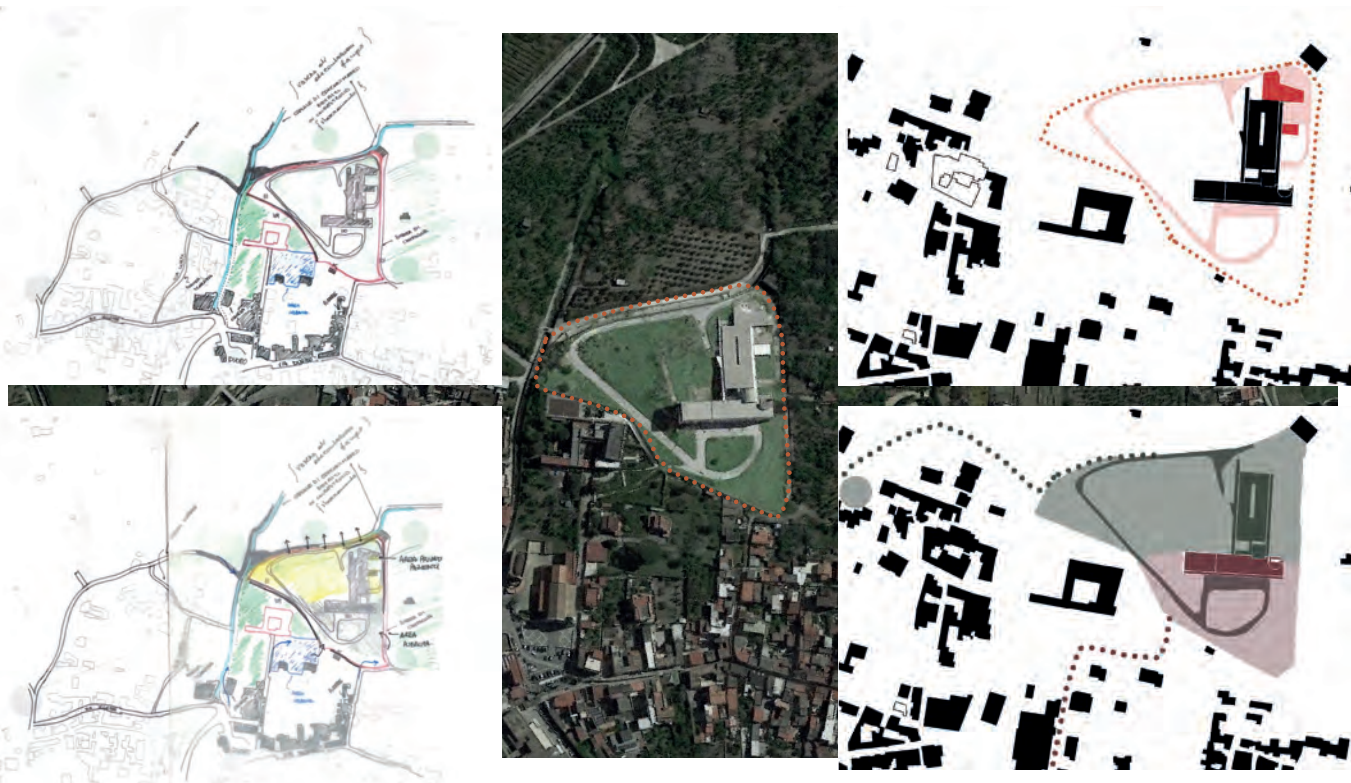
Since the area remained unused, except for spontaneous sports activities, with the new city plan, the area adjacent to the infrastructure has been identified as a place to be transformed by urban standards, in particular for sports use and for the common interest.

Here comes the idea of creating a long splint that embraces the entire southern edge of the basin, with three large blocks that emerge from it and that house a multipurpose room, a gym and a room for free body sports.

The gym was designed with the intention of being able to accommodate, in addition to the athletes, also a sufficient number of seated and standing spectators. It has an area of 1084 mq, an underground part intended for the playing field, in accordance with CONI provisions, and a part intended for the stands, which represent the point of ascent/descent with respect to the exit/entrance to the same. The gym has a total internal height of 9.50m, of which 3.50m is completely underground compared to the remaining part of the structure. In fact, the field is located at an altitude of +69.50m above sea level, and the remaining part is in direct relationship with the external environments. The construction system envisaged is steel, with special coatings that give character to the environment.

**MIRIANA BENINCASA - THE EPISCOPIO HOSPITAL:
A NEW LIFE FOR THE BUILDING AND ITS CONTEXT**
*L'OSPEDALE DI EPISCOPIO:
UNA NUOVA VITA PER L'EDIFICIO E IL SUO CONTESTO*

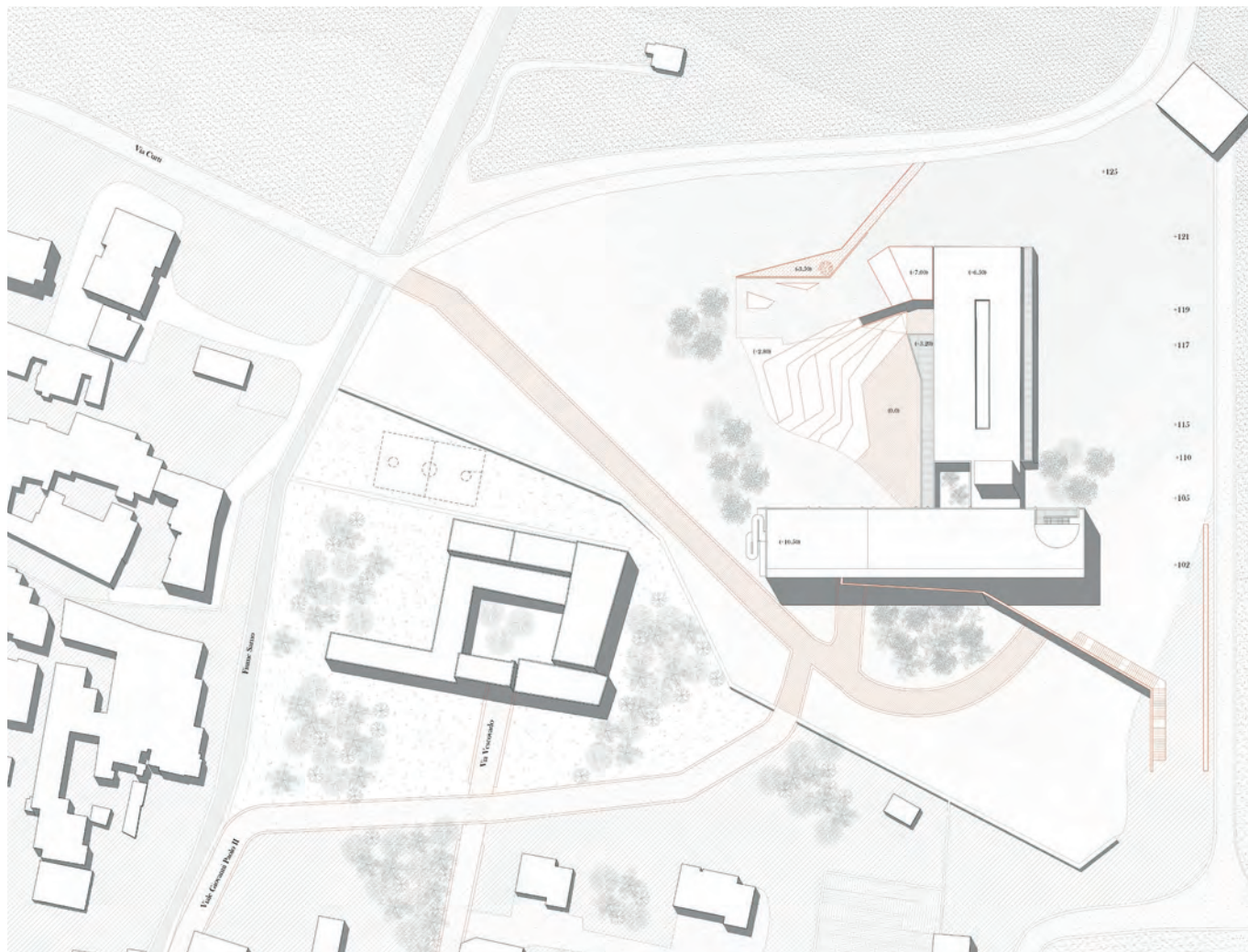




GENERAL STRATEGY

The general strategy aims to reactivate the former hospital structure into a new facility for the community, through the promotion of a new program, public space and connections.





139

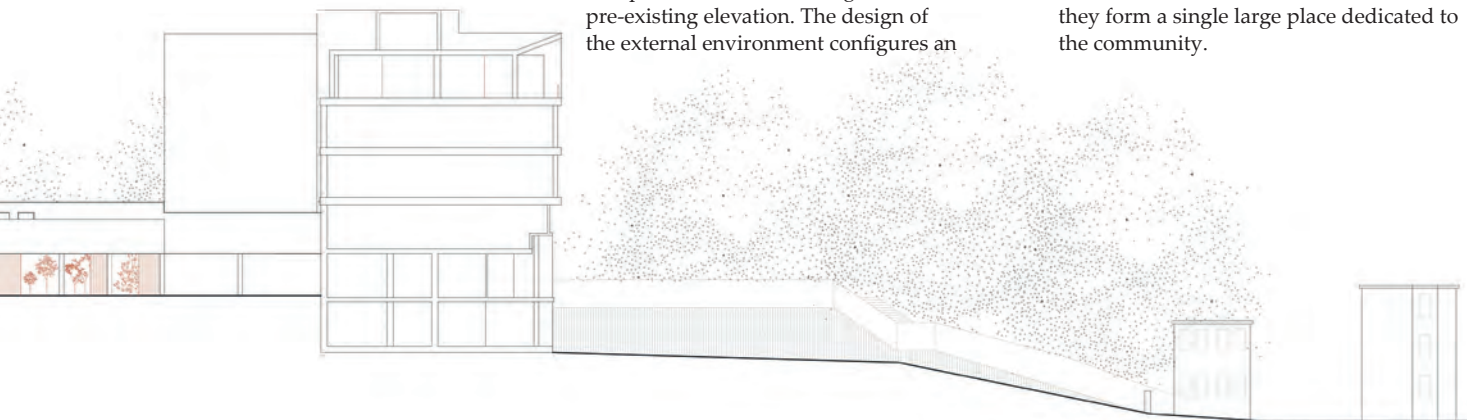
URBAN & ARCHITECTURE FRAMEWORK

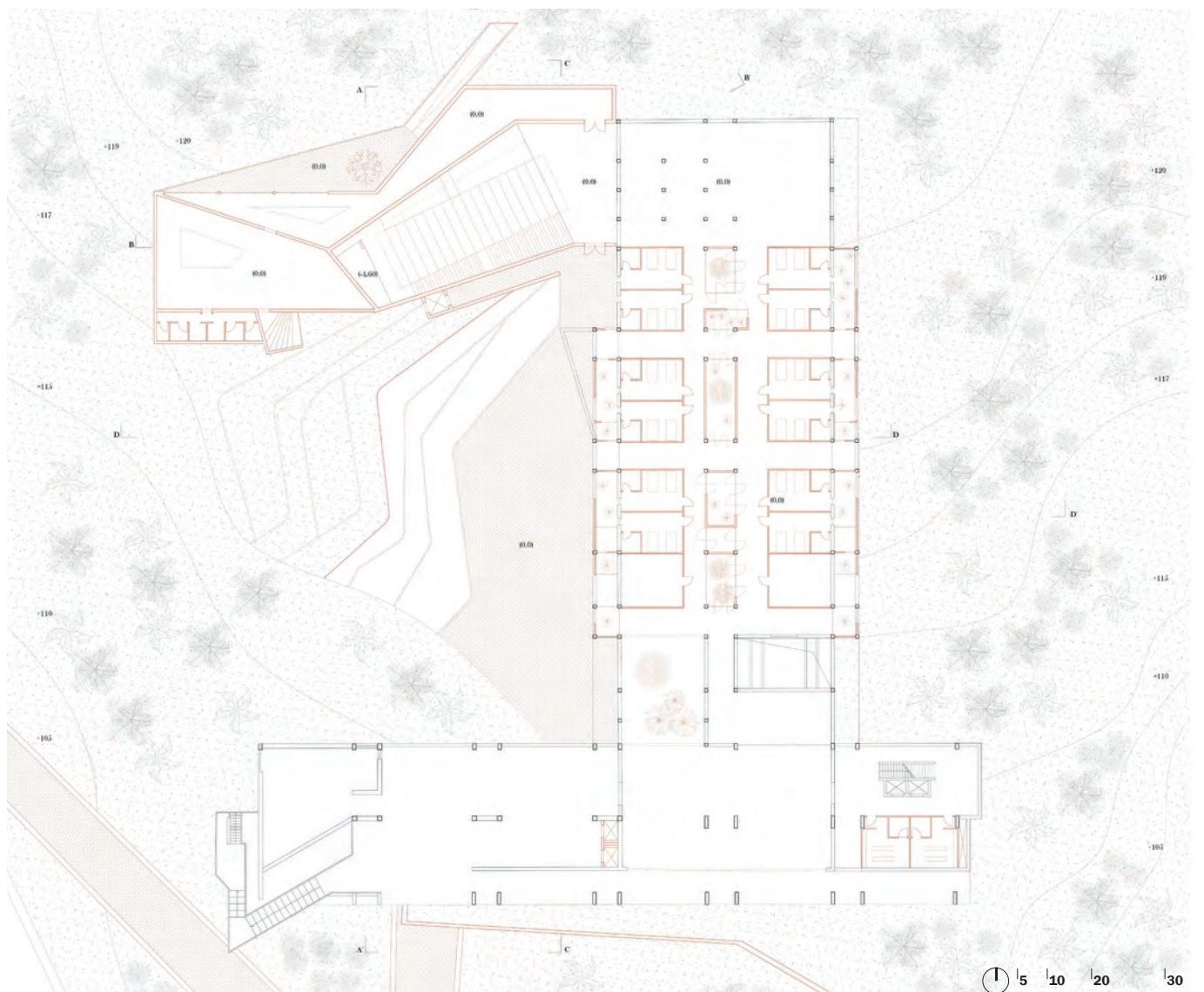
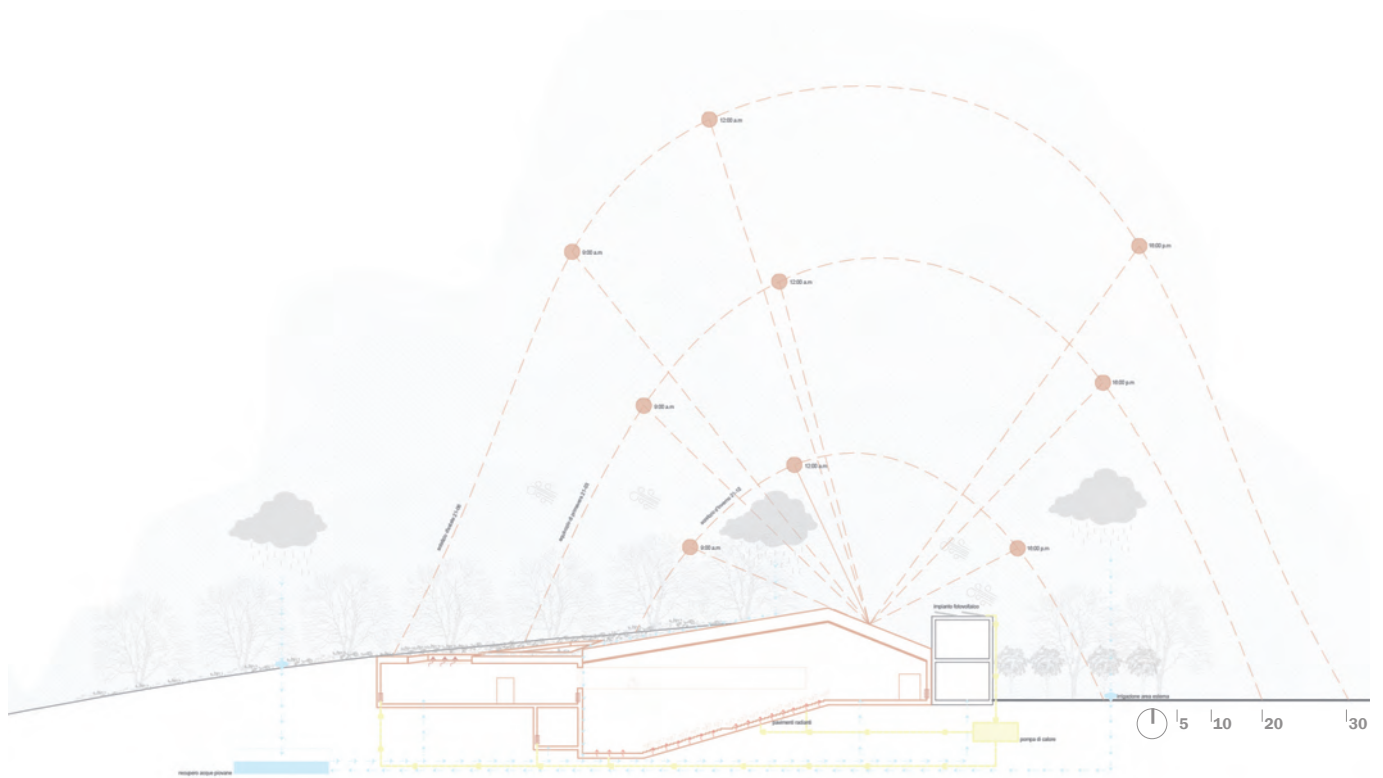
Program community hospital and auditorium

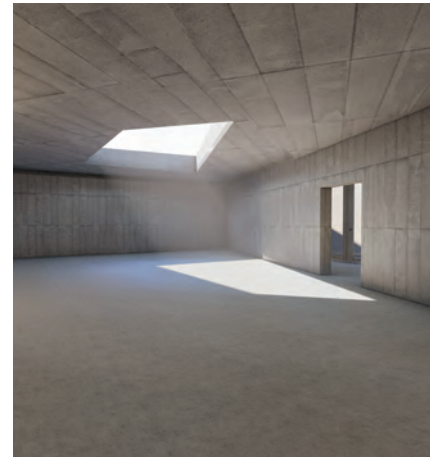
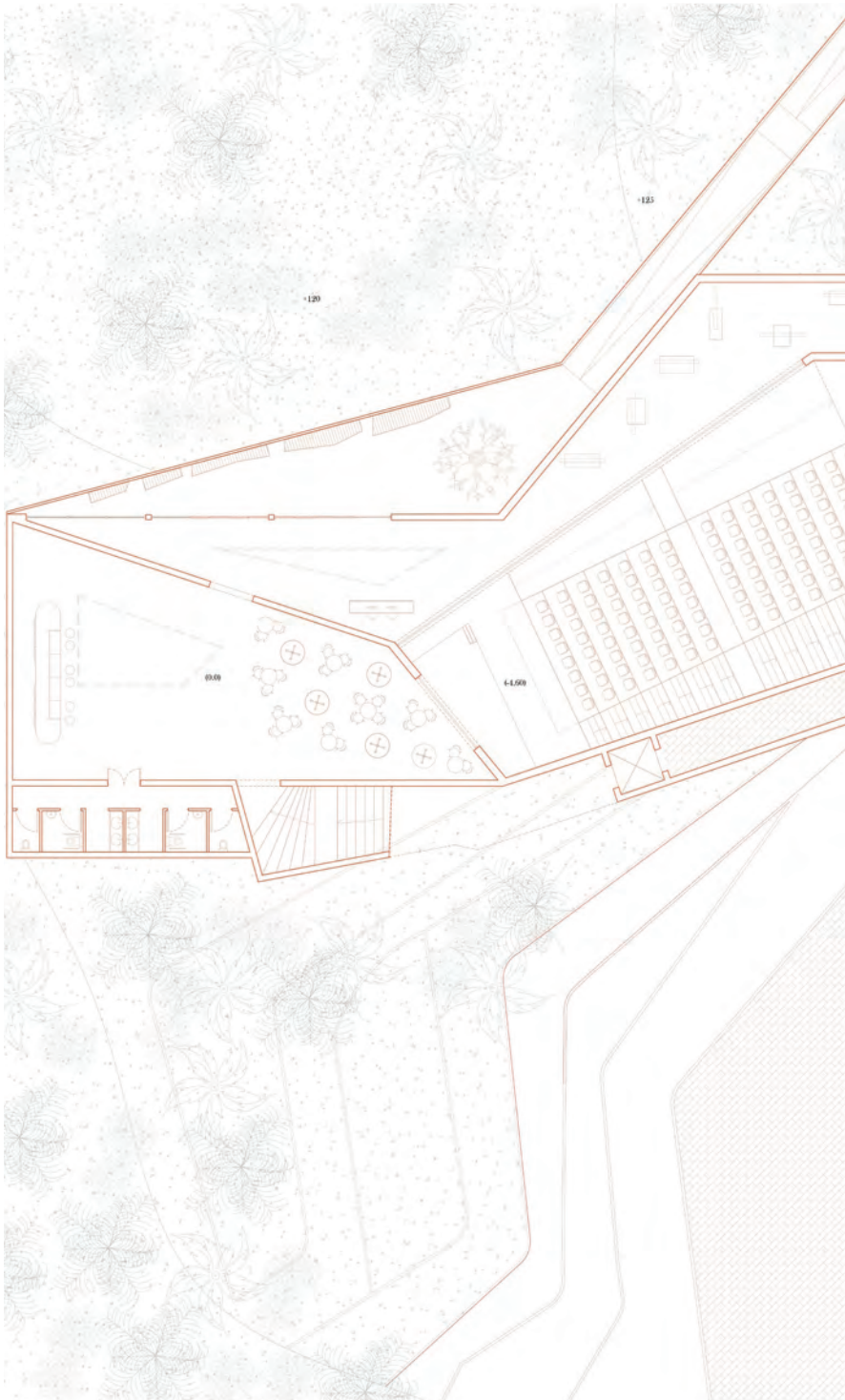
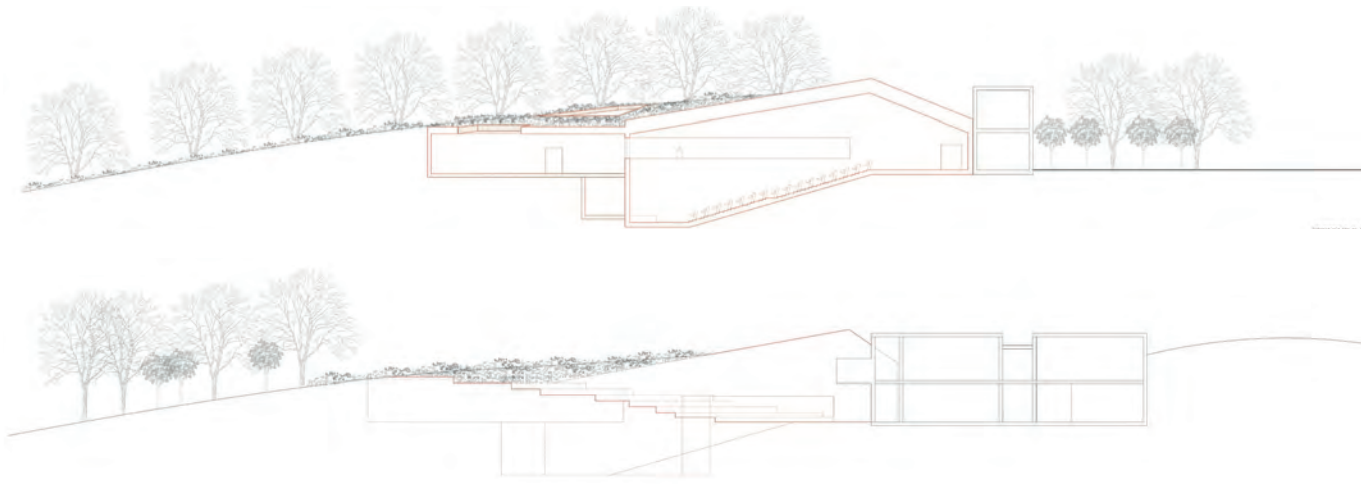
Covered area ex novo	700m ²
Outdoor area ex n	350 m ²
Above-ground floors	2
Built volume	8.000 m ³
Estimated cost	600.000€

The use of few compositional elements and simple materials enhances the monolithic aspect of the project which, through a cladding of burnished bronze panels, a material that ages and changes with the passage of time, recalls the changing colors of the stone and surrounding mountains. The portion of facades visible from the outside without openings contrast with the two large skylights placed at floor level: large wells of light, with irregular geometric shapes, reflect in the foyer and exhibition space multitude of indefinite greenery that acts as a stage and recalls a direct dialogue between the large space free-plan interior and the rigorous pre-existing elevation. The design of the external environment configures an

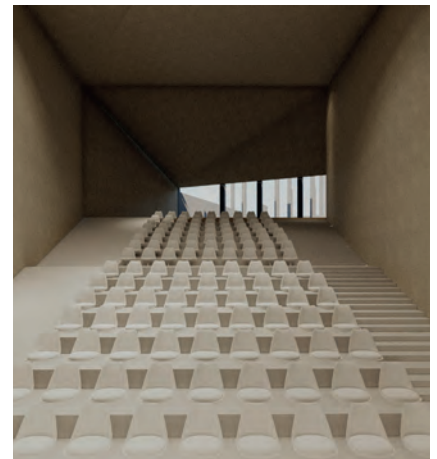
excavation common to the two architectural complexes to the south, which can be reached through generous steps that act as a filter space between the uncultivated greenery of the hill and the new courtyards that redesign the hospital façade. Meanwhile, at the north, the large ramp allows the creation of an entrance from the main driveway, previously inaccessible and allows the project to overcome the architectural barriers and the introverted and impervious aspect of the site. The two structures find a way to communicate with each other harmoniously and, in complete respect of their spaces, playing with the contrast and similarities of the materials, they form a single large place dedicated to the community.

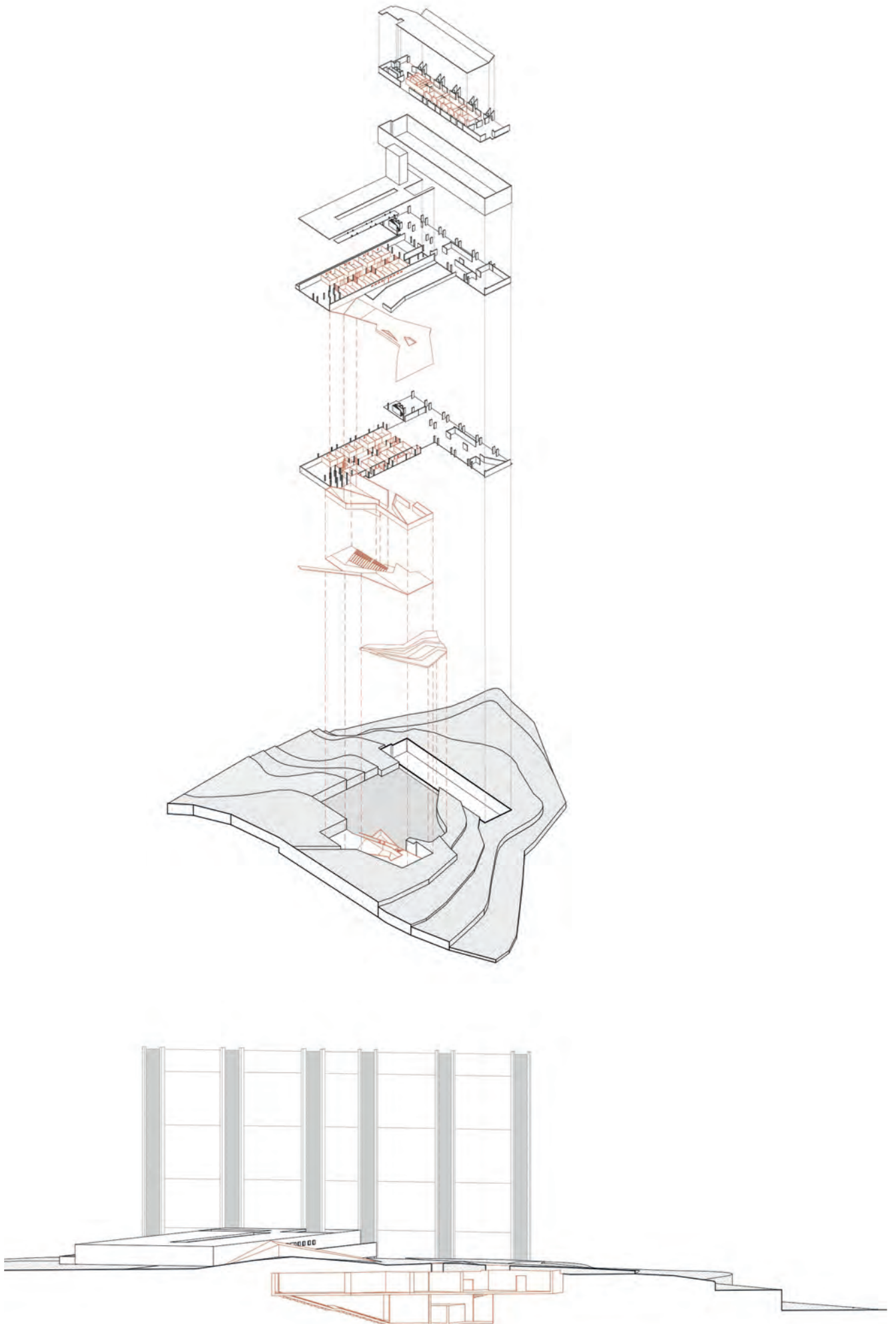






141

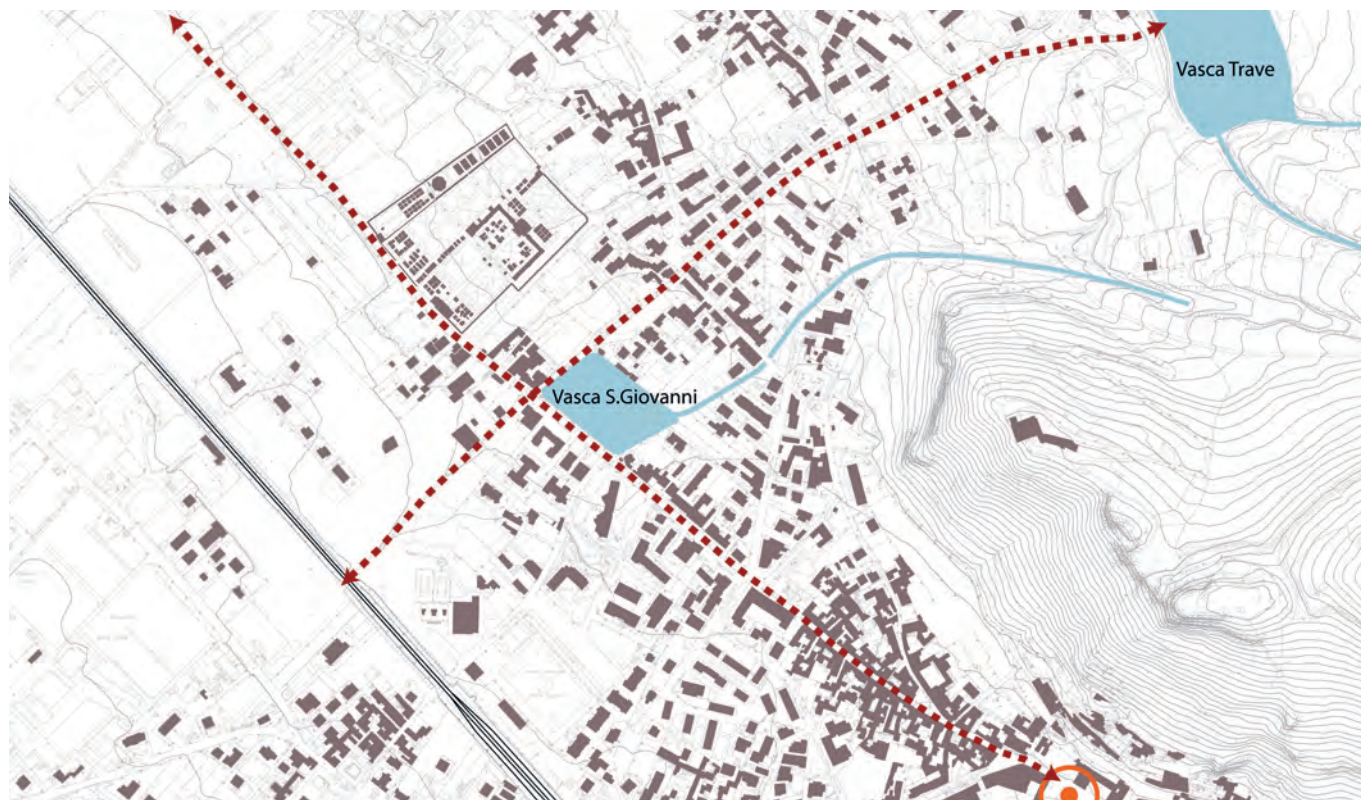




The current configuration of the former hospital in Sarno derives from a design approach dating back to 1978. The hospital consists of a building complex characterized by a relevant volumetric articulation in relation to the orography of the site and is completed in its essential parts, however the healthcare structure has never achieved effective use. The design intervention carried out can be divided into two characterizing phases: the first of refunctionalization of the pre-existence and the second of reconfiguration of the public use of the place through the addition of something ex-novo. The refunctionalization process aims to create a community hospital aimed at guaranteeing low and medium intensity care for a large catchment area, in one location intermediate between home care and hospital admission, in order to favor places more suited to the socio-healthcare need. The addition of common spaces surrounded by light partitions and the importance of the greenery that passes through minimally invasive grafts takes on a primary role, making possible a balanced harmony between the marked and the rational previous design imprint and the subsequent desire for “rebirth” of the place. In the finalized internal environments to hospitalization, the intervention involves the creation of autonomous greenhouses that define the places of stay. An accurate reading of the altimetry has determined the key points of the new intervention which, underlines the relationship with the subsoil and uses a geometry characterized by broken lines and acute angles. In the project, whose program is an auditorium, a large central room, marked by a single pitch that projects out partially from the ground, intersects, at different heights, all the other underground rooms.

FERDINANDO TESTA - LIVE ALONG THE EDGES: TRAVE BASIN
VIVERE LUNGO I BORDI: VASCA TRAVE





GENERAL STRATEGY





URBAN & ARCHITECTURE FRAMEWORK

Program

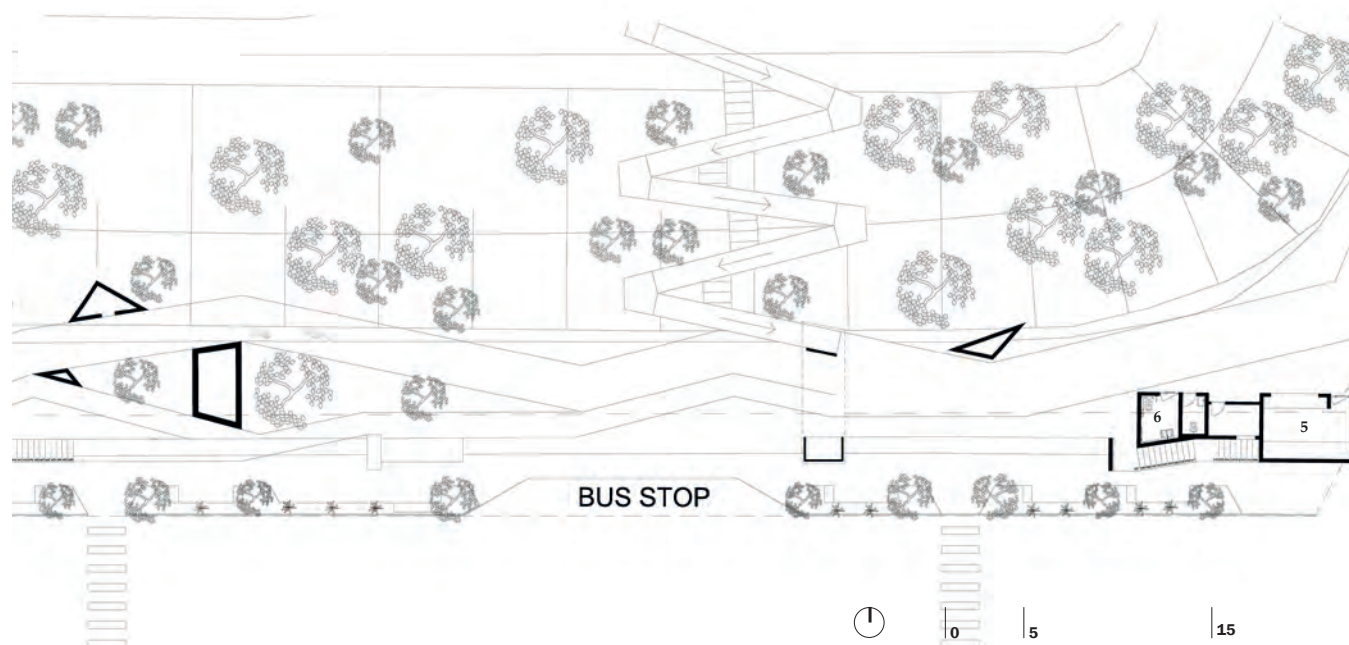
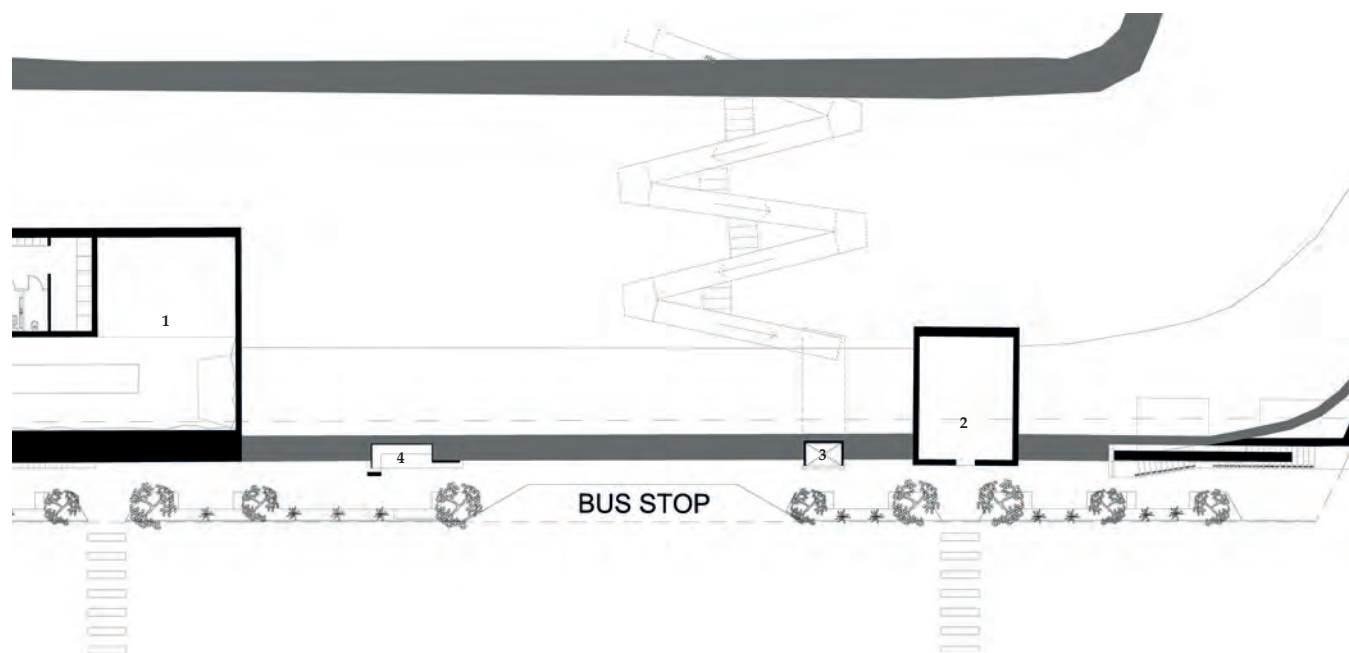
sport facilities, urban park,
organic urban orchard

Covered area	936m ²
Outdoor area	14226m ²
Above-ground floors	1
Built volume	3276m ³
Estimated cost	716.795€ €

The main objective of the project is the reconnection of green spaces, as well as the reconnection between two portions of territory that are currently separated. By working with differences in height and changes in altitude, the project redefines and relocates the basin wall in the collective imagination.
The area inside the pool simultaneously becomes a community area, a playground

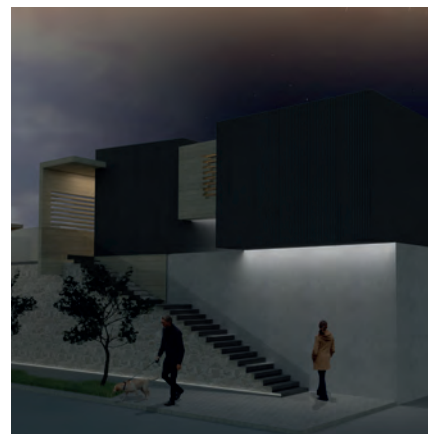
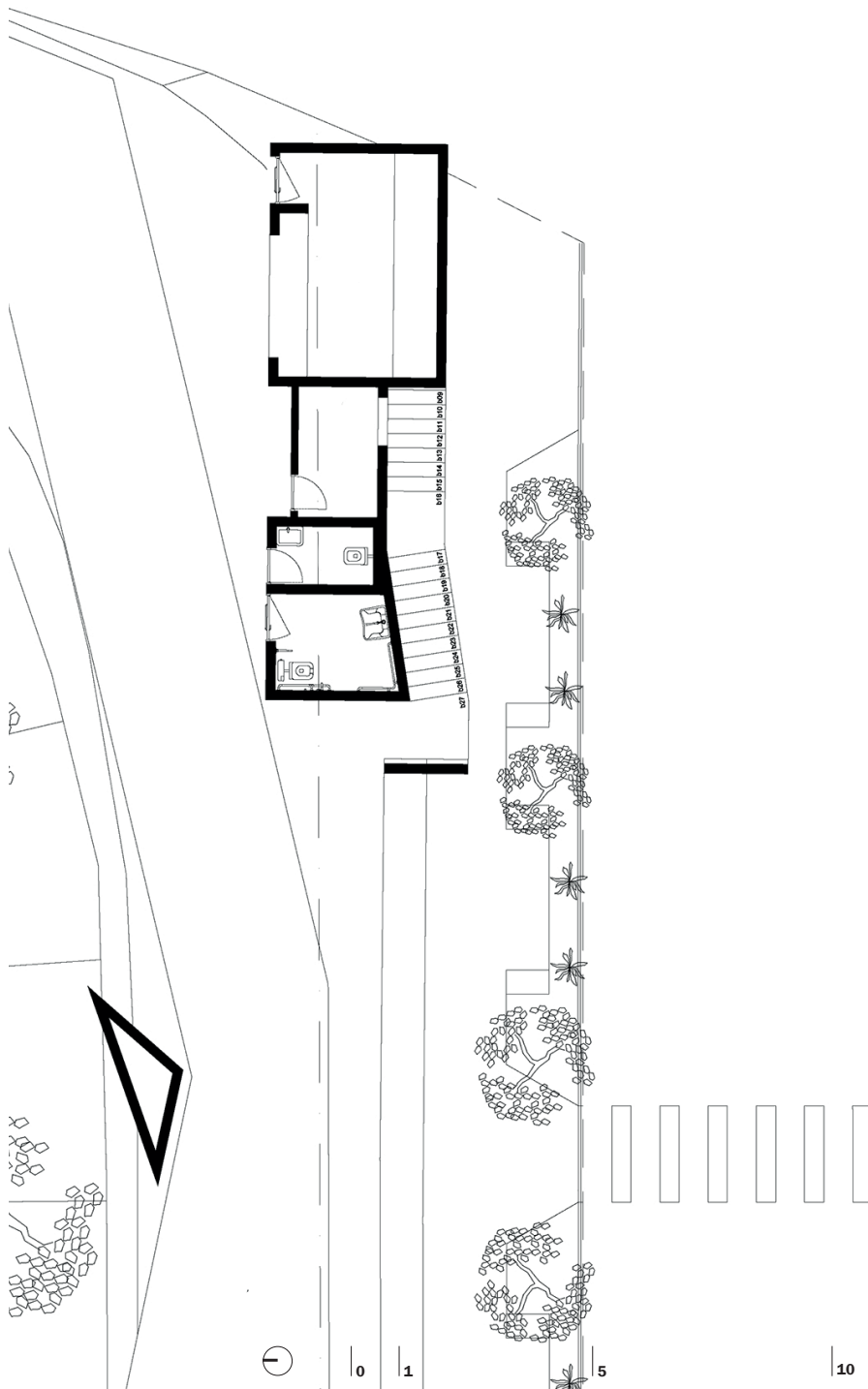
and a sports area, and ultimately a multifunctional place. Welcoming is a watchword that could not be renounced during the design phase.
Reconnection is also linked to the need of bringing people back to interact with nature, especially through agriculture. For this reason, urban gardens play a role of great importance within landscaping.

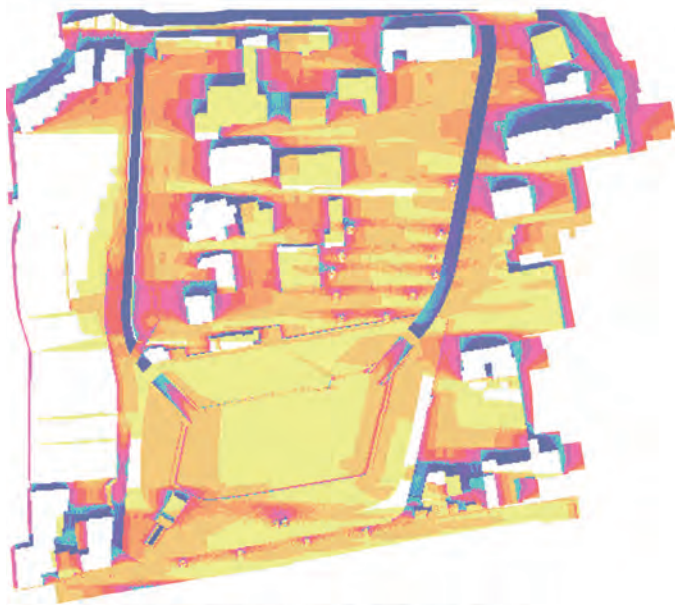




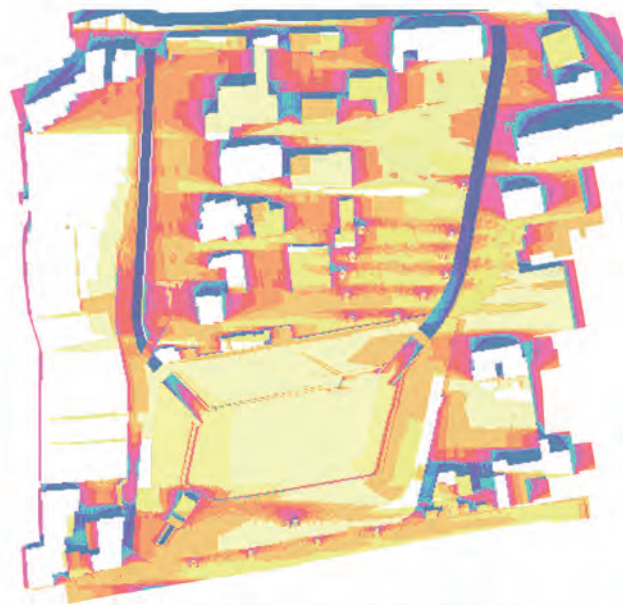
- 1. Gym
- 2. Bike repair place
- 3. Lift

- 4. Bus stop
- 5. Café
- 6. Toilets

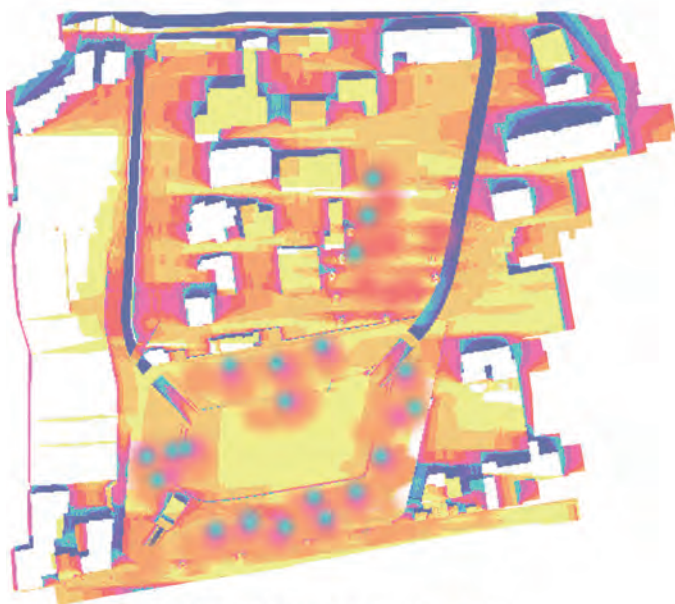




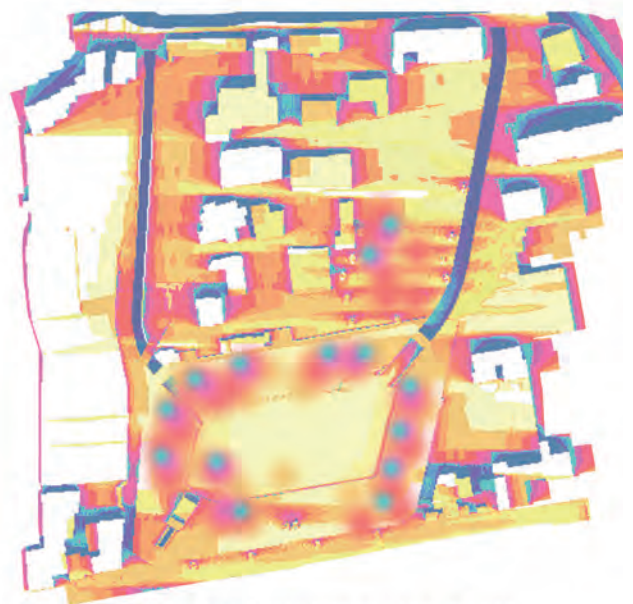
(21-12-2021)



(21-07-2022)

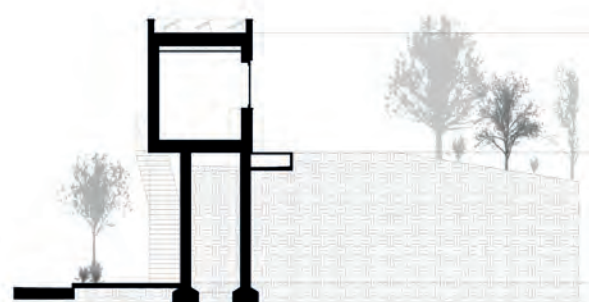
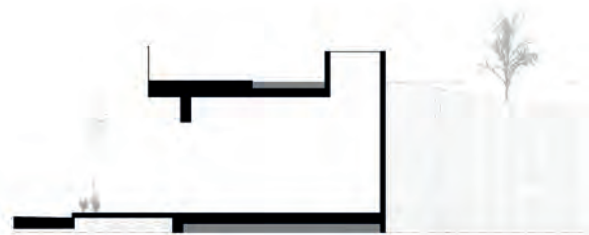
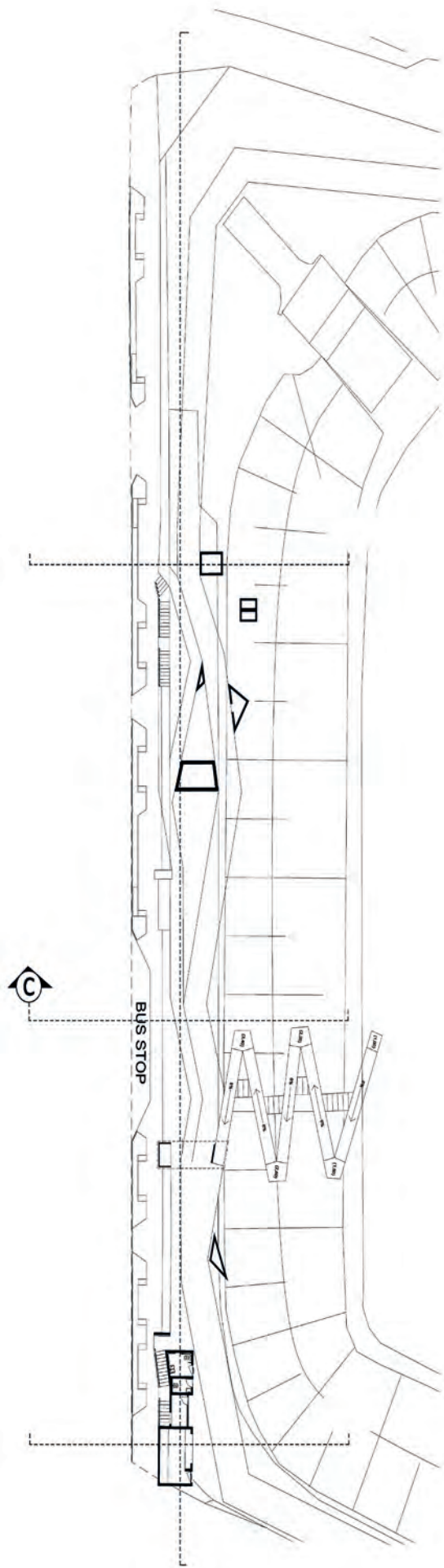


(21-12-2021)



(21-07-2022)





The territory of Sarno assumed its current shape starting from a tragic event that highlighted its fragility. Throughout the entire territory, the water collection channels resemble concrete scars and the water collection basins resemble deep wounds. Designing on an urban scale and not taking these aspects into account would have been yet another betrayal of a city that wants to look to the future to make peace with the past.

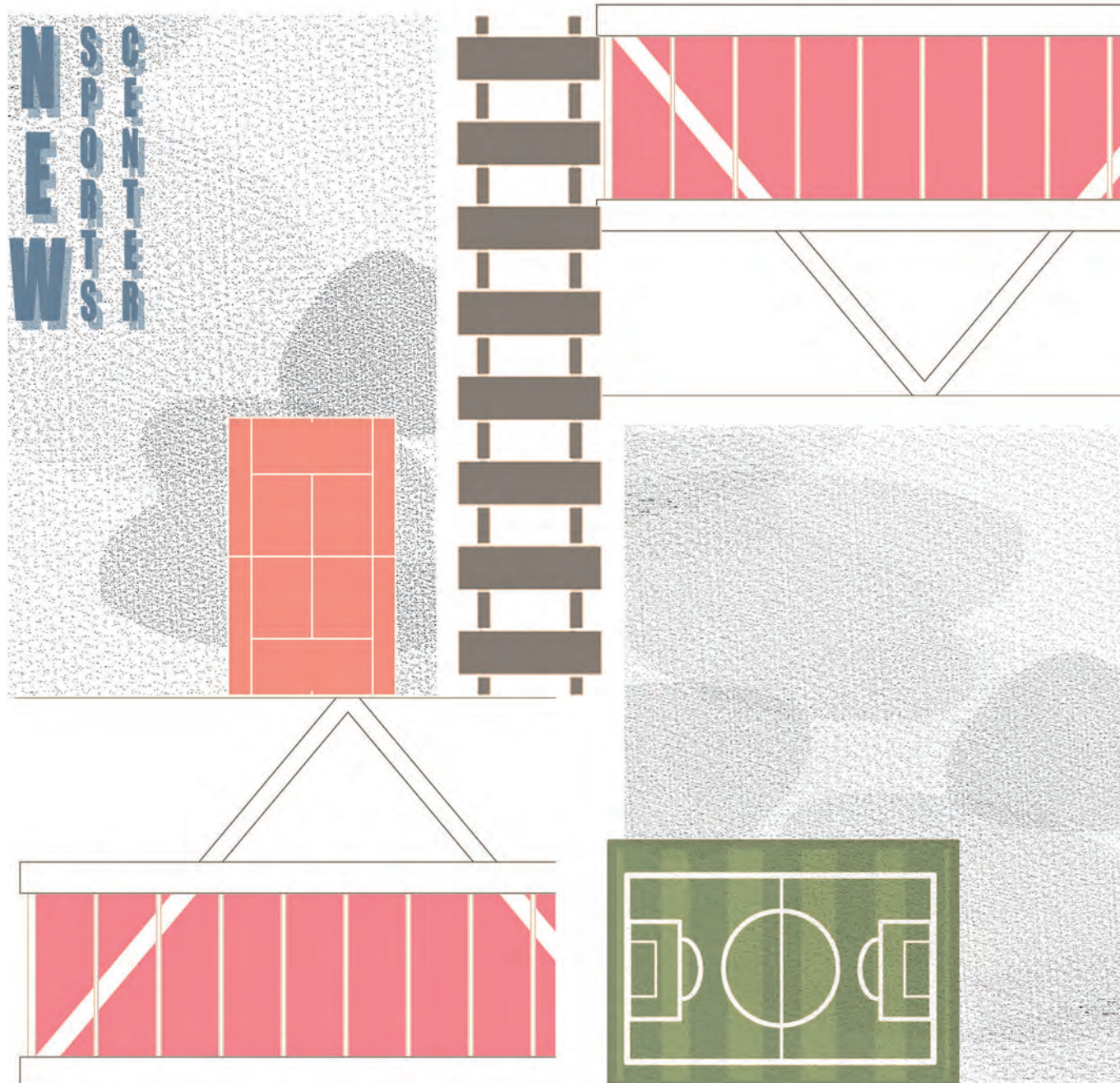
The urban redevelopment project of one of the numerous water collection basins is placed in this context. The basin is imagined as a large container – not just of water and mud – of social relations, unexpressed potential and the green lung of the urban area.

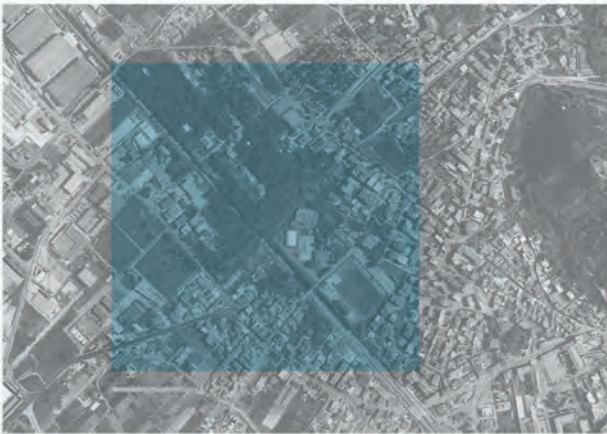
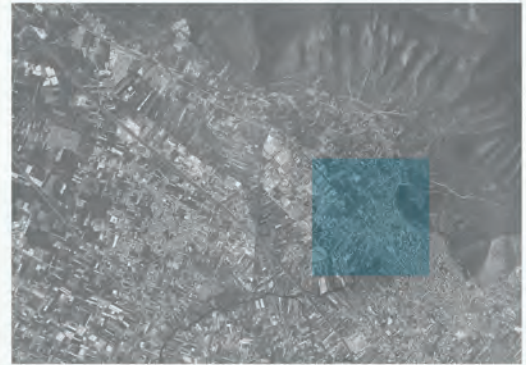
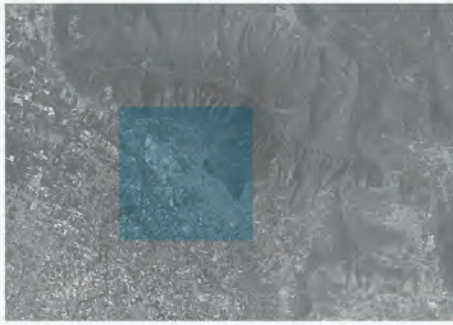
Along the perimeter wall which is currently not capable of hosting life, indeed presenting itself as an insurmountable barrier for the population, new services for the community have been imagined: a gym specialized in preparation for mountain sports; an uncovered cycle/
pedestrian path; refreshment and community spaces; a projecting roof for the bus stop.

Inside, different filling levels have been designed to keep the water collection function active while still ensuring safe use of the structure.

YURIY MAKAR - A NEW SPORTS AREA FOR SARNO

UN NUOVO POLO SPORTIVO PER SARNO

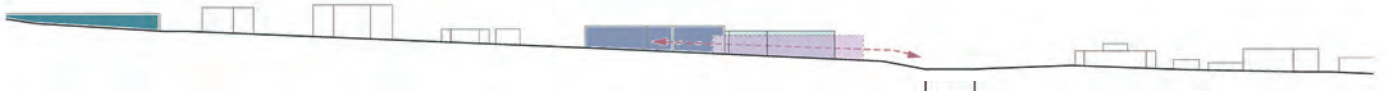




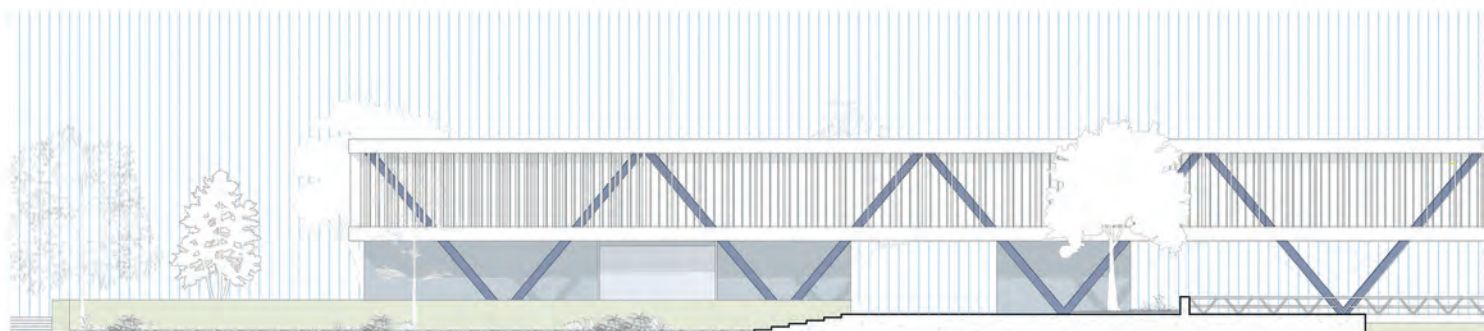
3

154

GENERAL STRATEGY

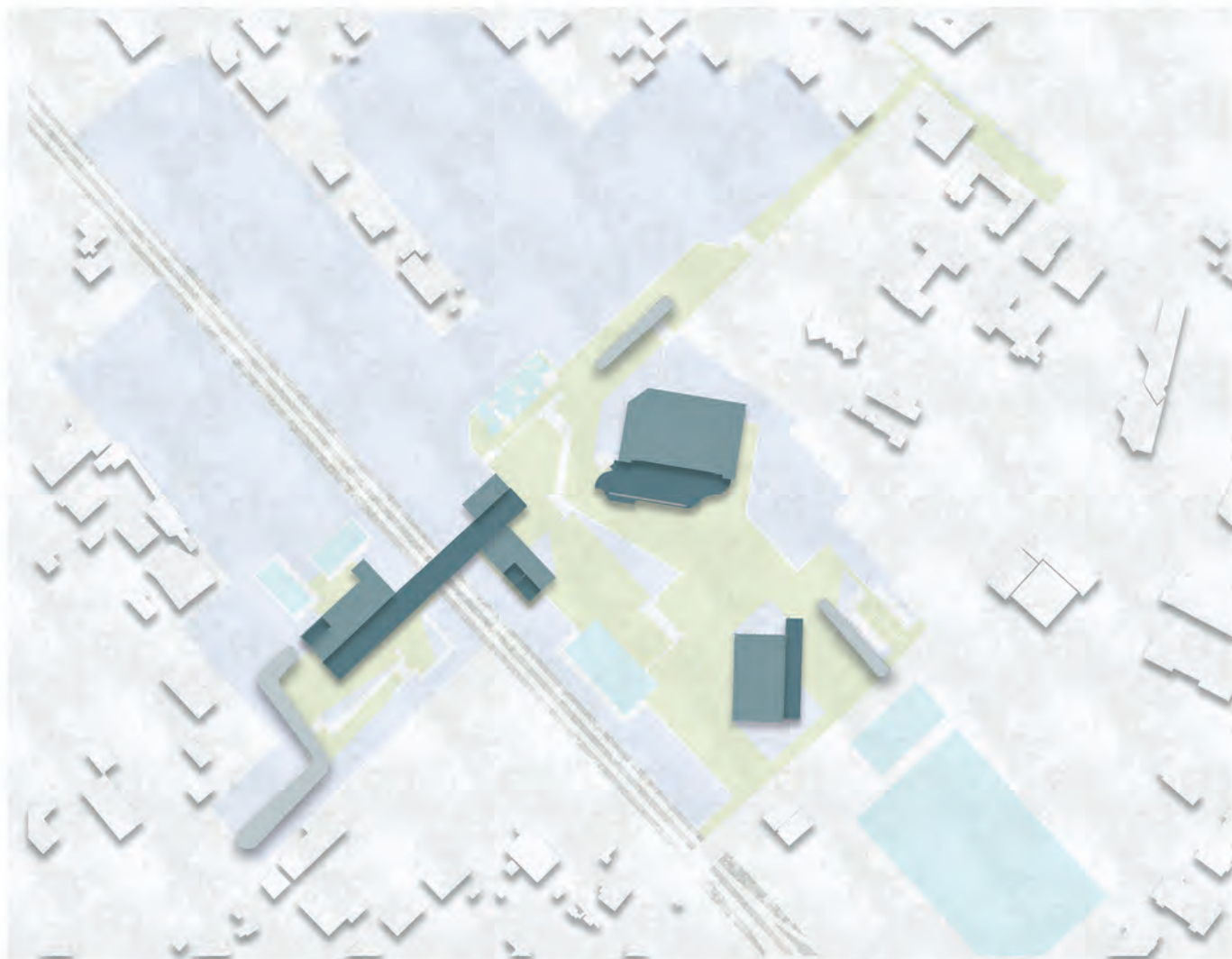


The objective of the project is to connect and make permeable the two green areas currently divided by the railway. This is done by taking advantage of the bridge and the pre-existing buildings, strengthening them, and expanding the entire system by designing a new sports complex with an equipped and public outdoor space.



FRONT ELEVATION





156

URBAN & ARCHITECTURE FRAMEWORK

Program sports and multifunctional center

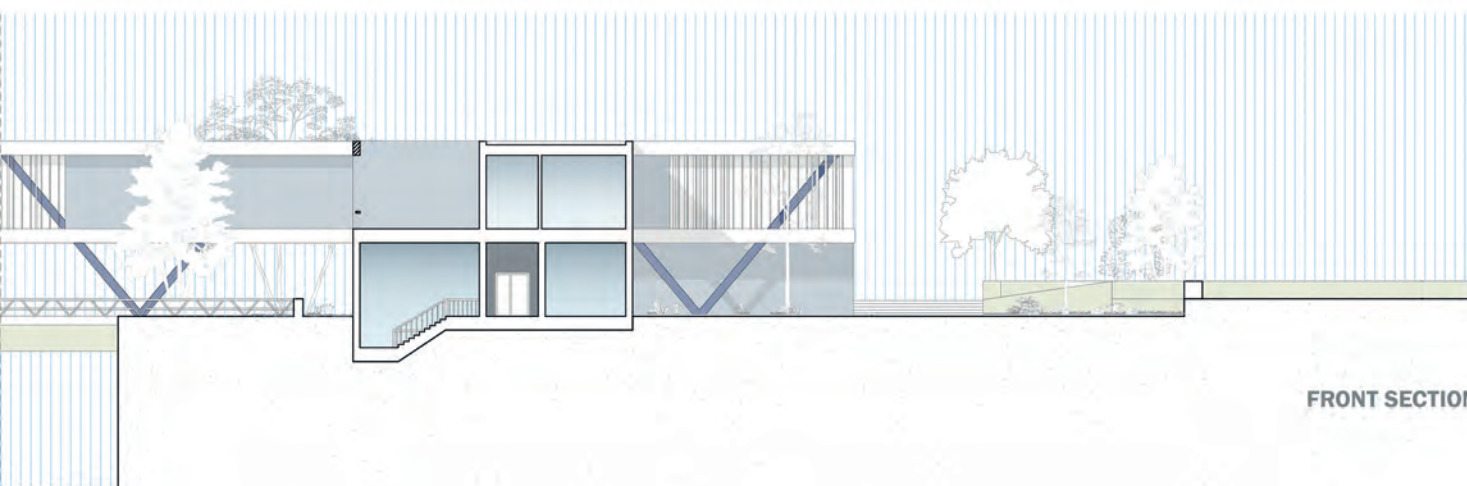
Covered area ex novo	2668 m ²
Outdoor area ex n	23985 m ²
Above-ground floors	2
Built volume	19.860 m ³
Estimated cost	738.278€

The project connects and makes permeable the study area taken into account, from the northern part to southern. The choice to operate in this way is due to the presence of an existing bridge, currently in a state of abandonment, which therefore testifies a previous desire of the municipality to connect the two areas. On the one hand, therefore, there is this condition of potential urban connection, on the other hand, in the area, although in a state of neglect, are located the municipal playground and an abandoned structure which was intended to be a swimming pool.

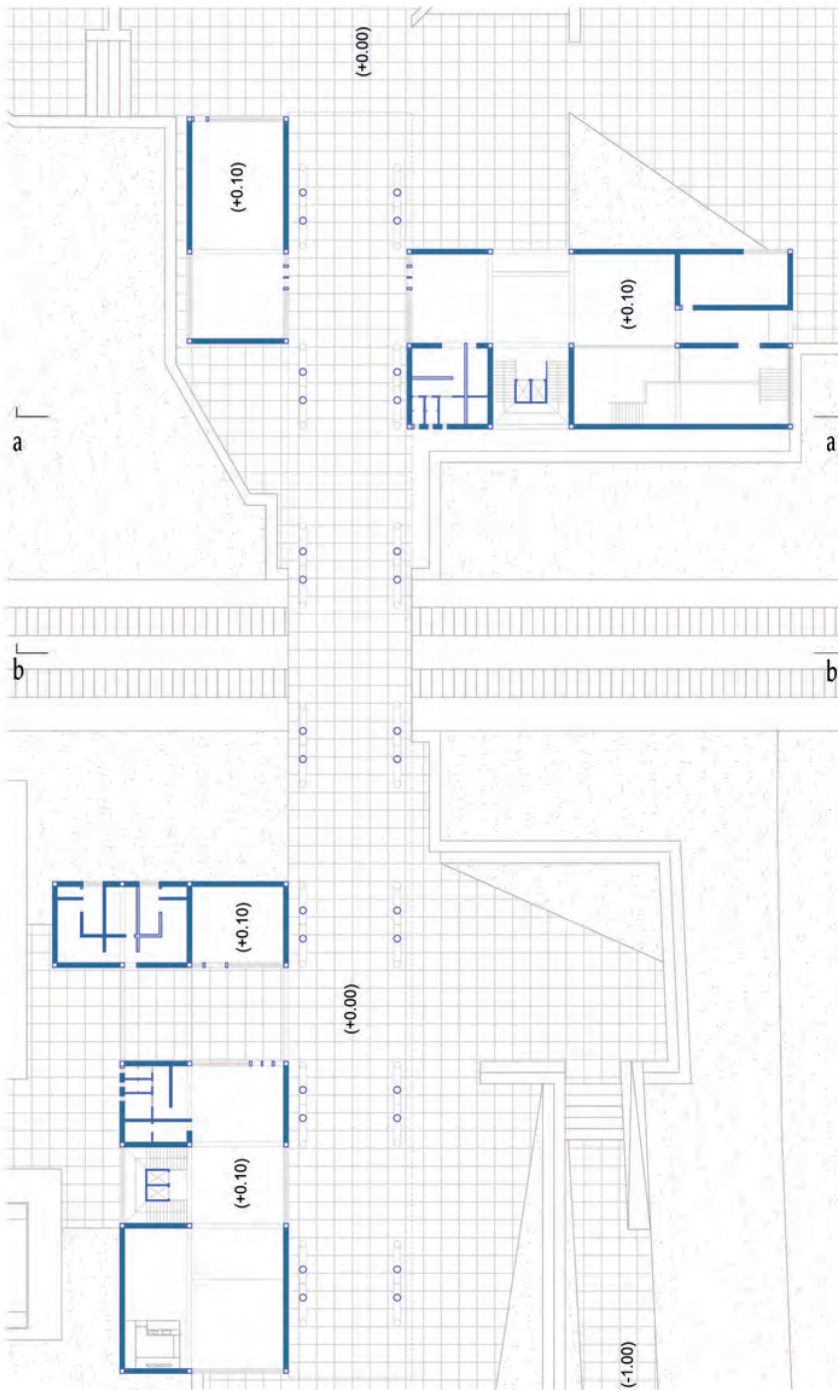
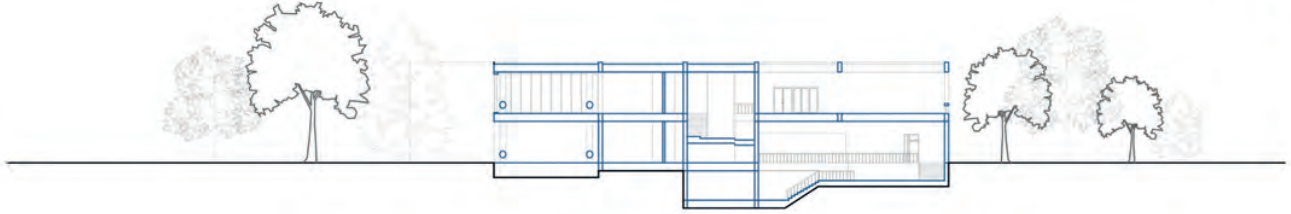
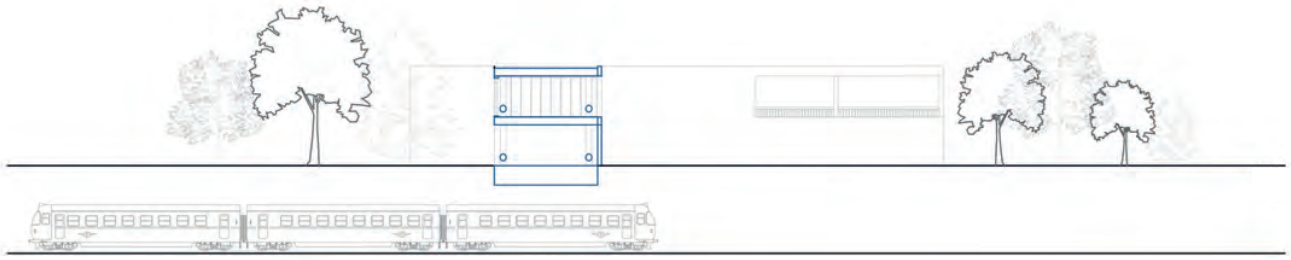
The decision to expand this system is also due to the presence of the Sarno football field located a few meters from the project area. In this way, different sports can be connected.

The new proposed building combine different blocks in one architecture, with various sports activities, just like it already happens in the project area.

The building is conceived as a bridge offering a connection over the railway and at the same time community spaces linked to sports and wellbeing.

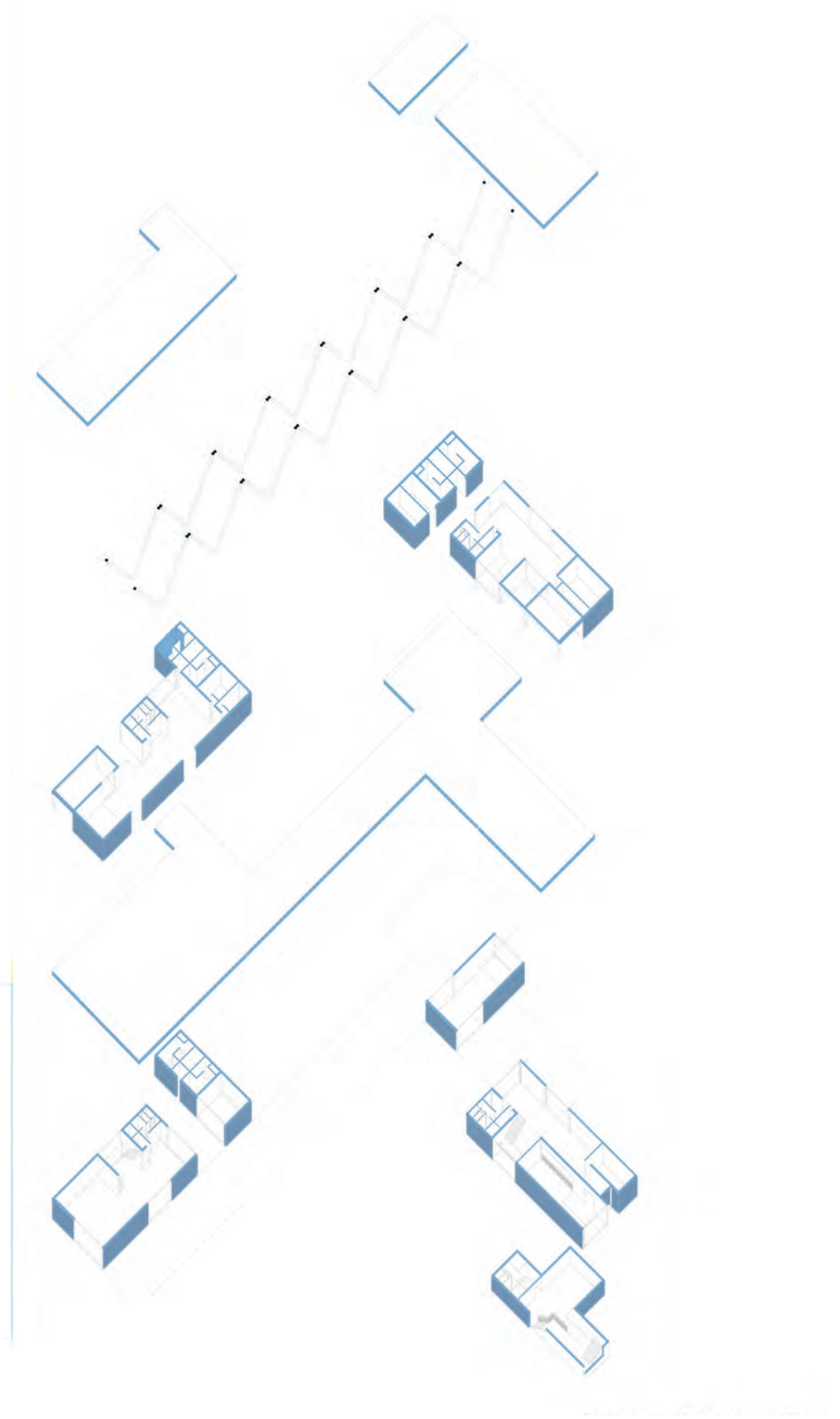


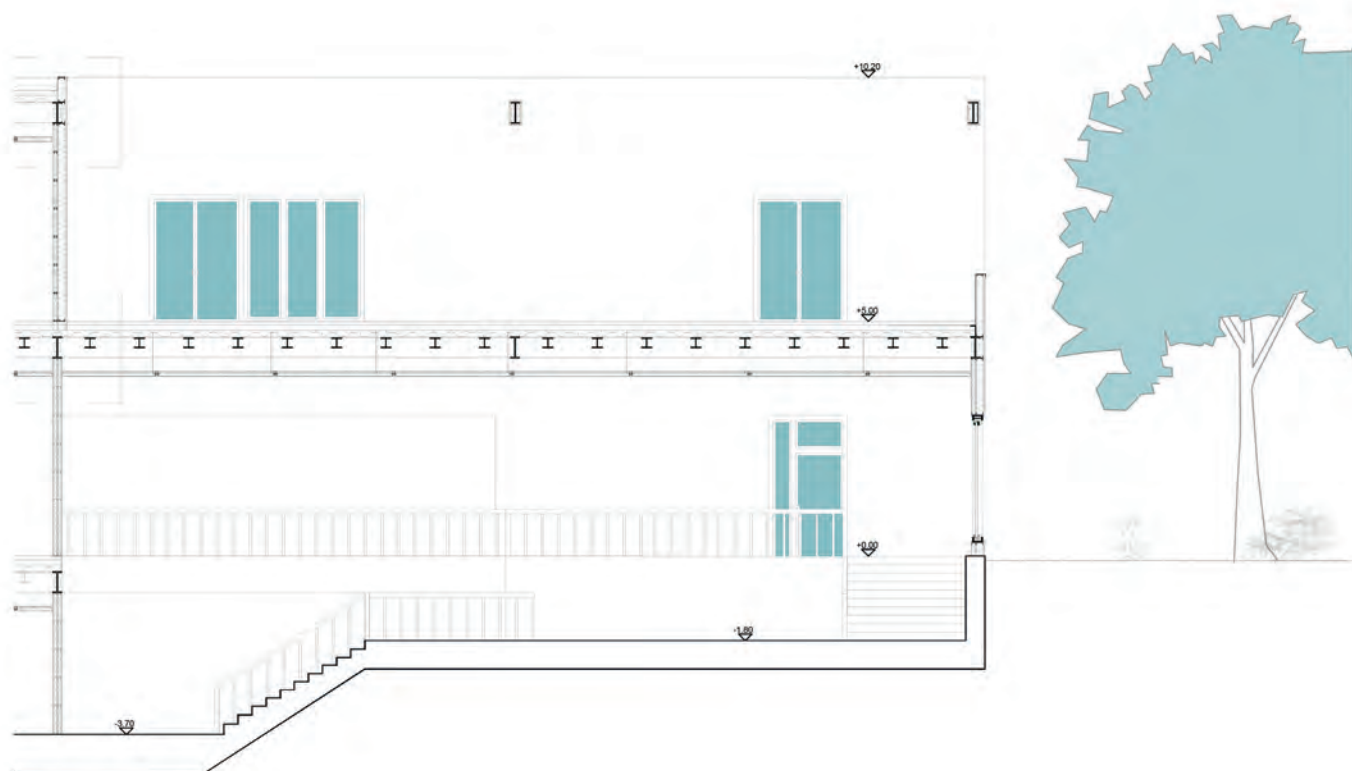
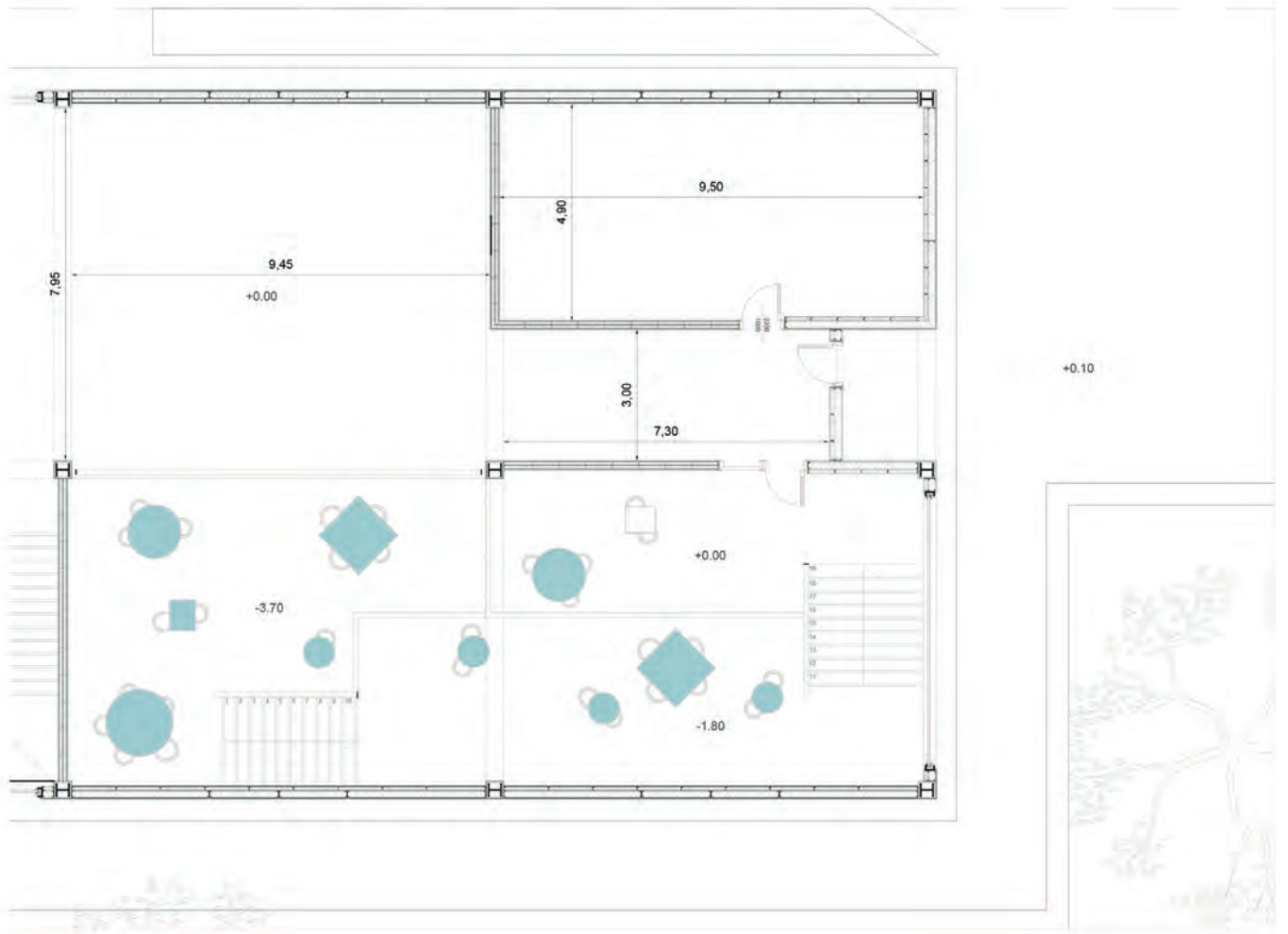
FRONT SECTION



157







The intervention area is located in the north-west part of the municipality, a few km from the railway station. The site contains some pre-existing building and sports facilities, but only one is in use as a sports hall. The other building, the municipal swimming pool, was never used and is therefore now in a state of abandonment and decay. Even the sports facilities, which are made up of some five-a-side football pitches, a skate park and a sports pitch covered by a wooden structure, are in a state of abandonment. Next to the area, there is the municipal stadium. In addition, the railway, cuts the area in two, thus becoming a limit and a starting point for the project.

Two design strategies are carried out. The first concerns the redevelopment of the entire site by trying to recover the sport facilities and expand them with new buildings and equipment, in such a way as to transform the entire area into a real sports centre. The other concerns the connection between the

160

lower part of the city and the upper part, which at the time was interrupted by the railway. The project therefore recovers an old pre-existing abandoned bridge to allow permeability of the area, but also to mend various urban fabrics that already exist which are currently disconnected from each other. These two operations have been reconciled in a single action, namely that of creating a multifunctional structure, a bridge building, which hosts different functions linked to sport, with public spaces and refreshment area, and allows passage from one part of the city to another. In this operation, the three accesses to the area and the public space outside the new building are fundamental, as they have the purpose of guiding those who access the area, almost as if it were an architectural walk. With this project, the different urban fabrics are stitched together, providing various services and public spaces that were missing, trying to become a real attraction, but at the same time offering a break from the urban density.

**GIANMARCO PERNA - FROM CARE TO CULTURE:
THE REUSE OF THE FORMER HOSPITAL VILLA DEI PINI**
*DA CURA A CULTURA:
IL RIUSO DELL'EX OSPEDALE VILLA DEI PINI*

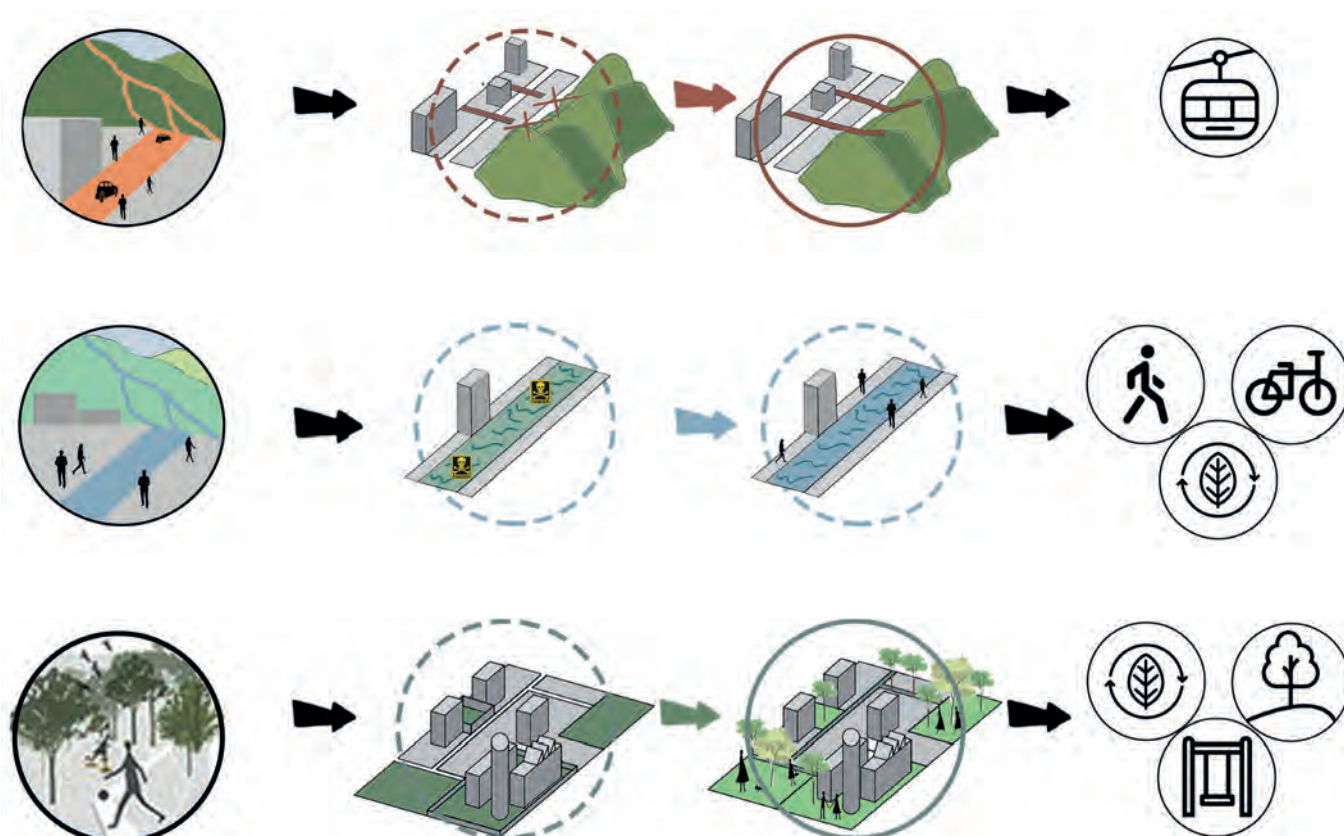


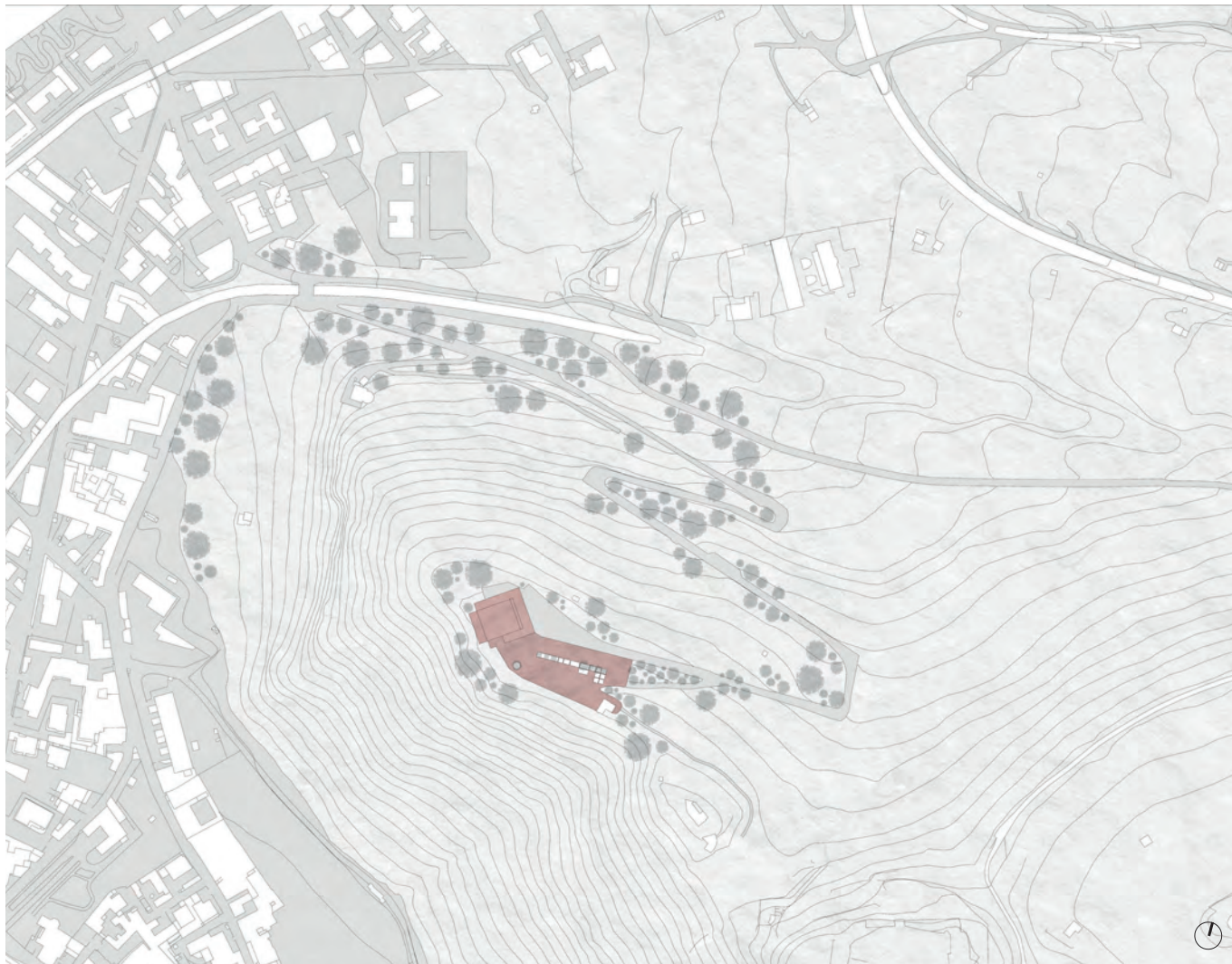


GENERAL STRATEGY

The main goal of the project is to reactivate the area of the abandoned hospital located on the historical hill, starting from the identification of those drosscapes that can become new potentialities. The city center can indeed benefit of more efficient connections through the existing landscape, reaching new public buildings.

162





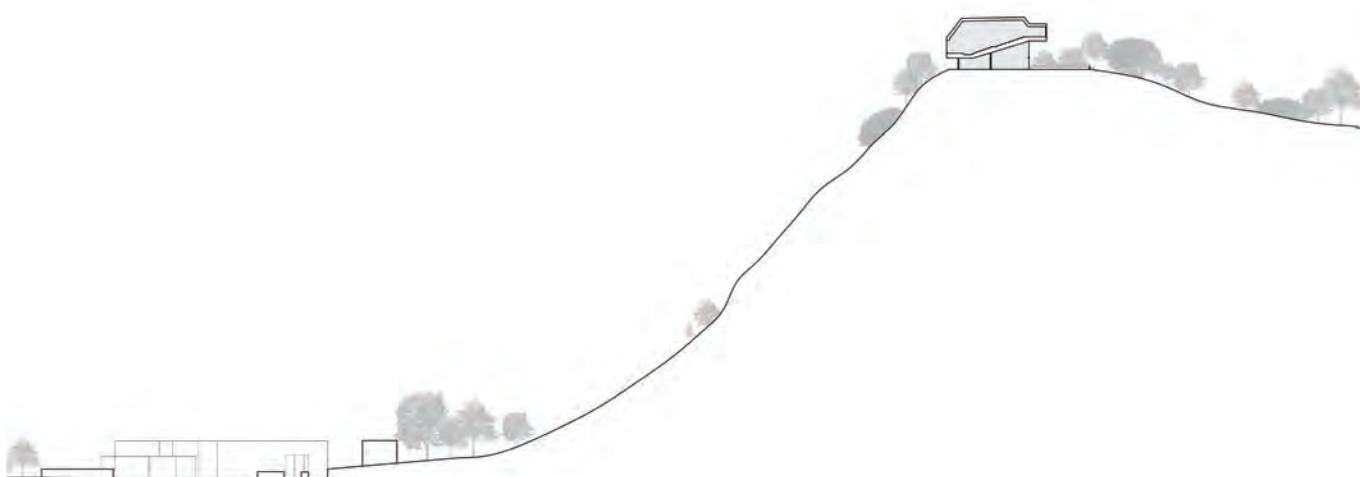
URBAN & ARCHITECTURE FRAMEWORK

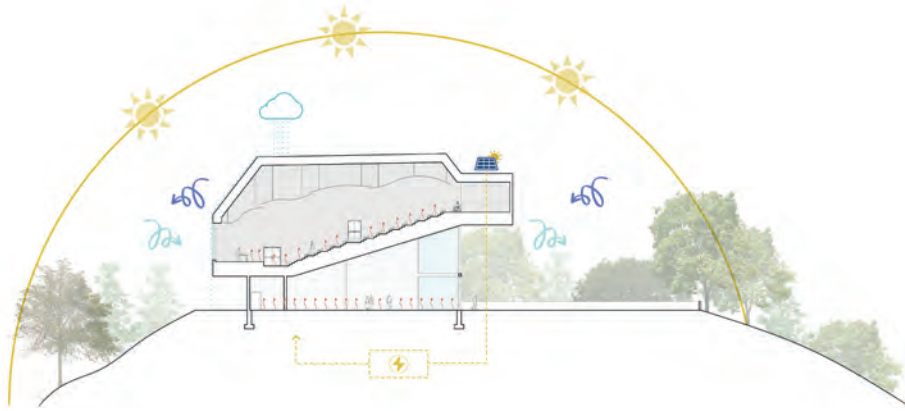
Program social and culture center

Covered area	6.400m ²
Outdoor area	3.368m ²
Above-ground floors	4
Built volume	17.174m ³
Estimated cost	9.339.225€

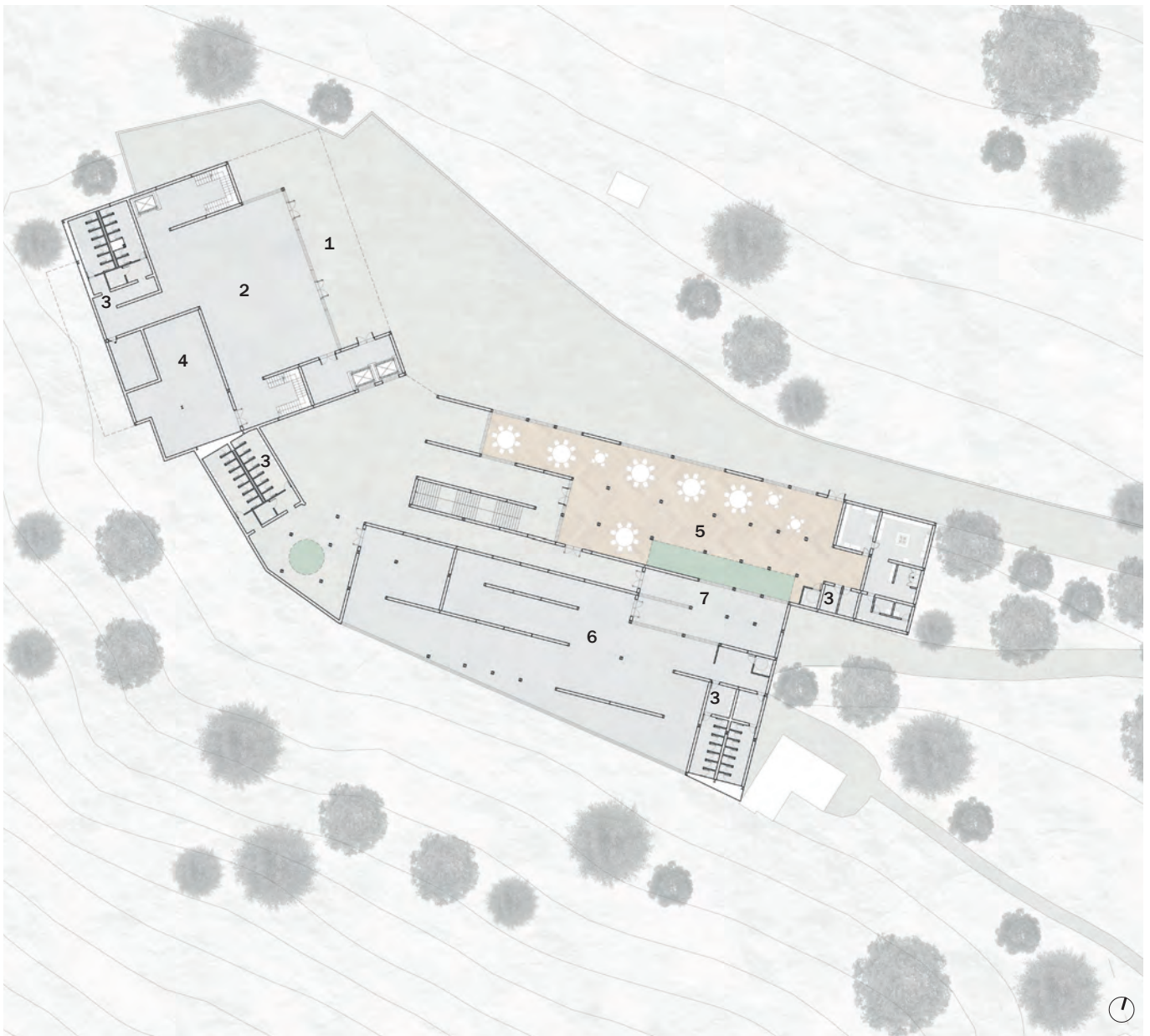
The intervention examined concerns the former sanatorium of Villa dei Pini, the only hospital in Sarno not to have been destroyed by the 1998 flood, on the western peak of Mount Saretto. The site has strong potential from a landscape point of view and, given its elevated position, it is a place of strong visual impact from the various views of the city. The proposal carried out involves the total demolition of the old hospital structure in favor of the creation of a new cultural center. The pole is made up of two functionally separate but spatially

contiguous blocks. During the design phase, particular importance was given to the continuity of the flows between the different blocks. The position of one block maintains that of the former hospital, declaring the strong desire to the visual memory of the structure. The block on the north side acts as a volumetric conclusion to the entire complex while the one on the south acts as a filter space. The other part forms the basis of an upper open public terrace overlooking the city of Sarno.

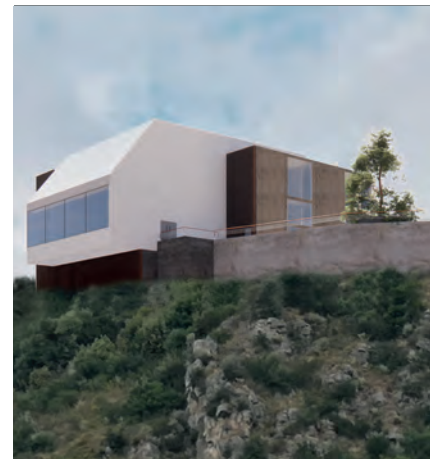




164



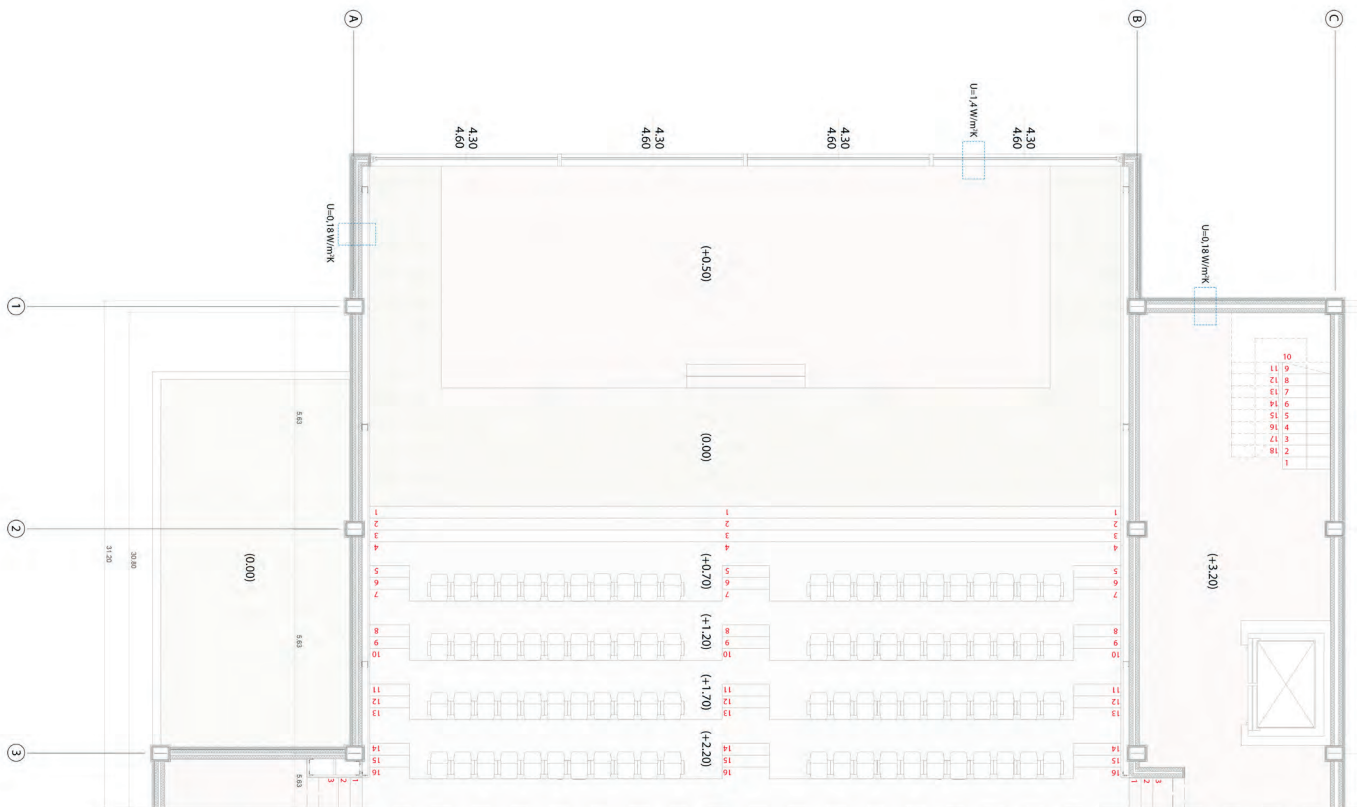
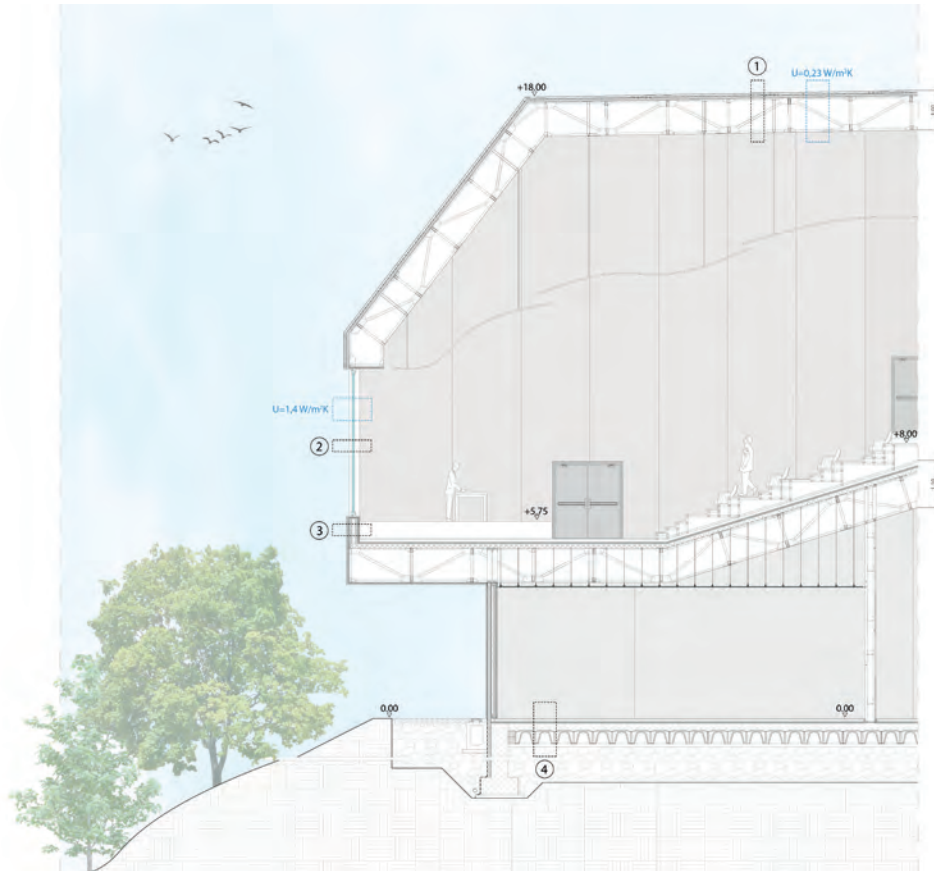
- | | |
|-------------|--------------------|
| 1. Hall | 5. Restaurant |
| 2. Lobby | 6. Exhibition room |
| 3. Toilets | 7. Bookshop |
| 4. Meetings | |



165



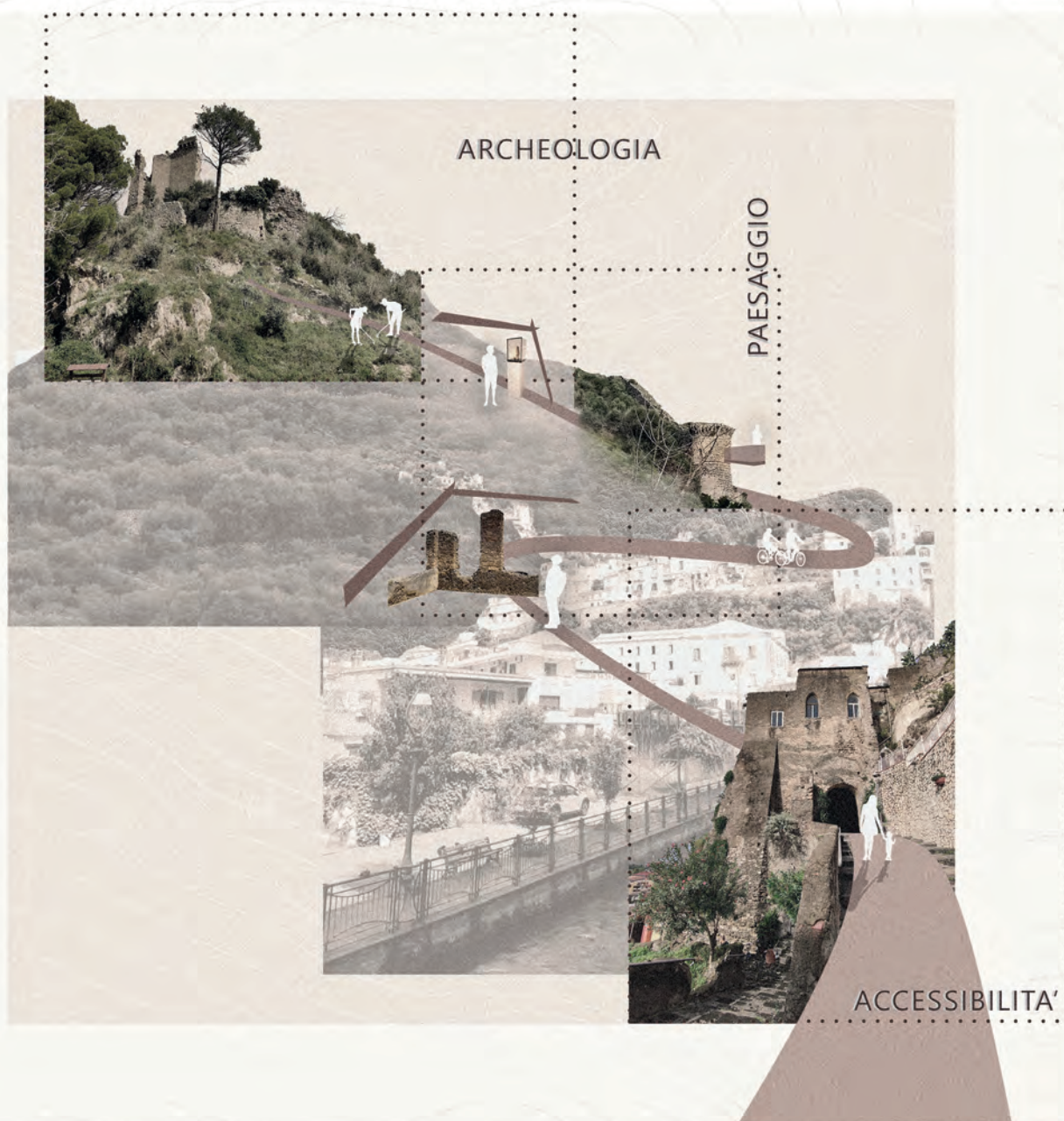


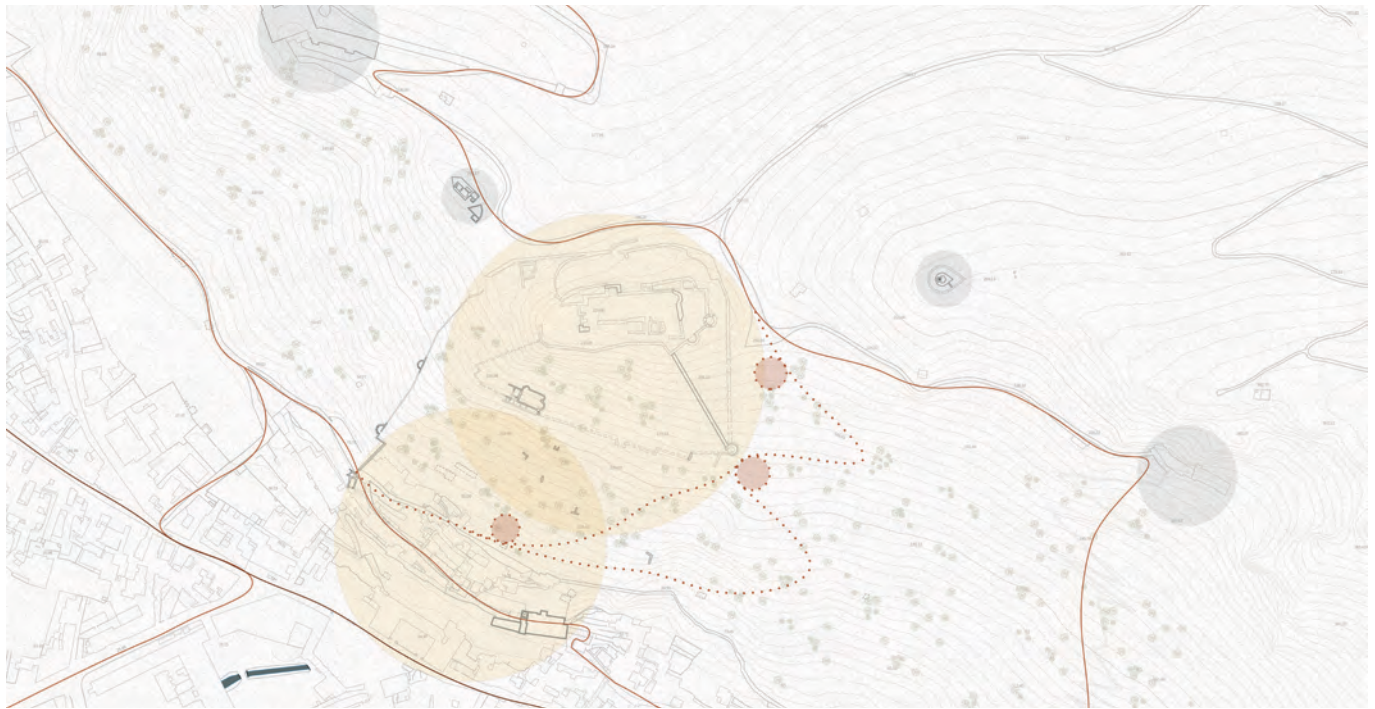


The intervention examined concerns the former sanatorium of “Villa dei Pini”, the only hospital in Sarno not to have been destroyed by the 1998 flood, being located on the westernmost peak of Mount Saretto. Despite this, the private hospital has fallen into bankruptcy over the years, undergoing a series of changes of ownership and management that have led it to a state of high degradation and abandonment. The site has strong potential from a landscape and panoramic point of view and, given its elevated position with respect to the urban context, it is a place of strong visual impact from the various views of the city. The intervention carried out involves the total demolition of the old hospital structure in favor of the creation of a new cultural center. This structure has the objective of being central within the urban context and as a point of suture between the city and Mount Saretto. During the design phase, particular importance was given to the continuity of the flows between the different blocks. The furthest block, overlooking the western end of the Saretto, houses an auditorium with conference rooms. The position of this block maintains that of the former hospital, declaring the strong desire to maintain the historical visual memory of this structure. The latter is characterized by a central block of irregular shape, which constitutes the actual hall of the auditorium. These two blocks, spatially distinct from each other, are joined by a raised corridor. One includes a restaurant, an exhibition hall with a continuous window overlooking the Sarnese plain and a covered public space, which acts as a filter with the other block. This part forms the basis of an upper open public terrace overlooking the city of Sarno.

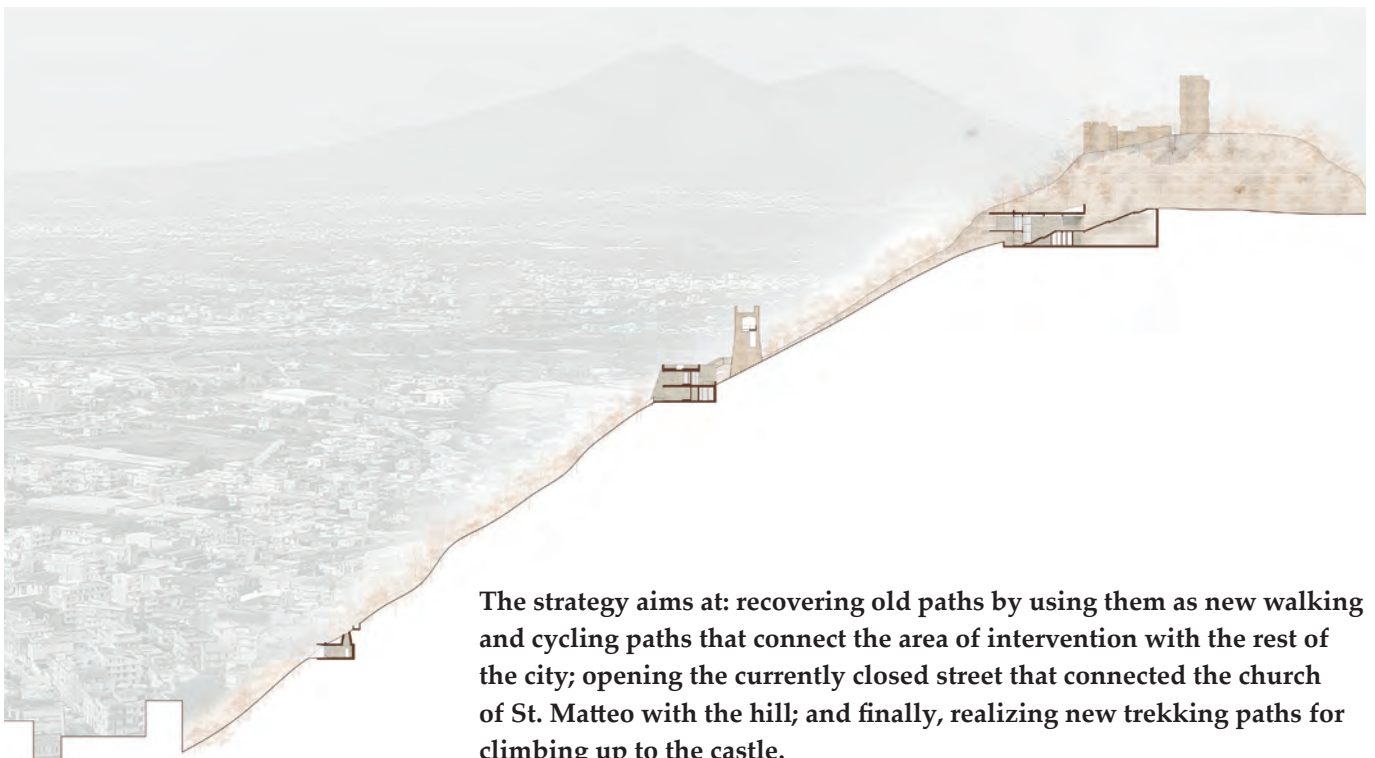
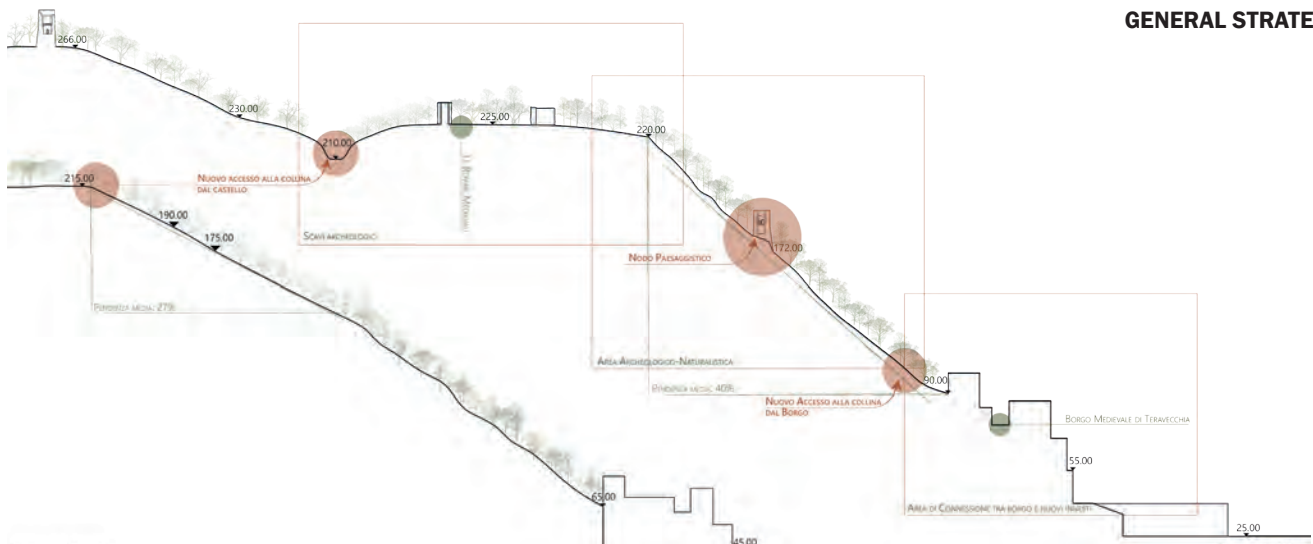
ERIKA SCOTTO DI COVELLA - THROUGH THE ANCIENT WALLS

ATTRAVERSO LE MURA STORICHE





GENERAL STRATEGY



The strategy aims at: recovering old paths by using them as new walking and cycling paths that connect the area of intervention with the rest of the city; opening the currently closed street that connected the church of St. Matteo with the hill; and finally, realizing new trekking paths for climbing up to the castle.



171

URBAN & ARCHITECTURE FRAMEWORK

Program

Archeological and naturalistic park,
museum, panoramic terraces

Covered area	2454,50m ²
Outdoor area	8100m ²
Above-ground floors	3
Built volume	18384 m ³
Estimated cost	5 204 430,49 €

The museum gallery is broken up into three precise points on the slope, allowing the design of a true museum exploded in the landscape. It is necessary to see these three interventions as museum spaces shifted onto the slope: the *Gallery* represents the new atrium-entrance to Saretto, the *Belvedere* is a new exhibition room in which the archaeological remains and the landscape are the artworks to be contemplated; and finally we have the *Museum*, the true exhibition space. The impact of the landscape was fundamental to consider, which is why it was decided to opt for three hypogeal buildings excavated in the limestone, united architecturally by an additive process that sees the translation

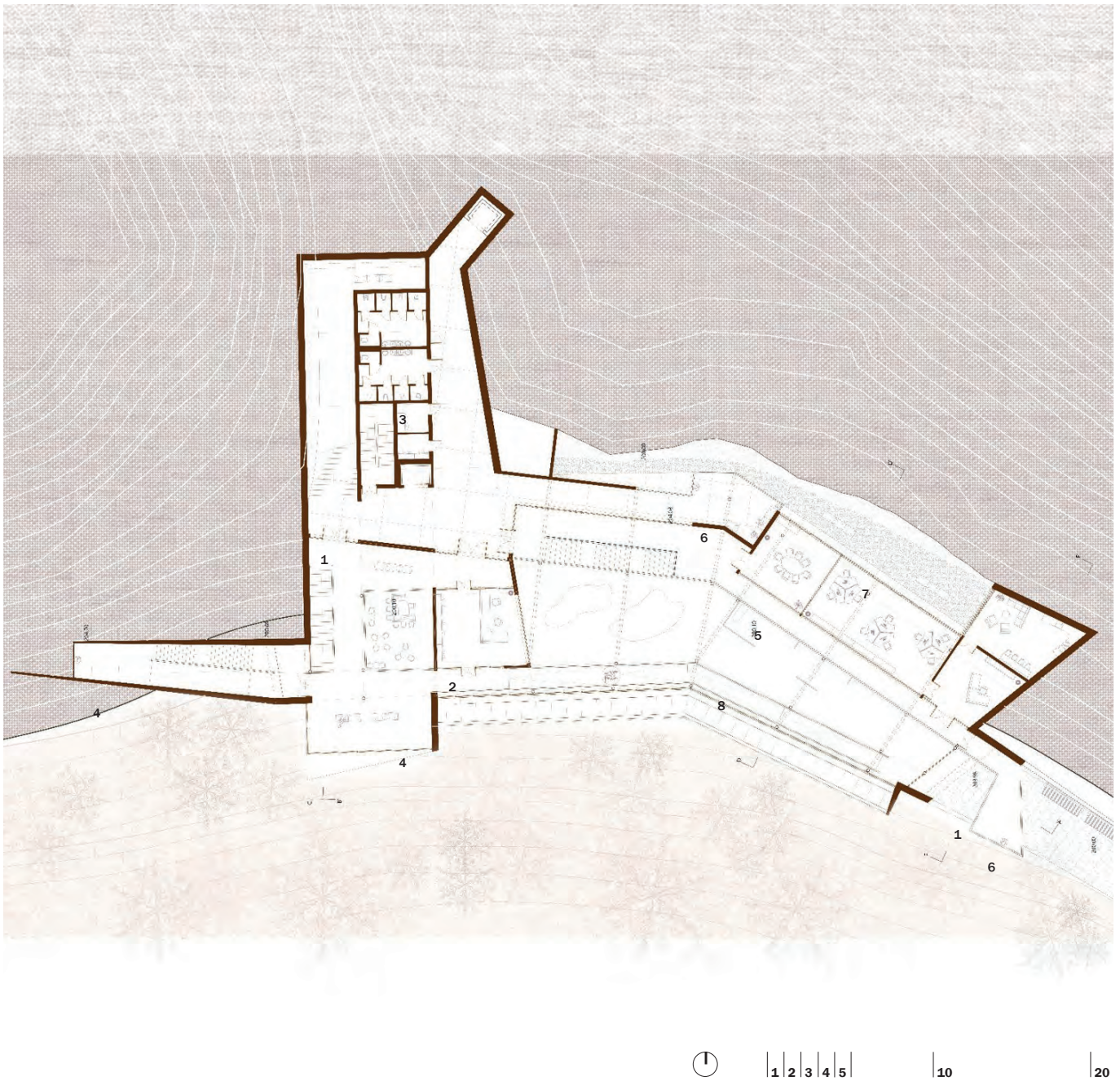
of archaeological features into the project. The relation with the pre-existence has determined three different thematic areas depending on the ruin with which to relate: Gallery-San Matteo, Belvedere-Angevin Tower, Museum-Castle.

Three strategic points where old and new converge, offering new ways of reviving and ascending the hill and the defence system. A fundamental element of the project is the Angevin Tower, a landmark that makes the entire system recognisable and identifiable, and that holds the three interventions together. For this reason, it is the only archaeological ruin to be re-functionalised and used as a *tower above the landscape*.





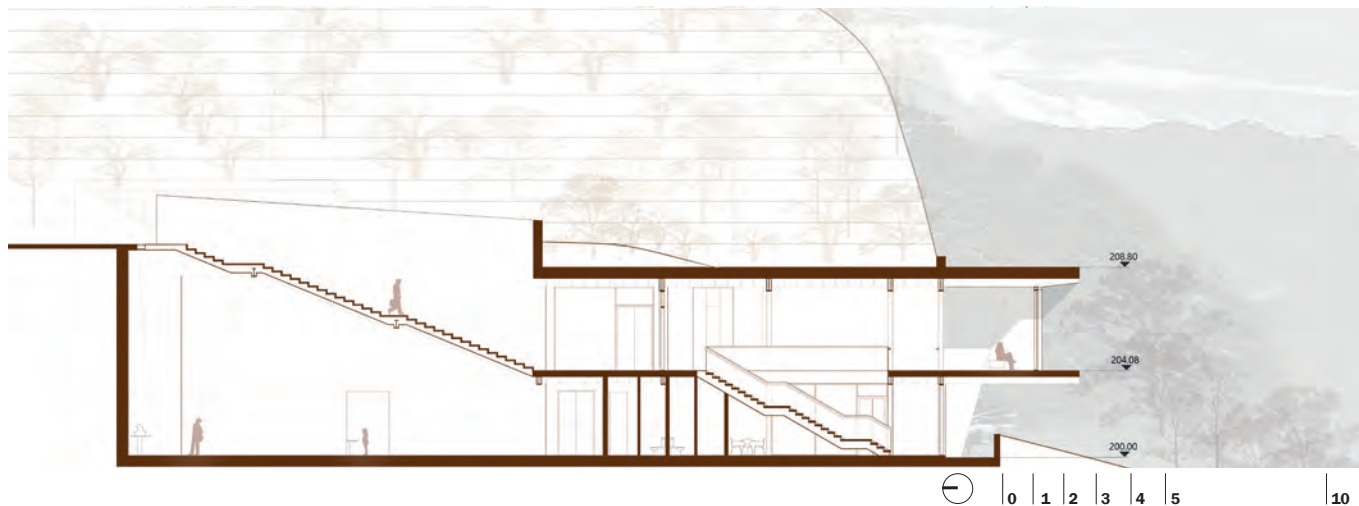
172

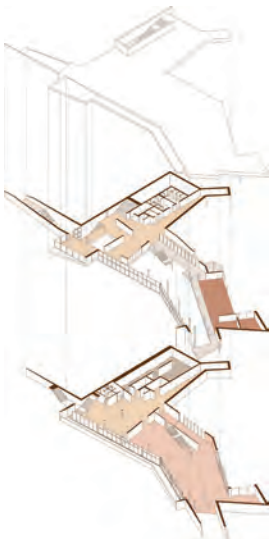
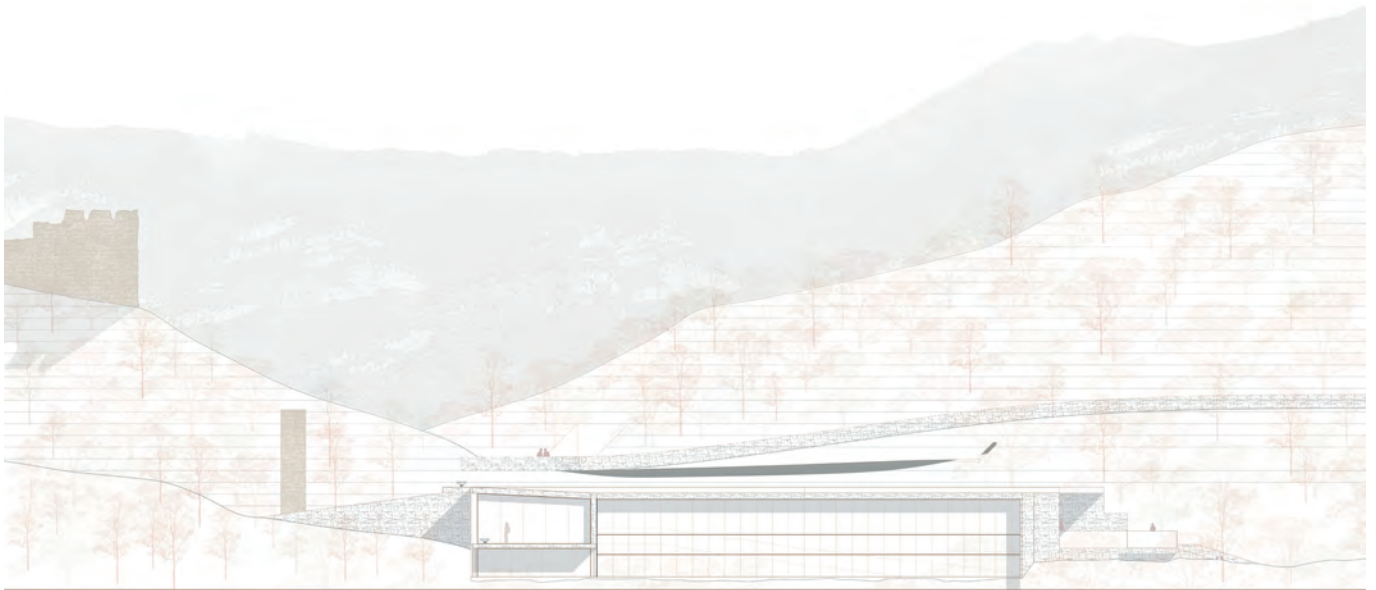
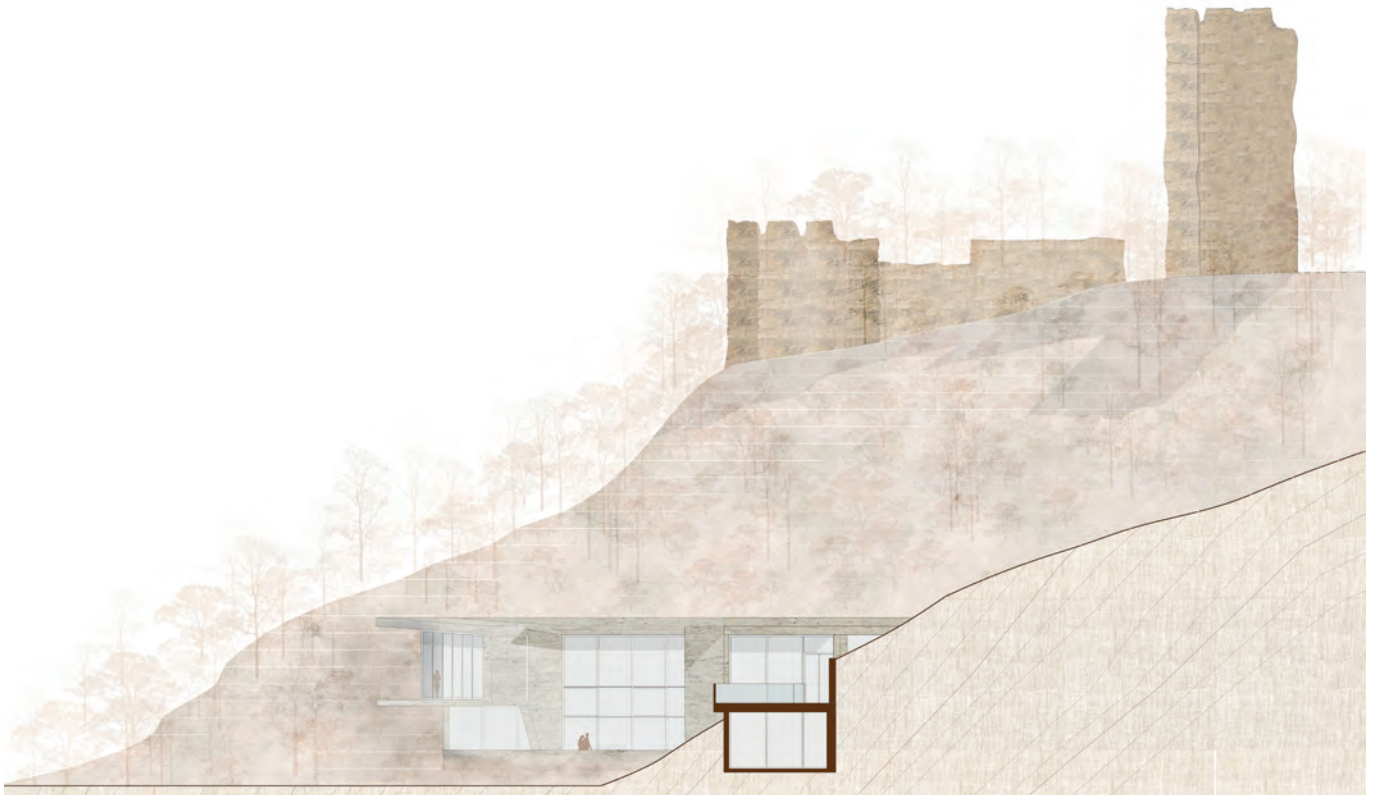


- 1. Access
- 2. Ticket office
- 3. Toilets
- 4. Archaeological viewpoint

- 5. Research and offices
- 6. Landscape viewpoint
- 7. Landscape gallery
- 8. Temporary exhibitions

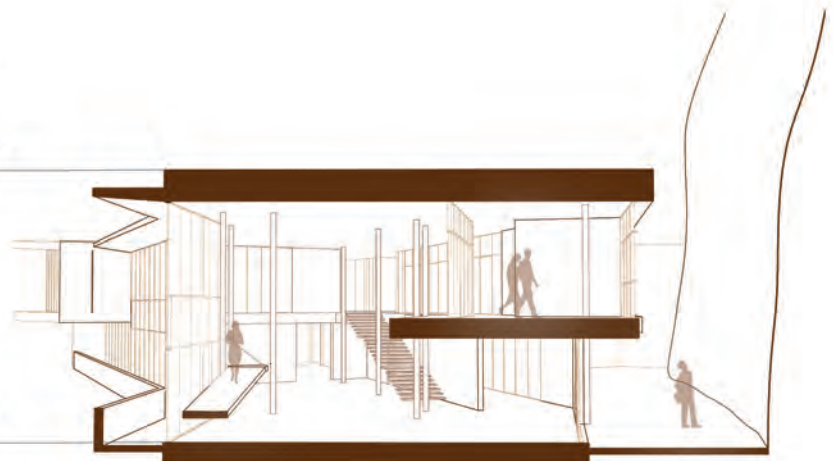
- 9. Café and shop

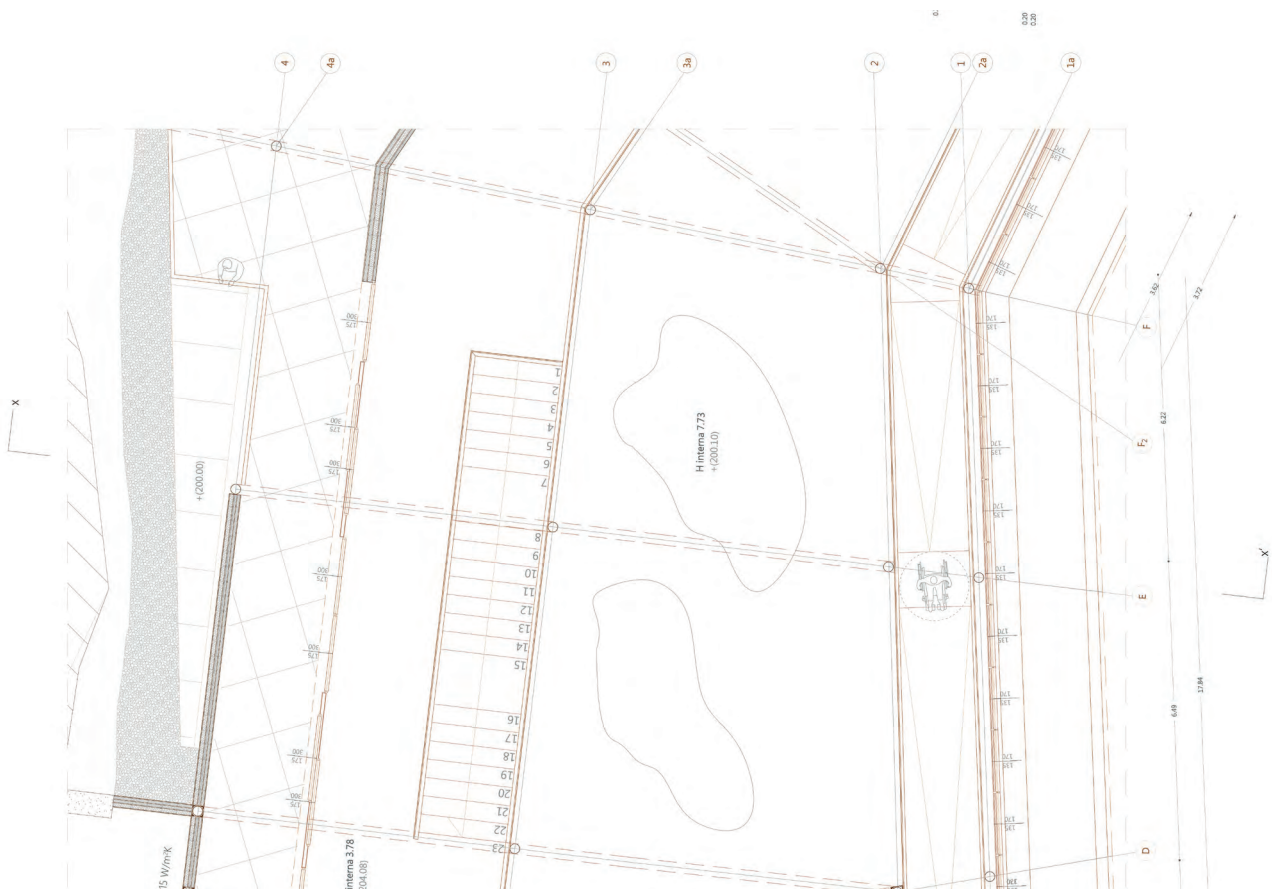
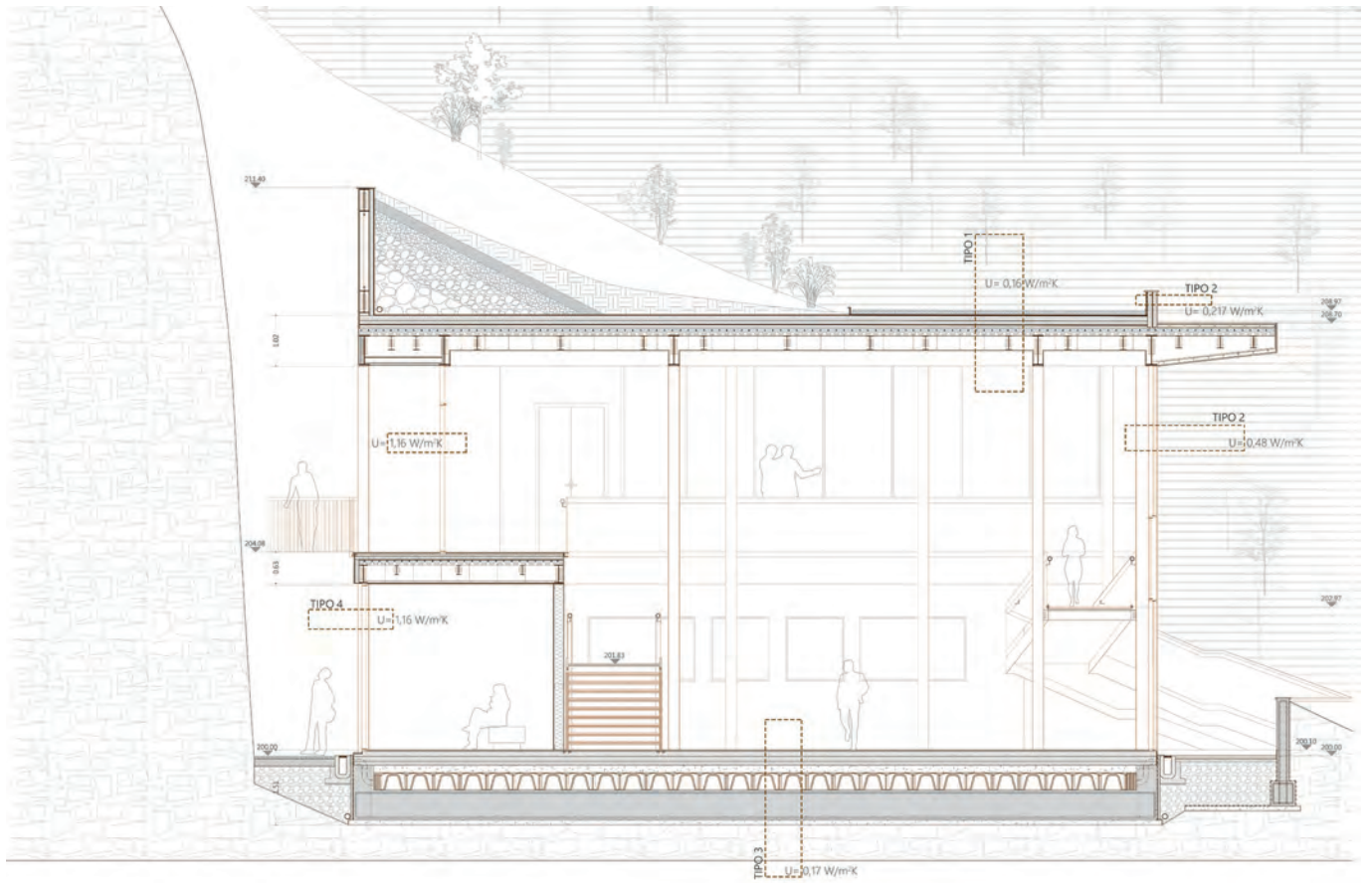




208.80

200.01



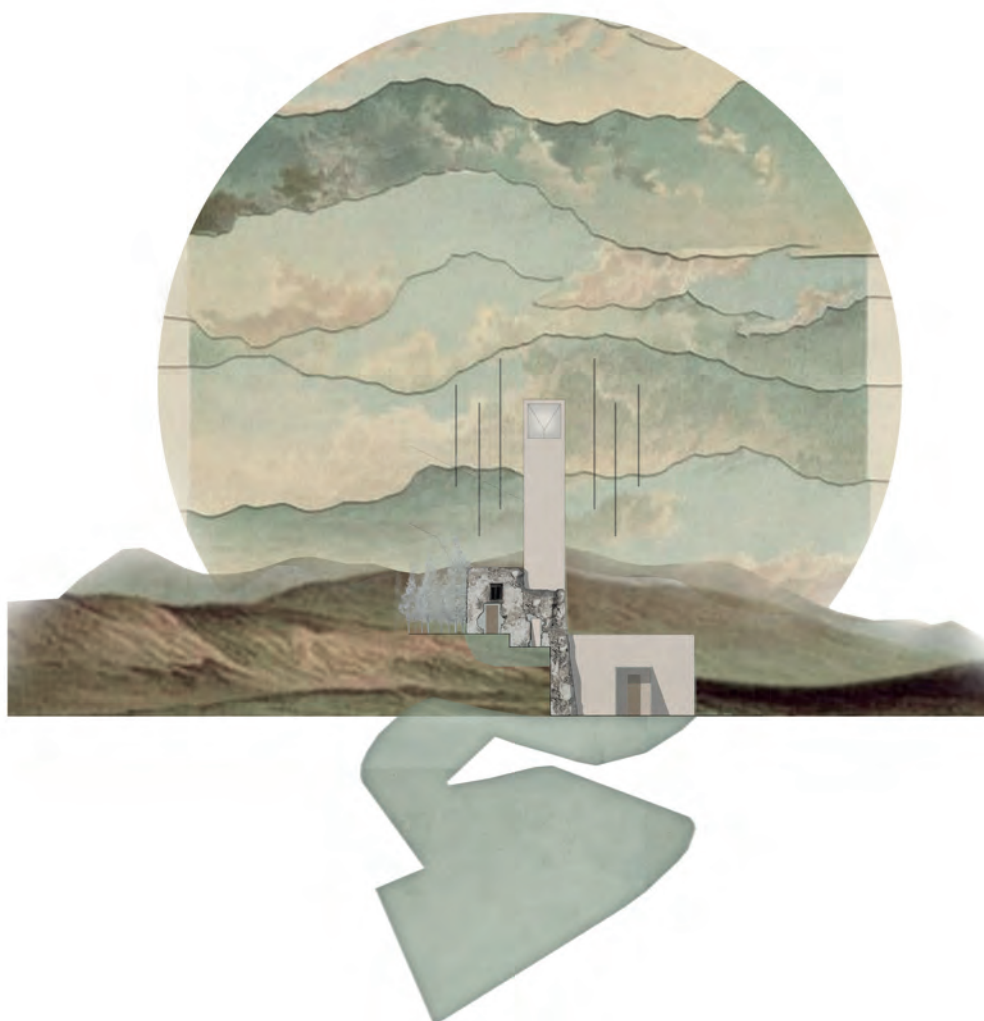


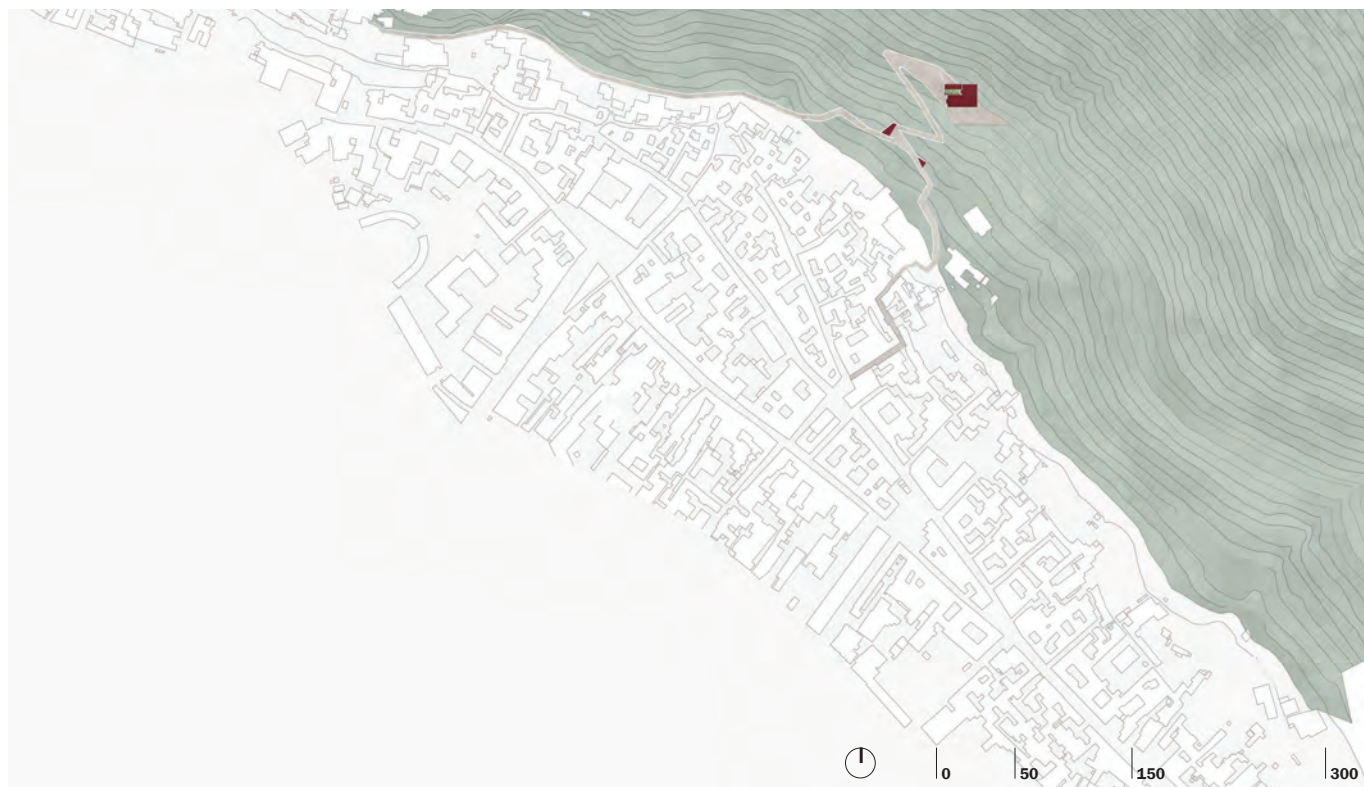
History, archaeology and nature are the three components that make up a landscape with a unique character, into which the project fits. The hill of Saretto in Sarno was for a long time the strategic military point of the city, thanks to the Normans who built the first defensive castle on its top, enlarged during the course of time first by the Angevins and then by the Aragonese, with various walls and towers. One of the particular aspects of this military system was certainly the connection with the medieval village on the slopes of the hill, Terravecchia, making up a single organism in connection with the ancient Roman settlements and the rest of the city. An issue of equal importance with the historical aspect is certainly the naturalistic one, since the particular integration in the hillside landscape, with the arrangement on several heights and slopes, means that the archaeology is united with its landscape, in an inseparable relationship in which none takes over from the other.

176 It is precisely from this point that architecture steps in, trying to give new value to what has remained and to rediscover what has apparently been lost. The project is designed with the intention of reconnecting the two systems at the two extremities of the hill, retracing the ancient tracks that are today difficult to identify or have been completely removed, by multiple paths along which archaeological ruins and nature can be united, restoring an open-air museum in which contemporary architecture becomes that missing piece to consolidate the lost links. A museum gallery exploded in three points of the hilly landscape at the service of citizens and visitors re-establishes the total absence of access to those places, in full respect of the historical and landscape components.

**MIRIAM DE GENNARO - AN ART HUB IN THE CHURCH
OF SAN MARTINO ON SARETTO HILL**

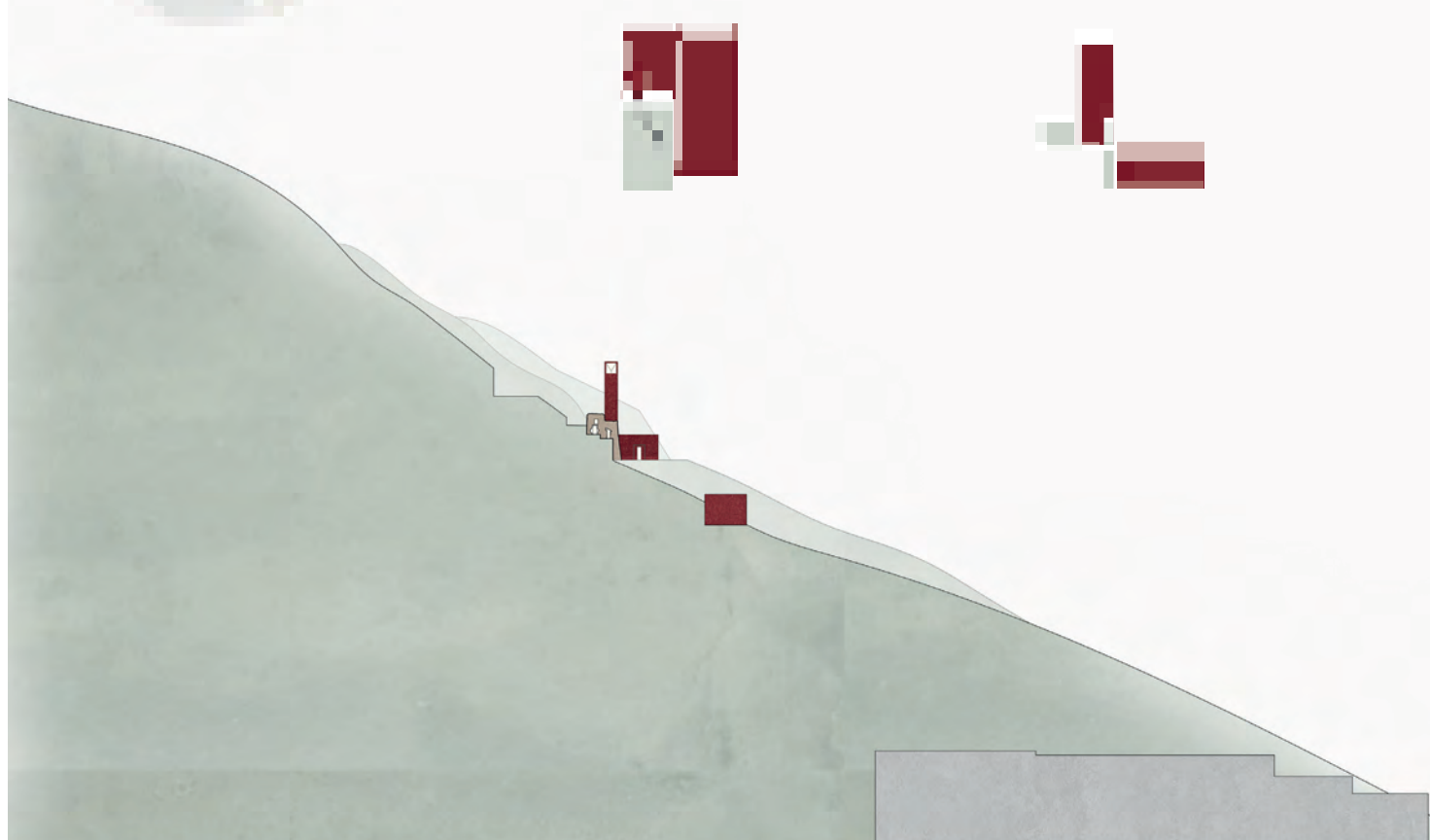
*UN POLO D'ARTE NELLA CHIESA
DI SAN MARTINO SUL MONTE SARETTO*

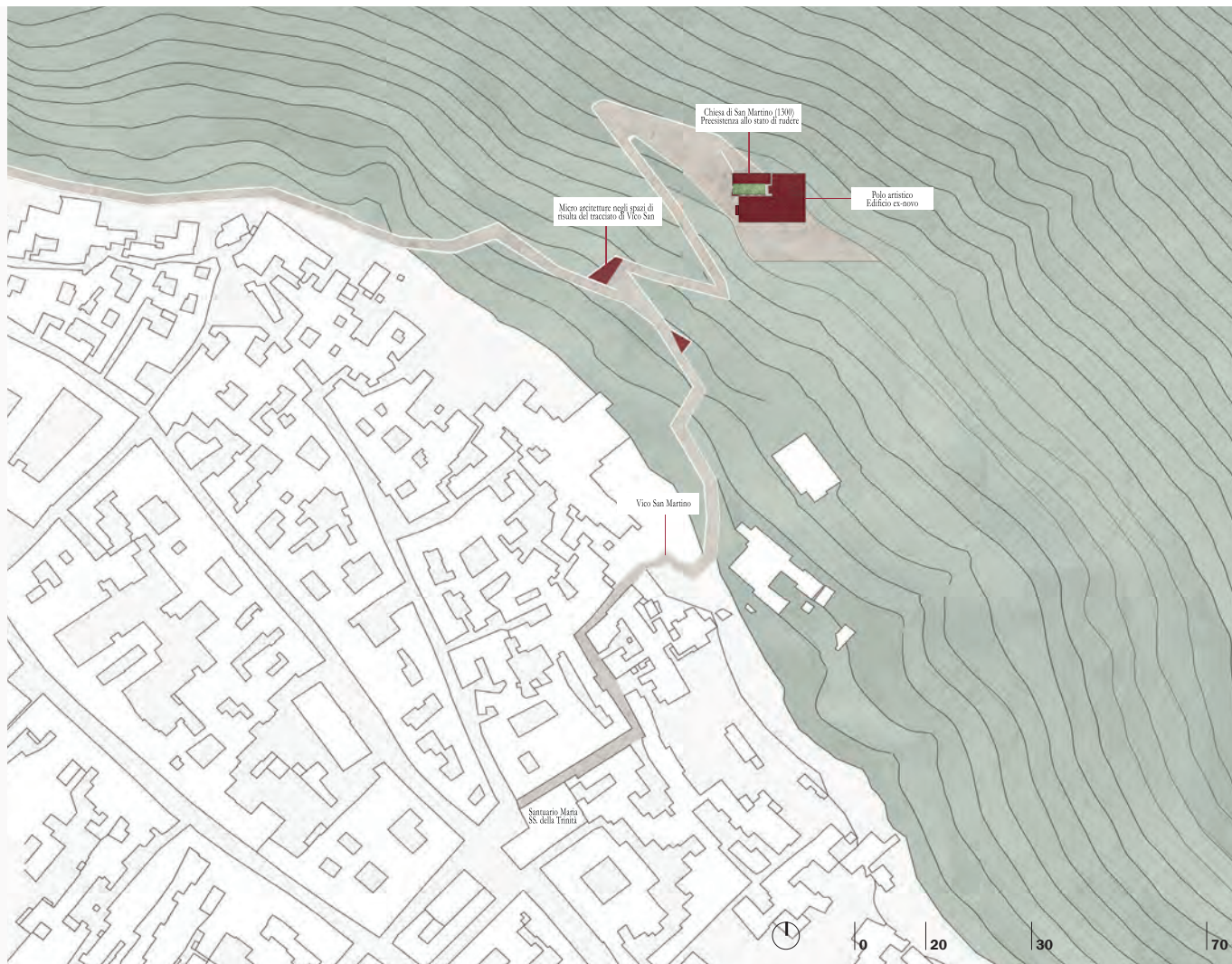




GENERAL STRATEGY

The project is a building located in Sarno, on the Monte Saretto, reachable only by an ancient road, vico San Martino, that starts from the village of San Matteo. The project has the double purpose to define a new urban centrality and to recover and protect an historic and representative place of the city otherwise in state of abandon.





179

URBAN & ARCHITECTURE FRAMEWORK

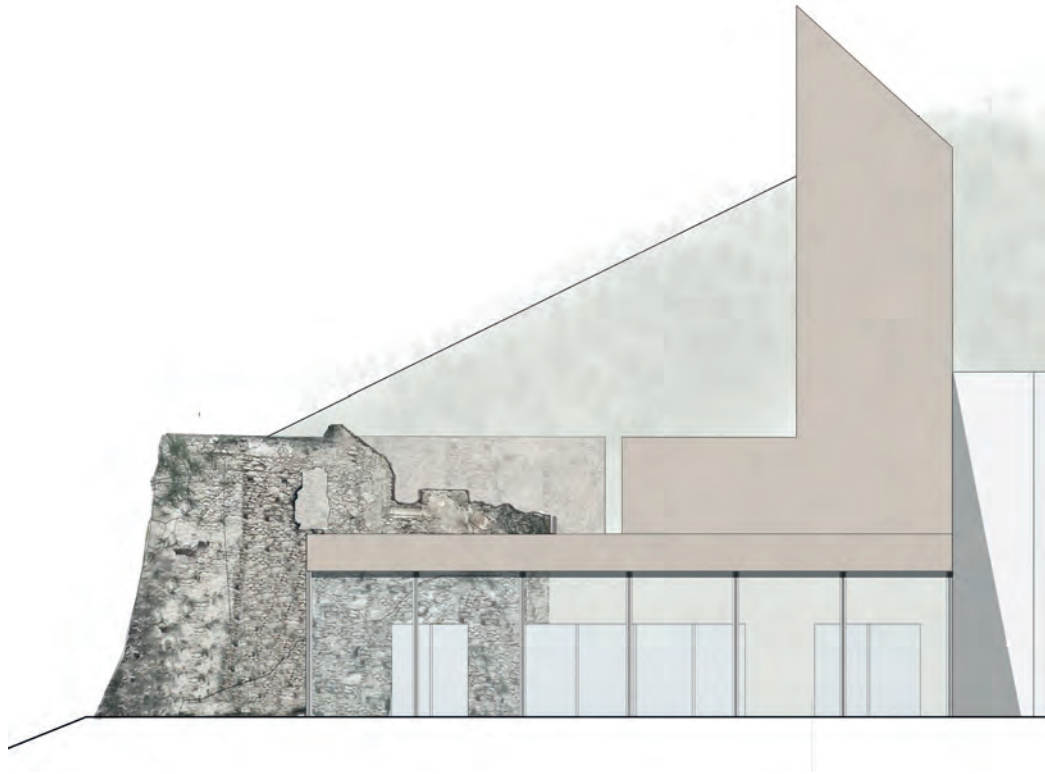
Program

historical city routes,
social and culture center

Covered area	2235m ²
Outdoor area	8520m ²
Above-ground floors	3
Built volume	8500m ³
Estimated cost	413.426,89€

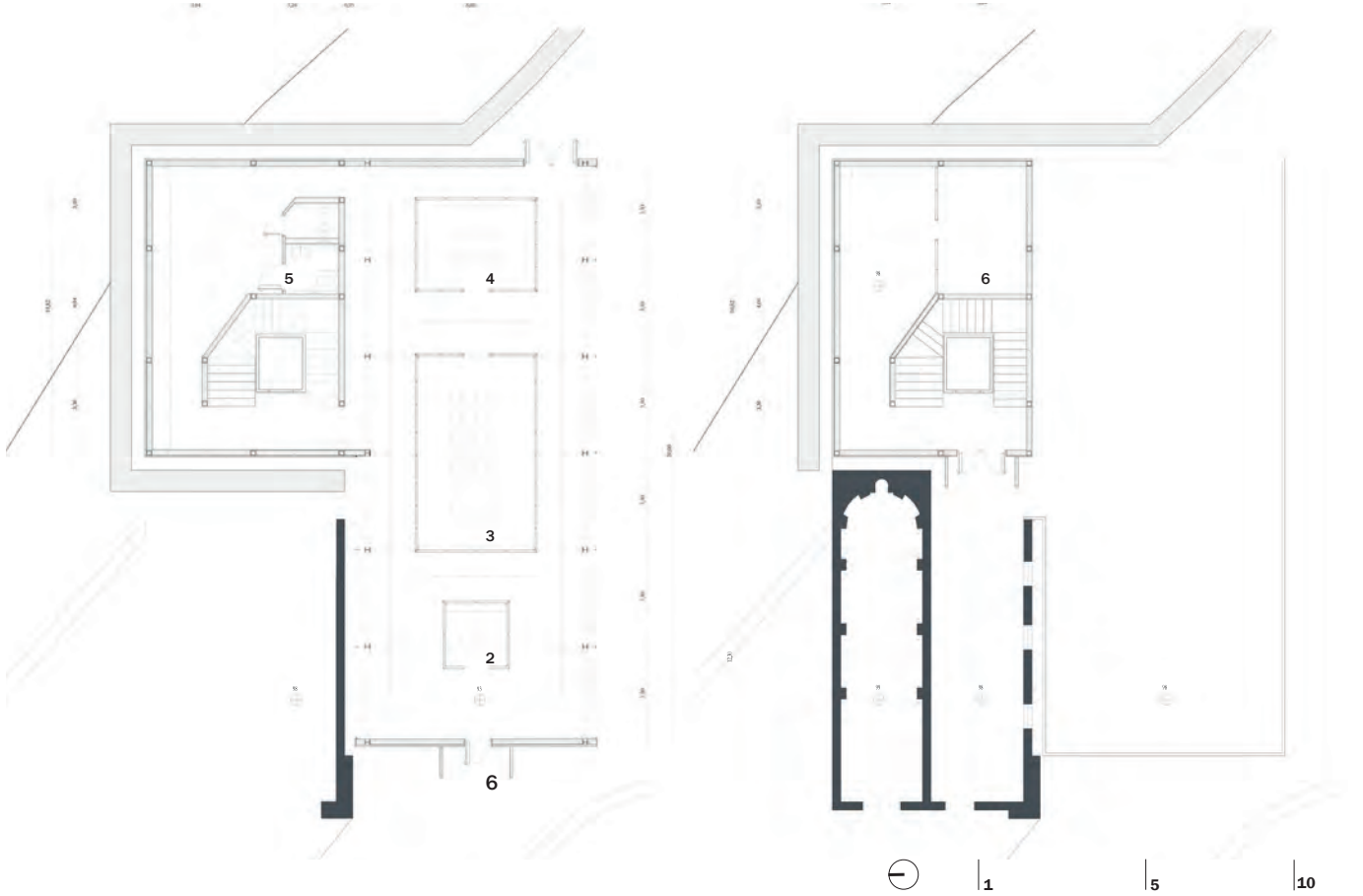
The building, destined to have the function of artistic center and expositive hub, is in close morphological and formal relation with an adjacent ruin, an ex-church dating back to the early middle ages, abandoned in the '900 ca. and from the 2020 jeopardized in a resolutive way. At the present the apse and the nave are intact, while the ex-sacristy appear like an open court,

swarmed by the vegetation. The shape of the proposed building can be approximated to an L, connecting itself to the simple forms of the rock church and ending with a 14m ex-novo high bell tower to host artistic performances The church will only be accessible via the new building as a difference of about 5m from the original access.



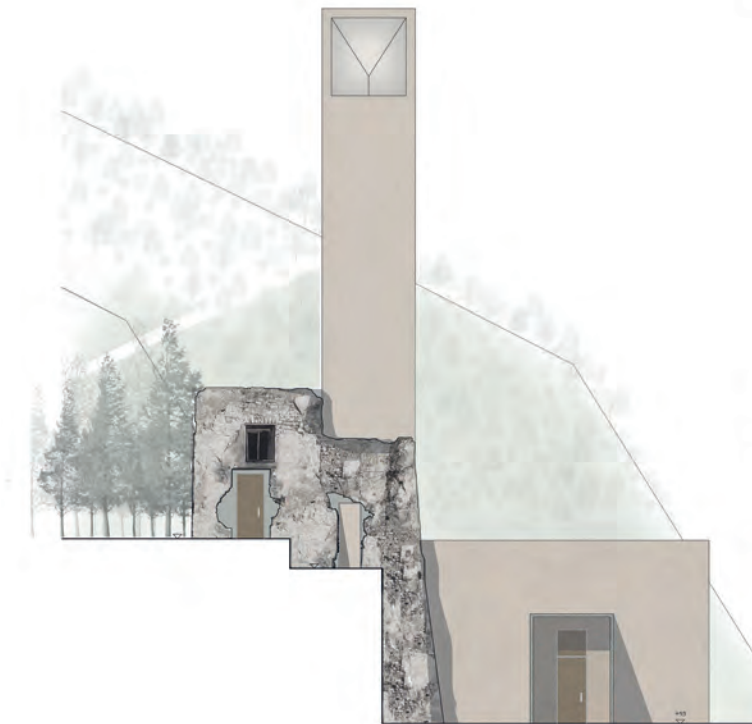
① | 1 | 2 | 5

180

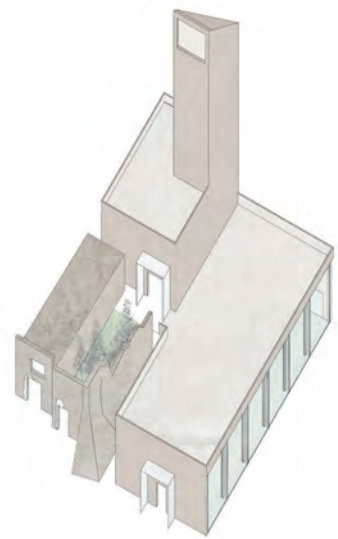


② | 1 | 5 | 10

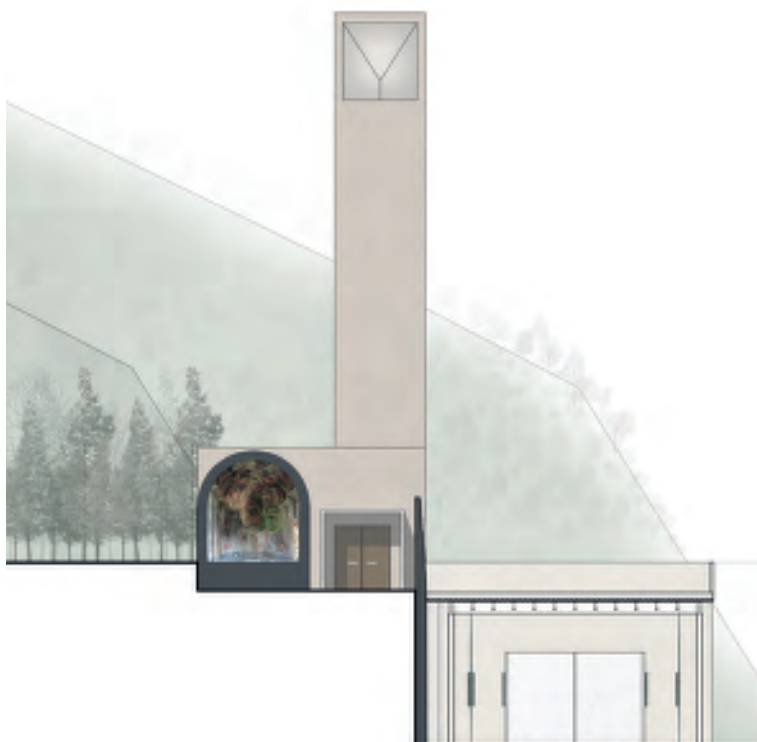
- 1. Entrance
- 2. Information desk
- 3. Conference room
- 4. Multimedia room
- 5. Toilets
- 6. Bell tower exhibition space



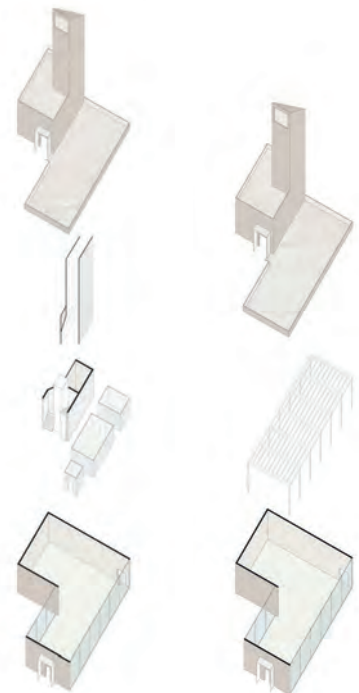
⊖ | 1 | 2



| 5

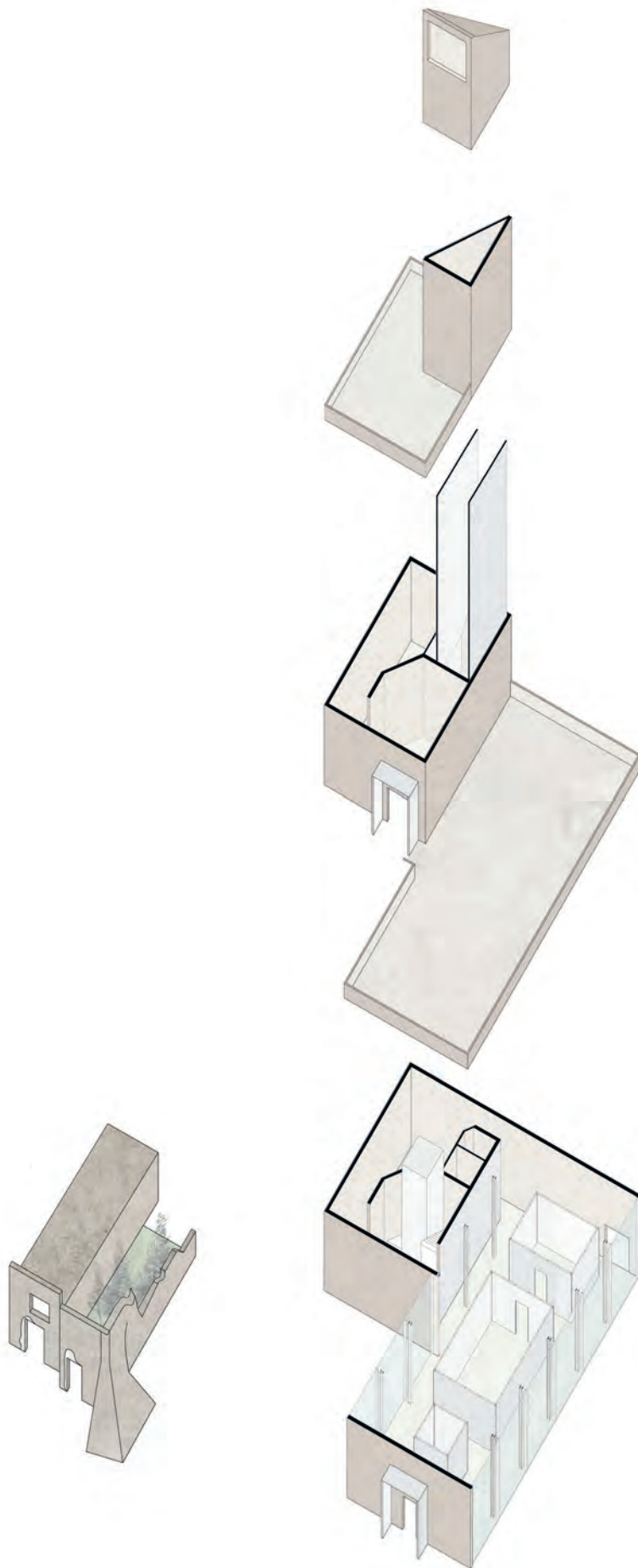


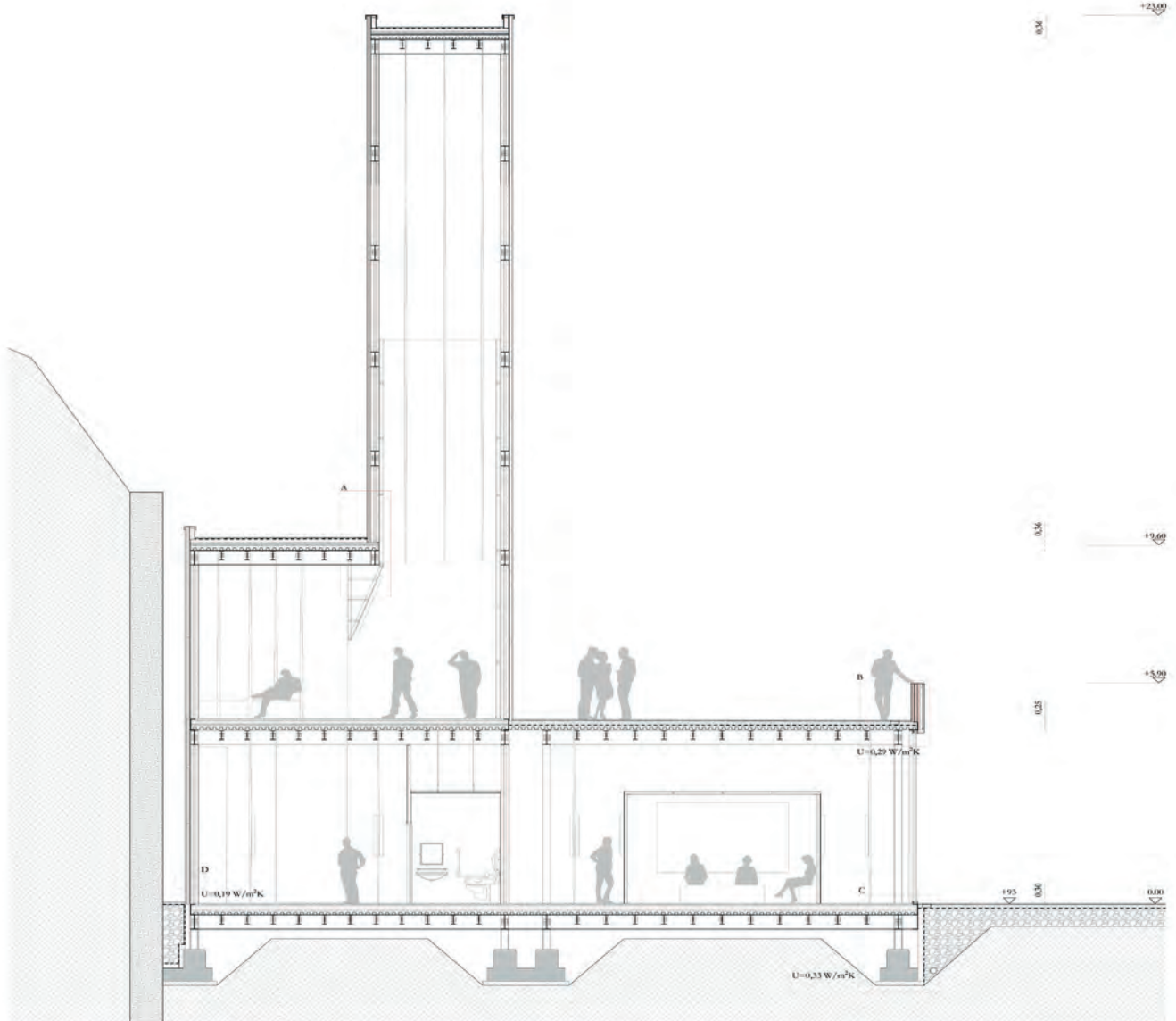
⊖ | 1 | 2



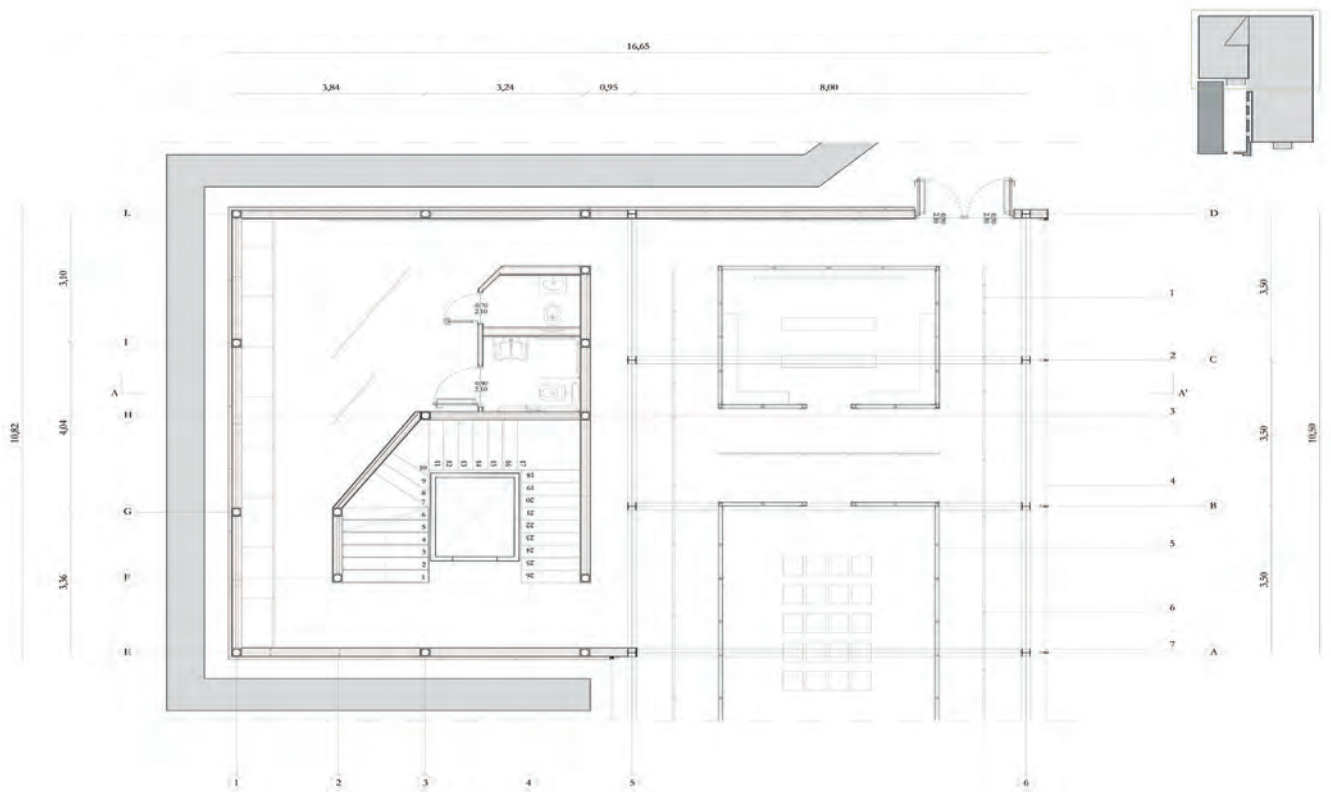
| 5







183

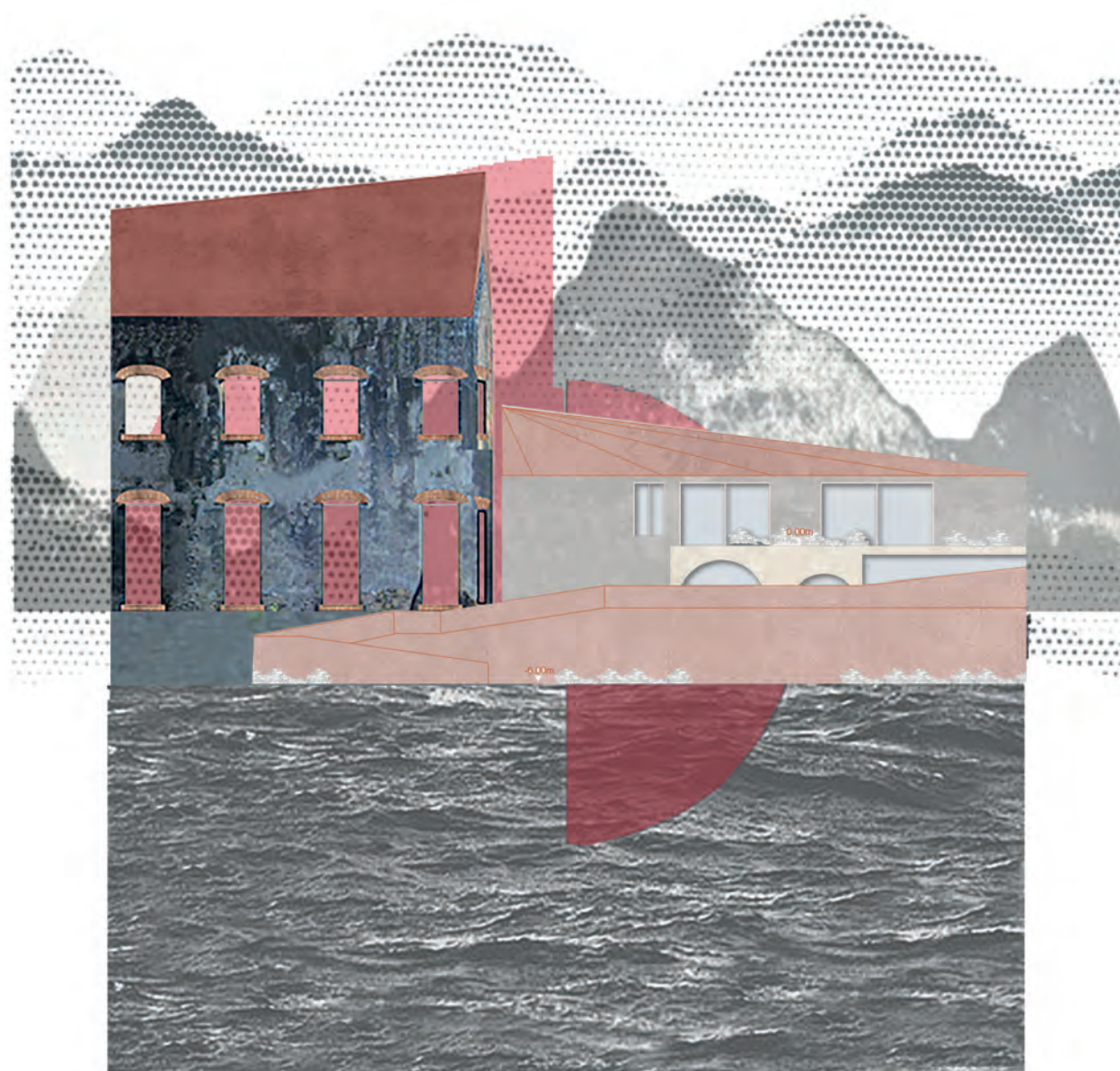


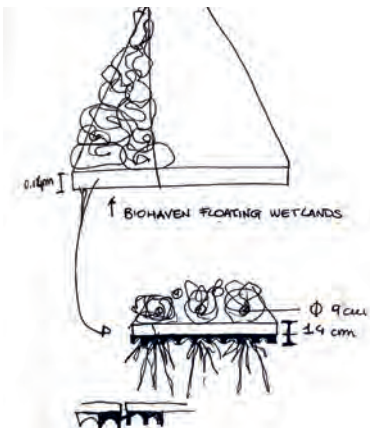
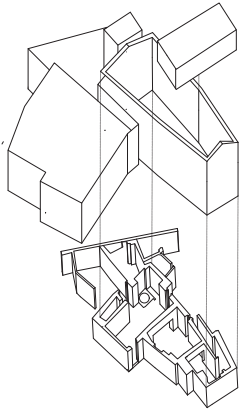
INDOOR/OUTDOOR RELATION SCALE 1:50

The project is a building located in Sarno, on the Monte Saretto, reachable only by an ancient road layout, Vico San Martino. The building, destined to have the function of artistic center and expositive hub, is in close morphological and formal relation with an adjacent ruin, an ex-church dating back to the early middle ages, abandoned in the '900 ca. and from the 2020 jeopardized in a resolute way due to an important collapse near the ex-sacristy of which remains partially intact only the perimetral walls. At present the apse and the nave are intact, while the ex-sacristy appear like an open court, swarmed by the vegetation.

The project has the double purpose to define a new urban centrality and to recover and protect a historic and representative place of a city otherwise in state of abandon. In particular, is foreseen the restoration of the part of the church that survived the collapse, and the conversion into an exhibition hall, and to use the new open courtyard conformation of the church as the meeting point between the ruin and the new artistic centre. This develops over the three levels on which the ruin lies in order to structure itself as its completion and an imposed path for the knowledge of the pre-existence, not fully usable due to its morphological and formal characteristics. Inside, the exhibition space is punctuated by polycarbonate cells with a steel frame, without covering. The intent is to build a new hierarchy of elements and places in an isolated context in relation to the city dynamics, so that new spaces find their own design between the solids composition, favoring an alternation between intimate and representative places. The sequence of spaces ends in an open space defined by the ground floor roof of the new building and the courtyard enclosed by the remains of the church. From here it is possible to observe the entire city from the altitude and recognize the urban layouts that have stratified over time. The bell tower is the identifying element of the connection between the contemporary and the pre-existence. It allows to draw an auditory relationship between the exterior and the interior through the resonance of the sounds channeled in the long 14 m section.

**LORENZA ELISA BUONO - THE PALAZZO MILL:
RECOVERY AND REUSE FOR A NEW PUBLIC SPACE**
*IL MULINO DI PALAZZO:
RECUPERO E RIUSO PER UN NUOVO SPAZIO PUBBLICO*





GENERAL STRATEGY



Program

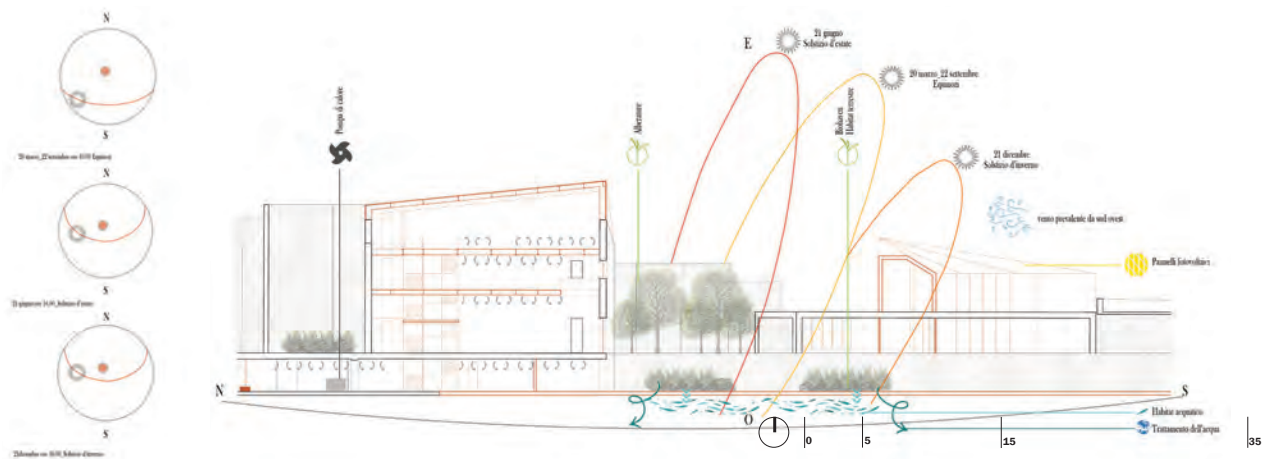
restaurant, riverfront,
social and culture center

Covered area	524 m ²
Outdoor area	543,7m ²
Above-ground floors	2
Built volume	4.047m ³
Estimated cost	1.906.562€

The project site is located in the Municipality of Sarno, within the historic center of the city characterized, on a morphological/landscape level, by the Sarò mountain and the Sarno river. In particular, the area is situated in a portion of the nineteenth-century built area, which has undergone various transformations over time.

The project can be divided into four phases: the restoration and redevelopment of one of the water Mills, called Palazzo because its vicinity to the so-called river's spring, which characterize the area; the design of an exhibition and community center as a new structure within the Mill; the design of a new restaurant space closer to the main street; and a new square, which will rise on the embankment originally intended for the conservation of the river machines, in continuity with the design of the new riverfront through a ramp that aims to redefine the new elevation of this site.

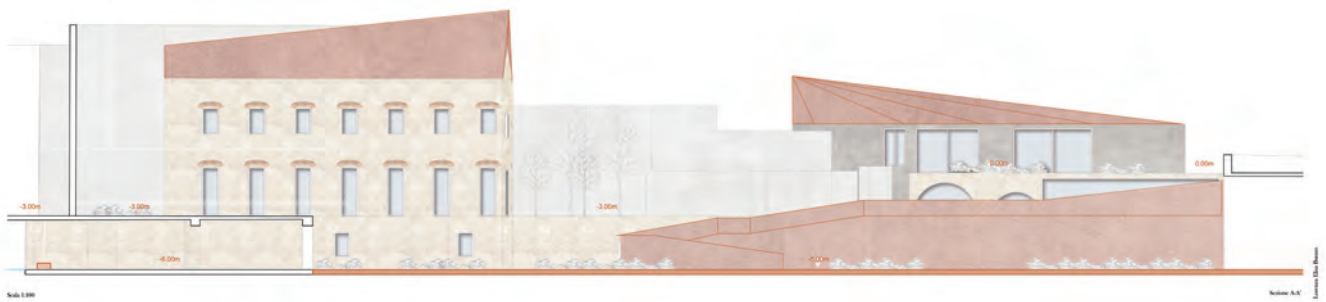




1. Entrance
2. Restaurant hall
3. Kitchen
4. Connecting ramps

5. Riverfront
6. Garden
7. Exhibition hall
8. Toilets

12. Connections
13. Covered public space



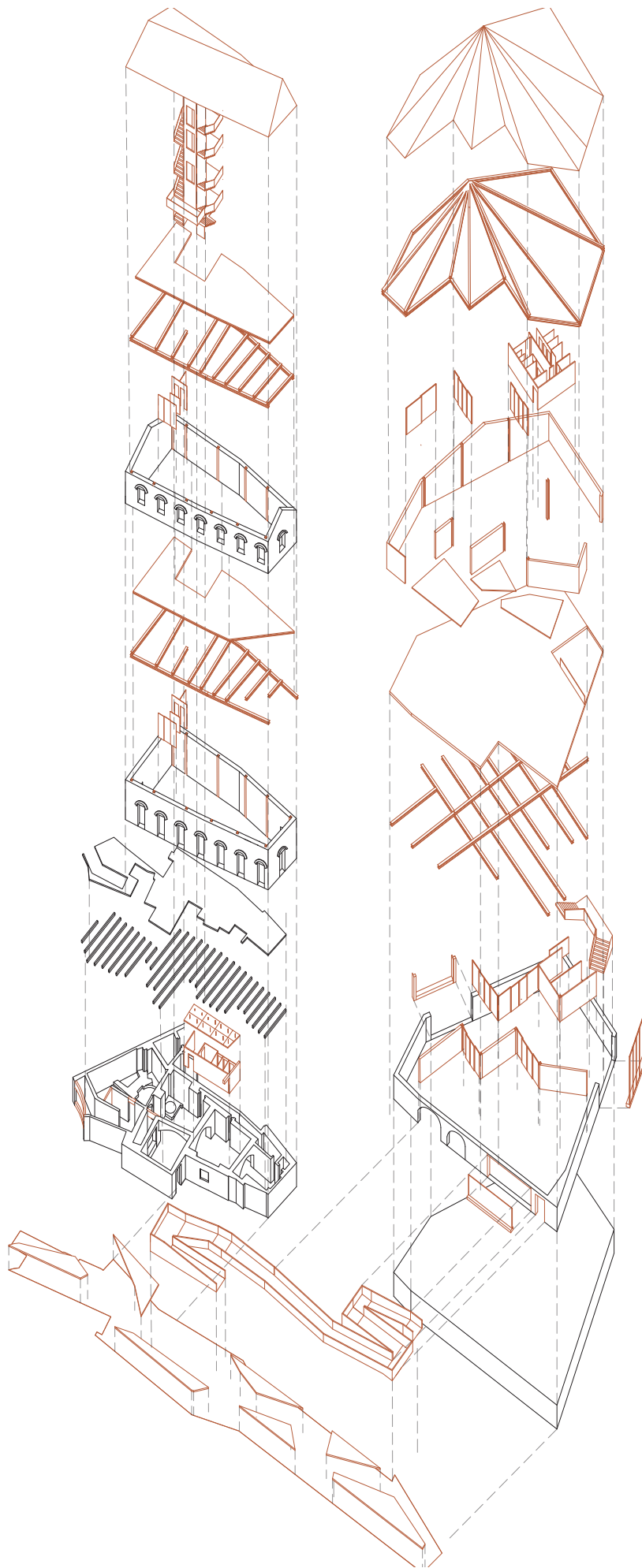
5

15



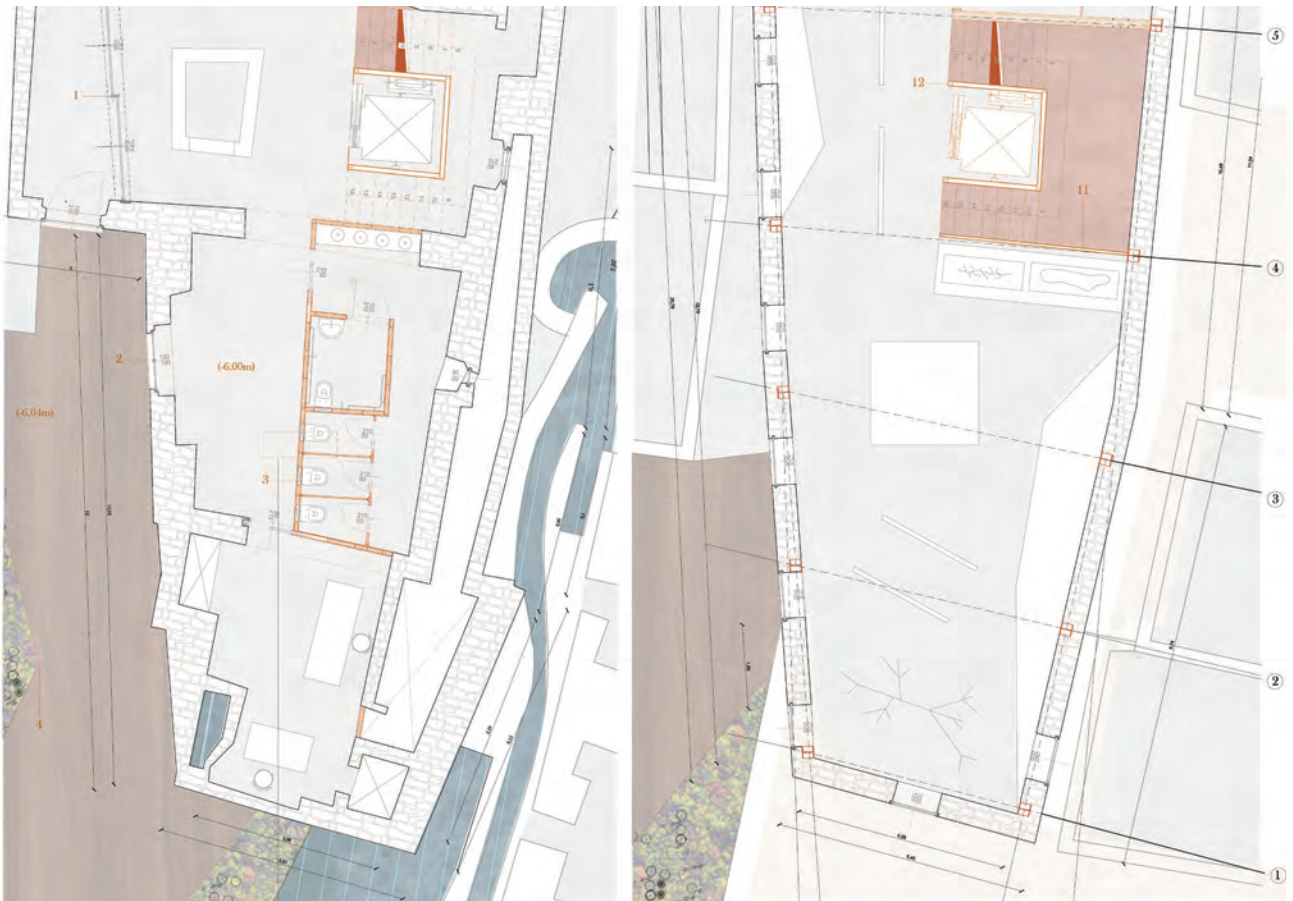
189







191



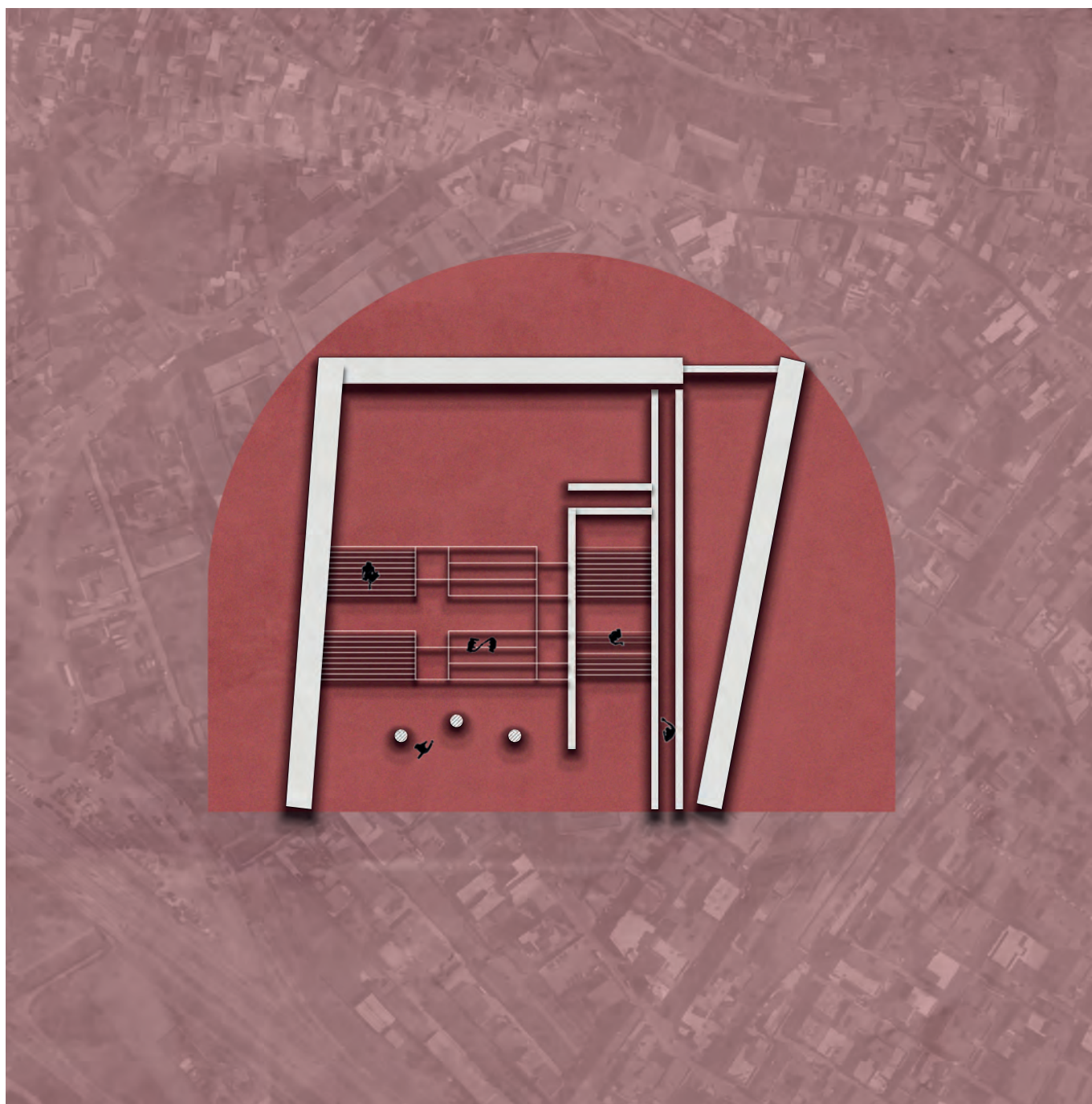
INDOOR/OUTDOOR RELATION SCALE 1:50

The building of the former nineteenth-century mill/residence in Ignimbrite was originally born as a water mill, given the presence of the Sarno river, which originally surrounded it on all sides. This building initially had only one floor at river level and over the course of the century underwent further transformations so that in the late nineteenth century a two-storey building was built above it which had the function of residence for the workers. Today the building is in a state of ruin.

The project involves the restoration and reuse of the building. As a cultural asset its redevelopment provides for the consolidation of the masonry given by pillars hollowed into it, thus allowing the masonry to be kept exposed. The definition of a new modern-style roof with an asymmetrical pitch in burnished steel wants to resume the original nineteenth-century pitched roof given by tiles.

192 The ex novo project envisages a trapezoidal free-plan structure, which takes up the geometry of the existing embankment itself, and a burnished steel roof, which looks and is linked to that of the mill. The structure is defined by transversal cuts, on both levels, with respect to the trend of the structure going to define by subtraction the surrounding open space that characterizes the project. Therefore, the outdoor connection and the new structures always compare each others on two levels, the level of the road which therefore acts as an access and the basement, and the river level. The ramp and the riverside project act as a link to the Mill, defining a new elevation for that portion of territory, necessary for the mill to be open to the public.

CATERINA AMATO - A NEW LIBRARY IN SARNO CITY CENTER
UNA NUOVA BIBLIOTECA NEL CENTRO DI SARNO

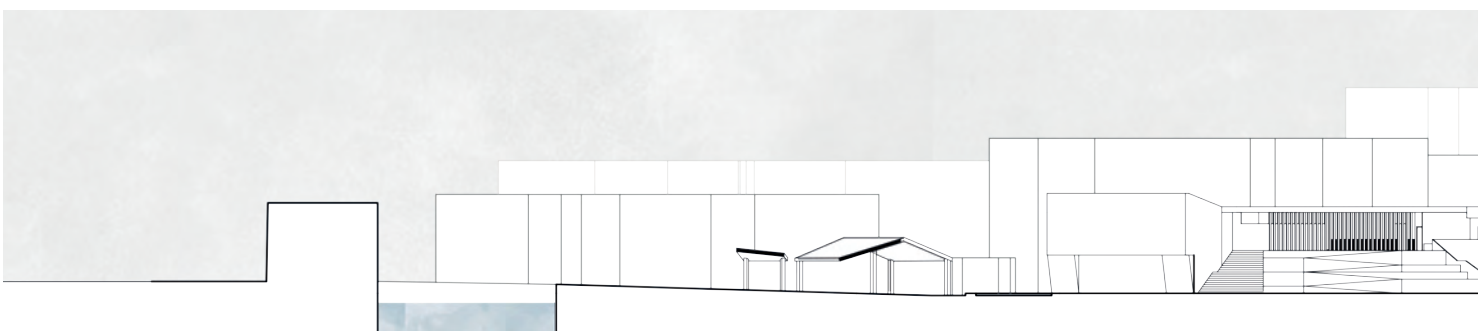
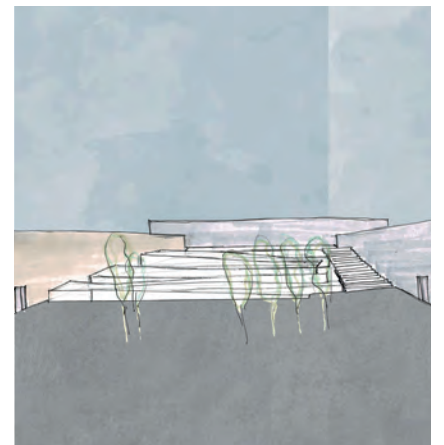
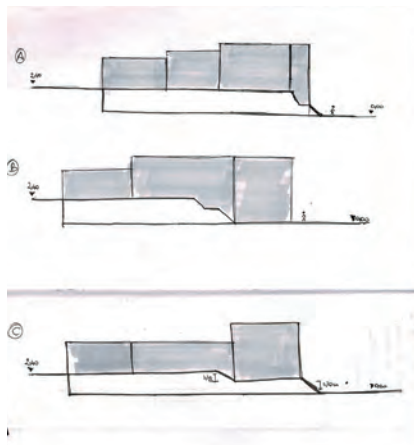


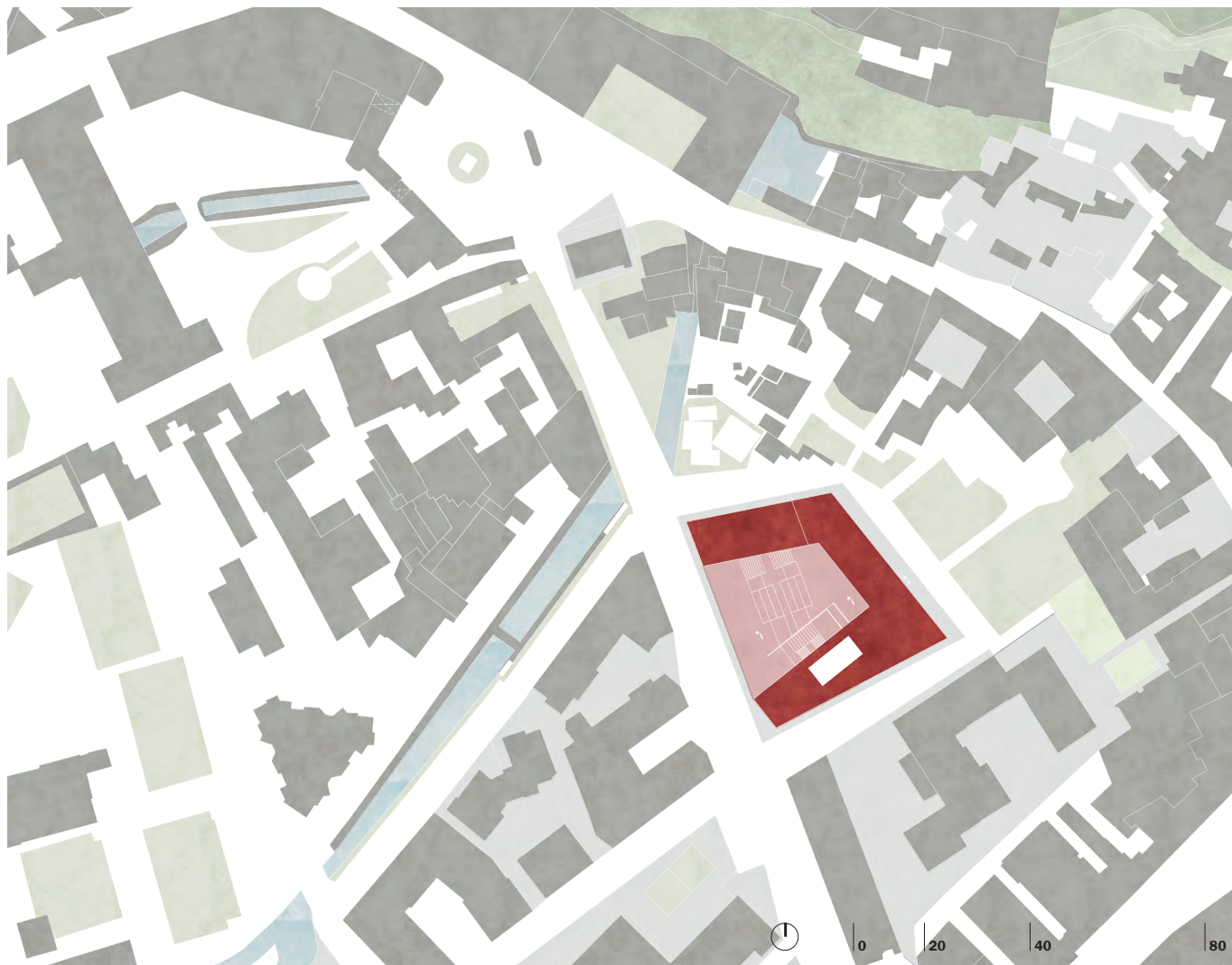


GENERAL STRATEGY

194

From the site visits and initial analysis, it has been observed that there is a significant number of schools in close proximity to the project site. This spontaneous campus-like setting has generated the project idea: an architecture capable of representing the different schools and reconnecting them to keep them together.





195

URBAN & ARCHITECTURE FRAMEWORK

Program
library, multimedia
and conference hall

Covered area	2700m ²
Outdoor area	5520m ²
Above-ground floors	3
Built volume	18360m ³
Estimated cost	€ 18,032,782

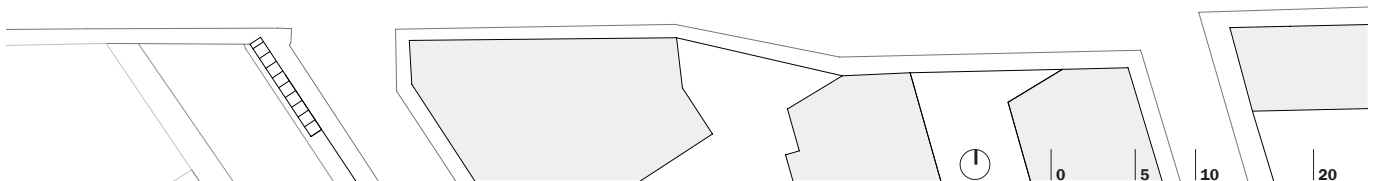
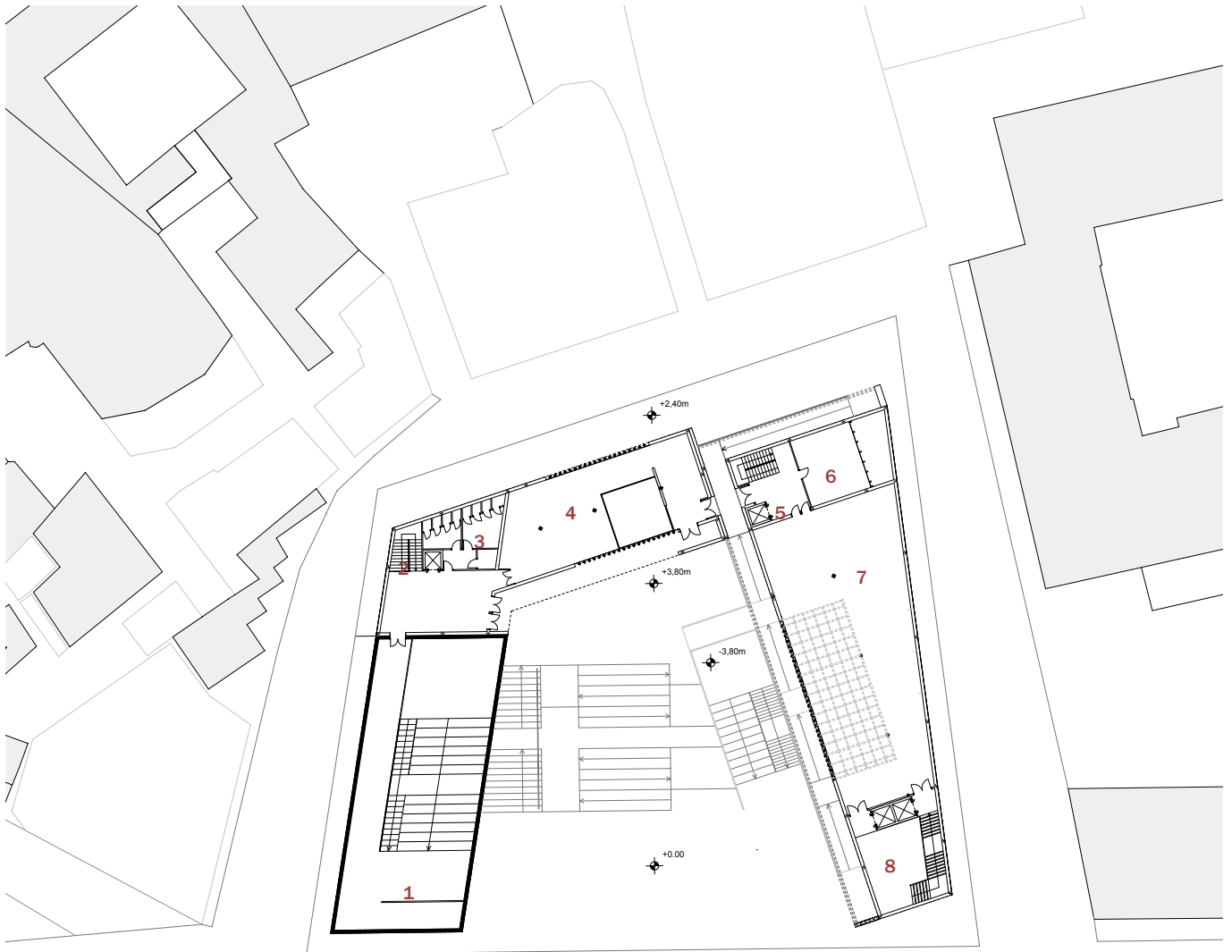
The new building has three levels, including one underground, one semi-underground, and one completely above ground. These different blocks follow the topography of the terrain because the area has a height difference of 2.40 meters. The project is situated on the edge of the current market area, to ensure that the central void is not lost. In fact, the project's intention is to add public space to the city rather than take it away through construction, and it achieves this by adapting its layout to the existing conditions.

The result is derived from the combination of three distinct blocks positioned at the project's perimeter. In the center of these blocks, there will be a medium-sized square that serves as an agora dedicated to the collective life, particularly intended for students. This open courtyard is born from the desire to establish a seamless connection with Sarno's educational fabric, both in terms of perception and function. Furthermore, the use of natural elements such as rows of trees stems from the need to create directions that converge toward the new cultural center of the city.

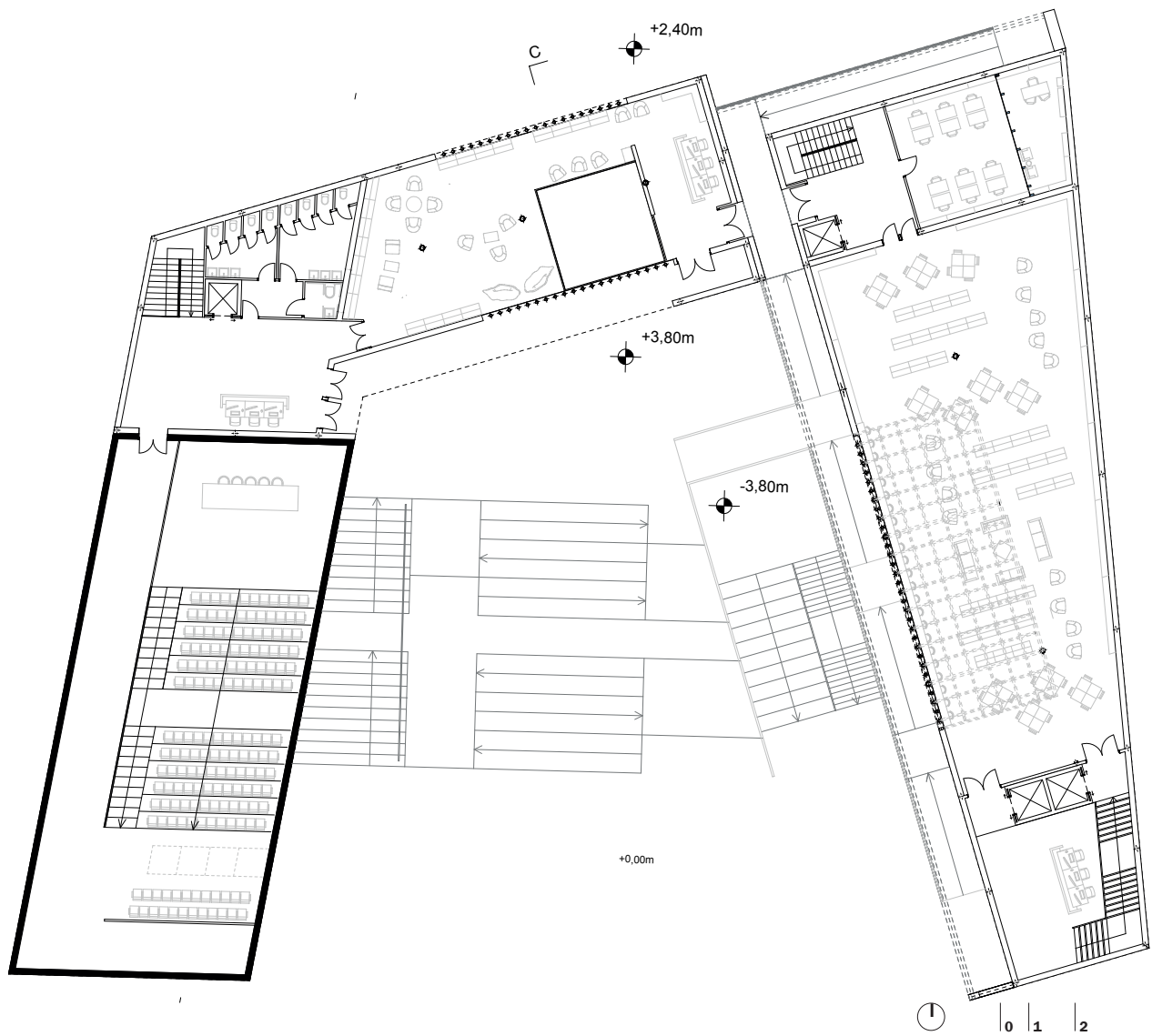
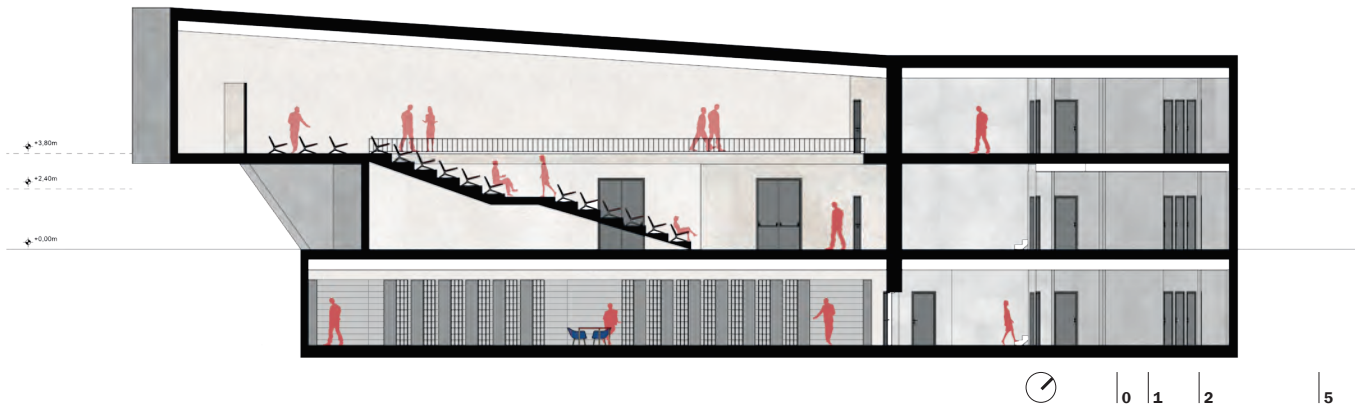




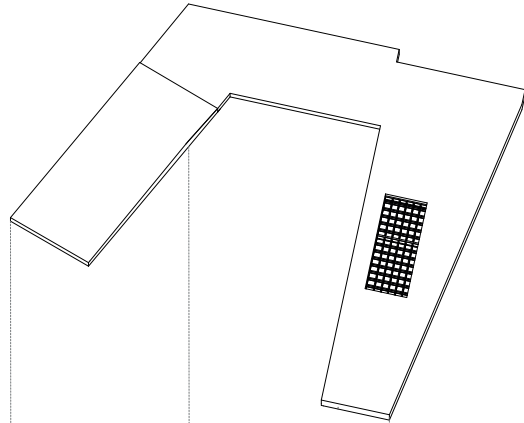
196



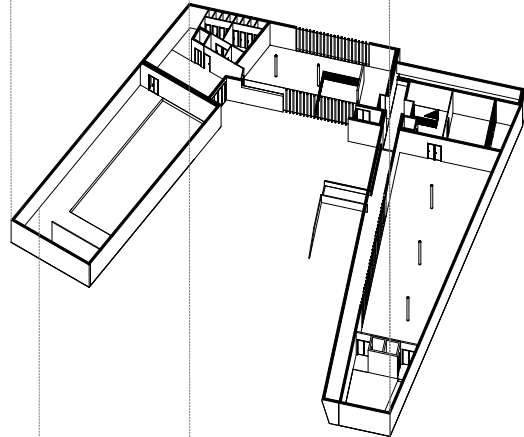
- 1. Conference hall
- 2. Connections
- 3. Toilets
- 4. Multimedia spaces
- 5. Connections
- 6. Offices
- 7. Library
- 8. Lobby



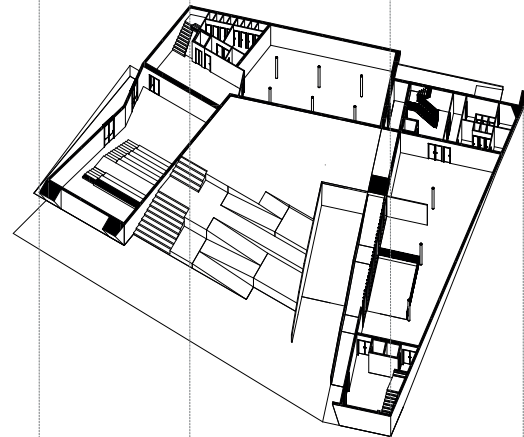
(+8,40m)



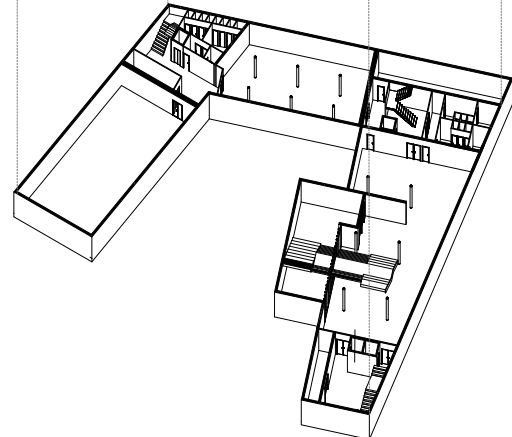
(+3,80m)

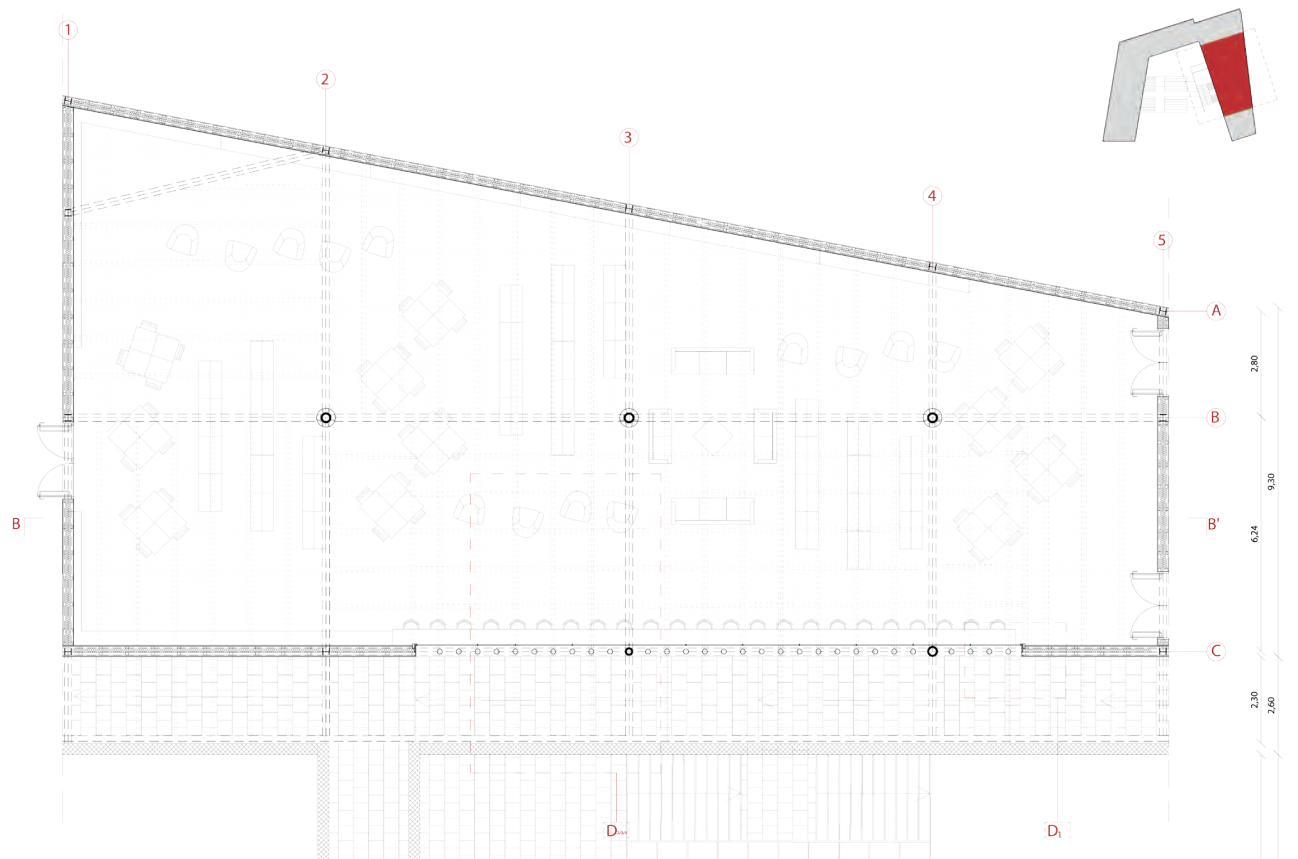


(0,00m)



(-3,80m)





The project area is situated within the municipality of Sarno, specifically in the historic heart of the town, nestled at the base of Mount Sarò. It encompasses an elevated square, elevated 2.40 meters above street level, and is distinguished by the presence of concrete roofs that shelter a local market.

Mainly, this area serves as a parking. The conceptualization for this project involves the erection of a public edifice comprising three distinct volumes housing various functions: a library, a multimedia center, a conference hall and other collective services.

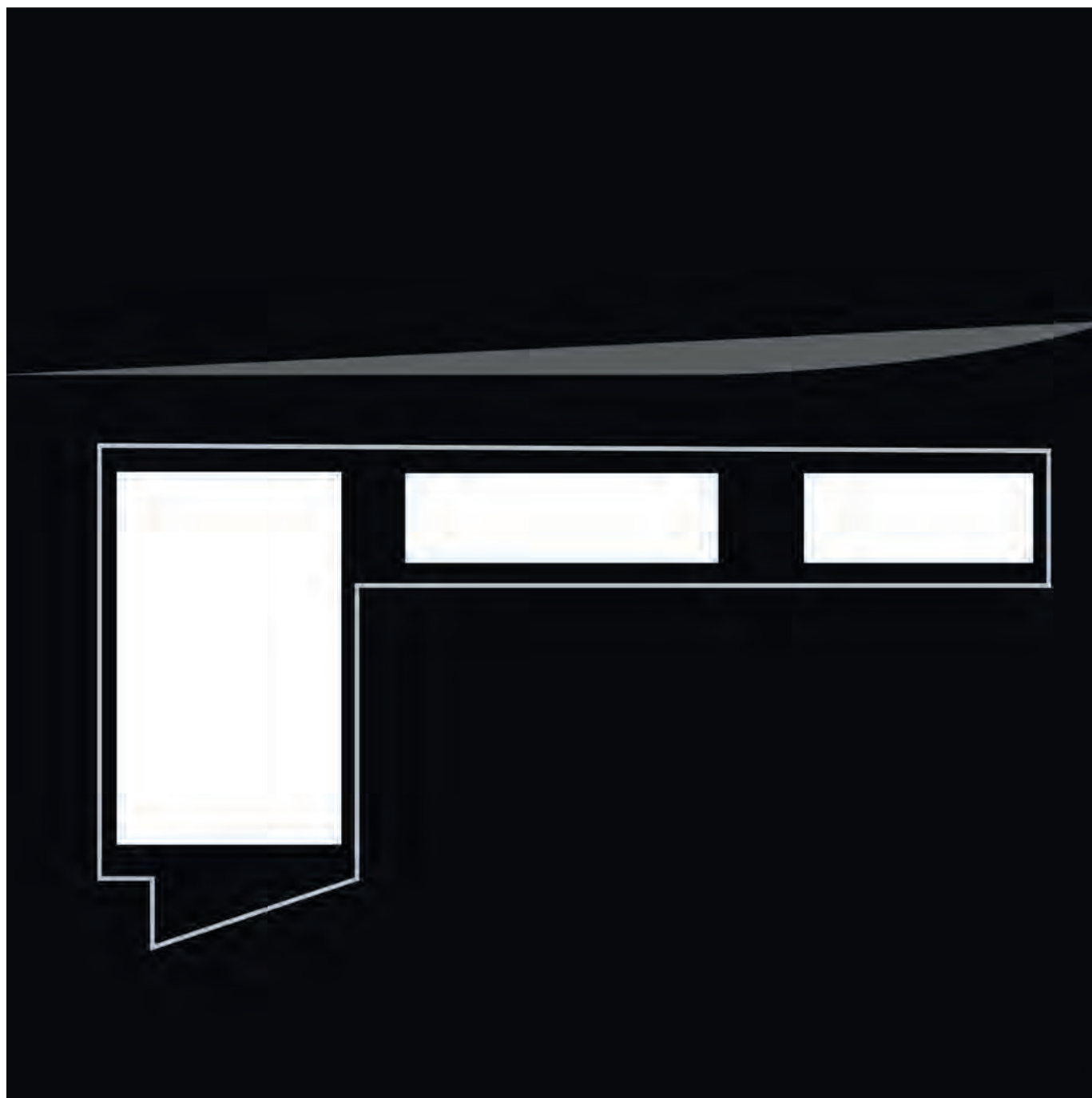
The architectural design of this building incorporates a semi-open courtyard, with an absence of a clearly defined front or rear, thus permitting access from both via Matteotti (at ground level) and the rear area (2.40 meters above ground). The spatial allocation across three levels is delineated as follows:

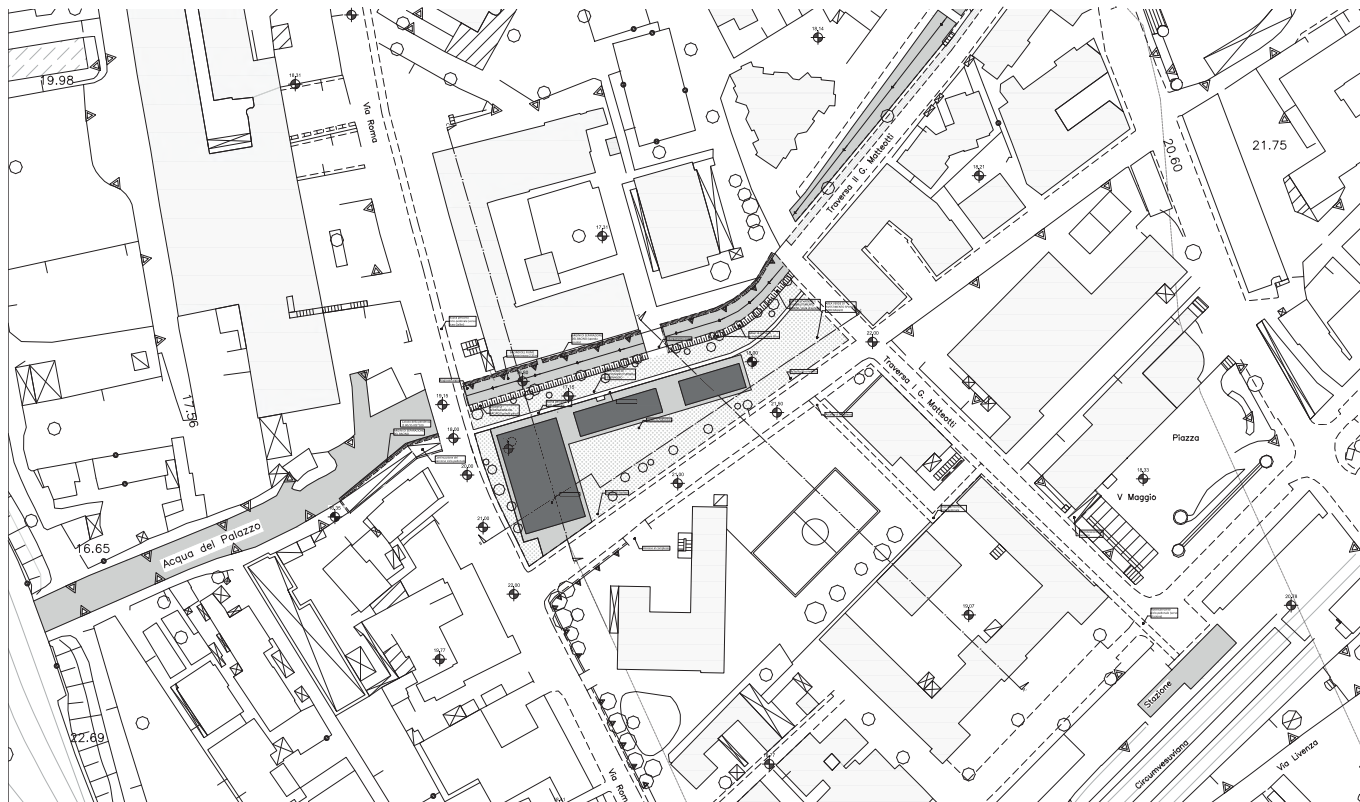
- On the ground floor (at street level), proceeding from the left, there will be a conference hall (a double-height space), a multimedia center (likewise a double-height volume), and a reading room.
- On the lower level (-3.80 m), one will find an archive, a multimedia classroom, and a study room.
- On the upper level (+3.80), there will be another conference hall, a media center, office spaces, and the library.

The area housing the library, reading room, and study room directly overlooks a portico that serves as a sheltered passage connecting the interior and exterior spaces via a ramp.

Conversely, the media center and conference hall extend directly onto the new square, which incorporates a complex system of ramps and stairs necessary to traverse the varying elevations of the site. These elements not only fulfill functional requirements but also contribute to the square's multifaceted appearance, serving as controlled inclinations that function as urban design elements in both static and dynamic contexts.

**GIOVANNI FALCIOLA - URBAN EDUCATIONAL PARK
ALONG THE RIO PALAZZO RIVER**
PARCO URBANO EDUCATIVO LUNGO IL RIO PALAZZO

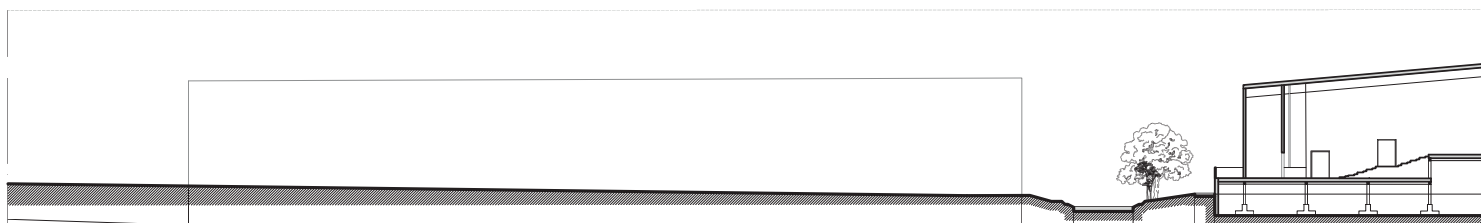
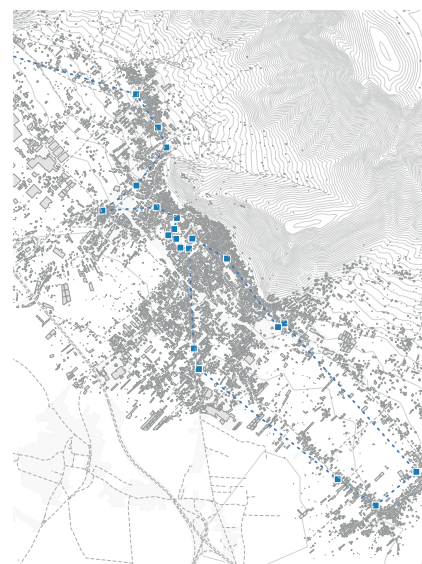


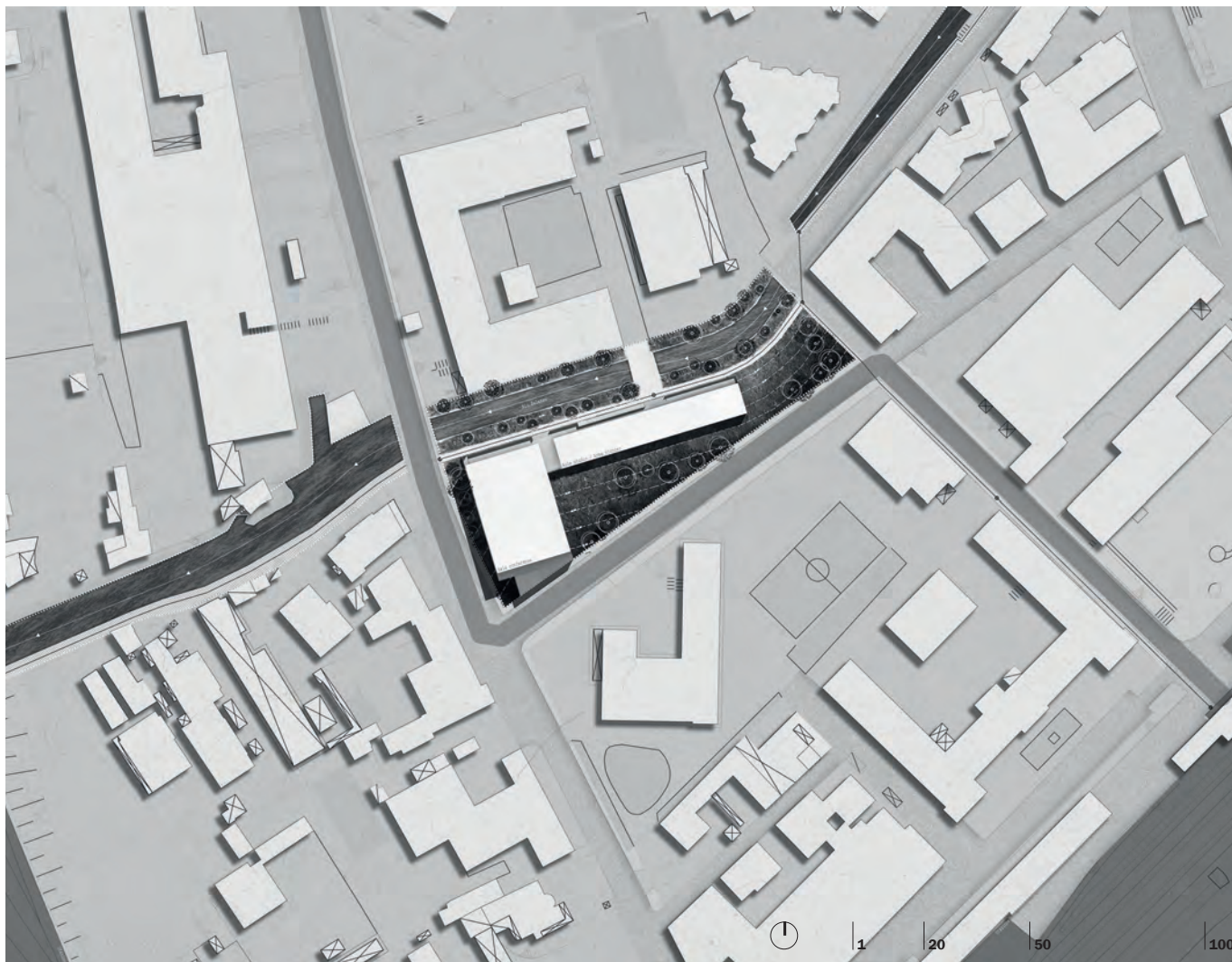


GENERAL STRATEGY

The strategies adopted attempt to operate through a series of interventions on the urban fabric and through a reading of the project with a non-destructive character. The definition of the project program stemmed from a careful reading and relative critical synthesis of the city plan.

202





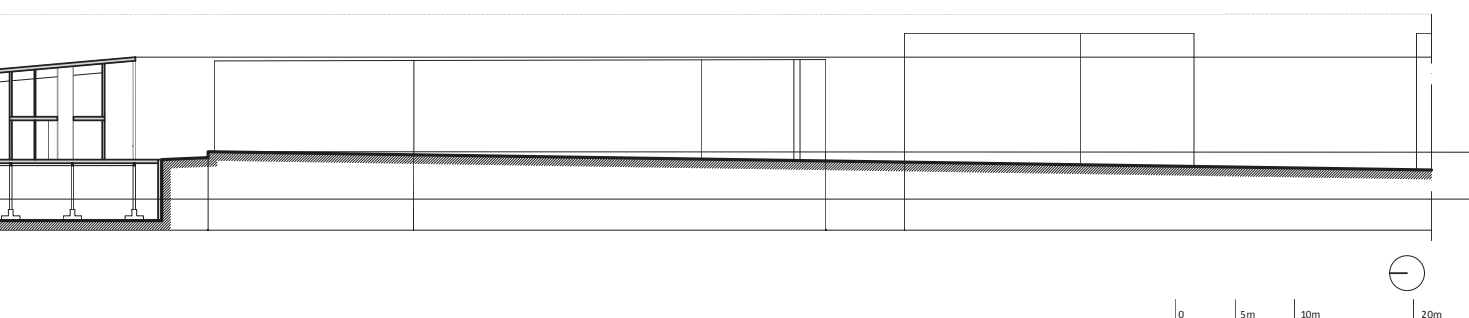
203

URBAN & ARCHITECTURE FRAMEWORK

Program
sport facilities, urban park,
social and culture center

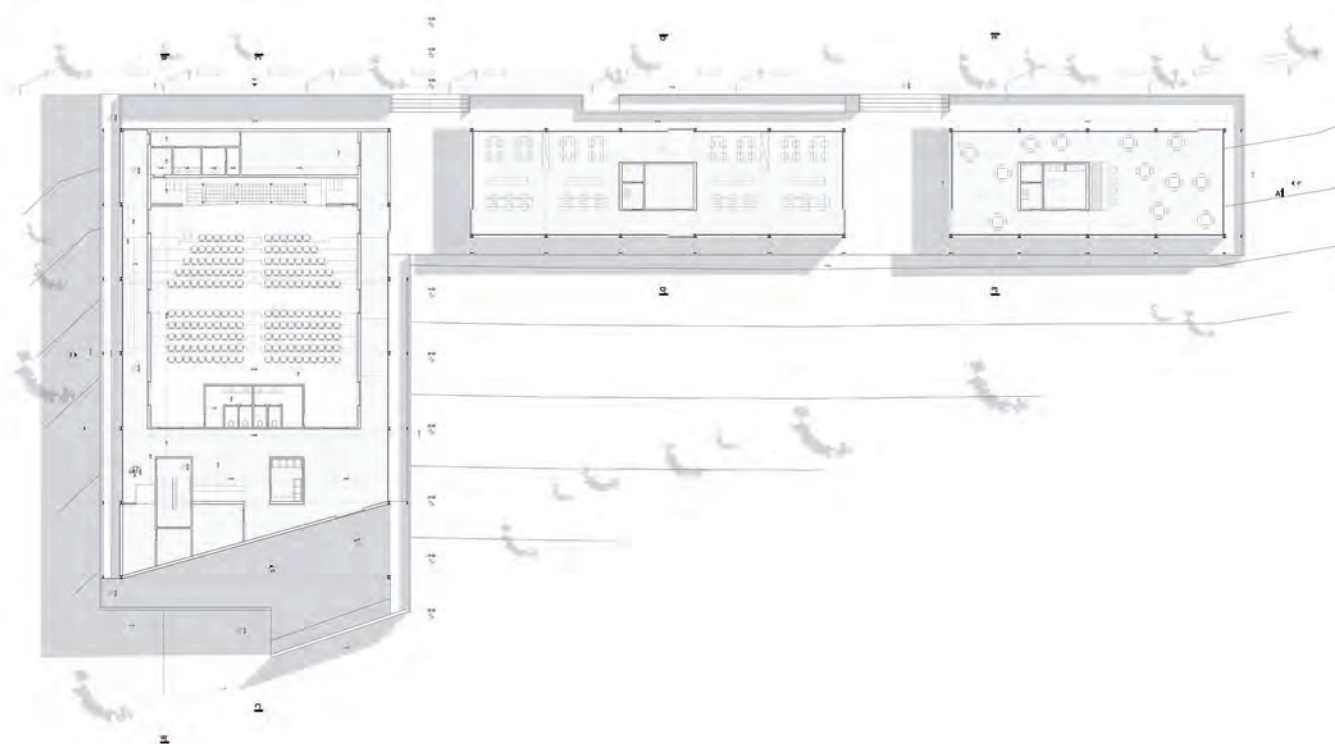
Covered area	1200m ²
Outdoor area	23625m ²
Above-ground floors	2
Built volume	8500m ³
Estimated cost	€ 1.264.553

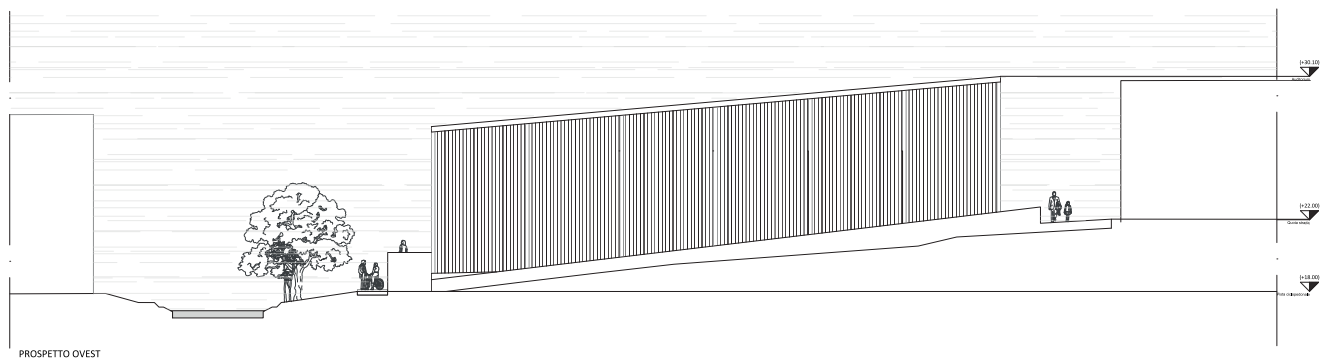
The project involves the construction of a rearrangement of the riverbanks from which an urban park will take shape, which will be crossed by a bicycle-pedestrian path (planned within the city plan in the same location) and which will connect to the already existing path adjacent to the Rio di Palazzo. In addition, the park will include the construction of a series of buildings intended for the school use of pupils to address the shortage of school facilities, and which will be grafted at a strategic point in the area in order to be well connected to all school sites and to urban spaces as well.





204





PROSPETTO OVEST

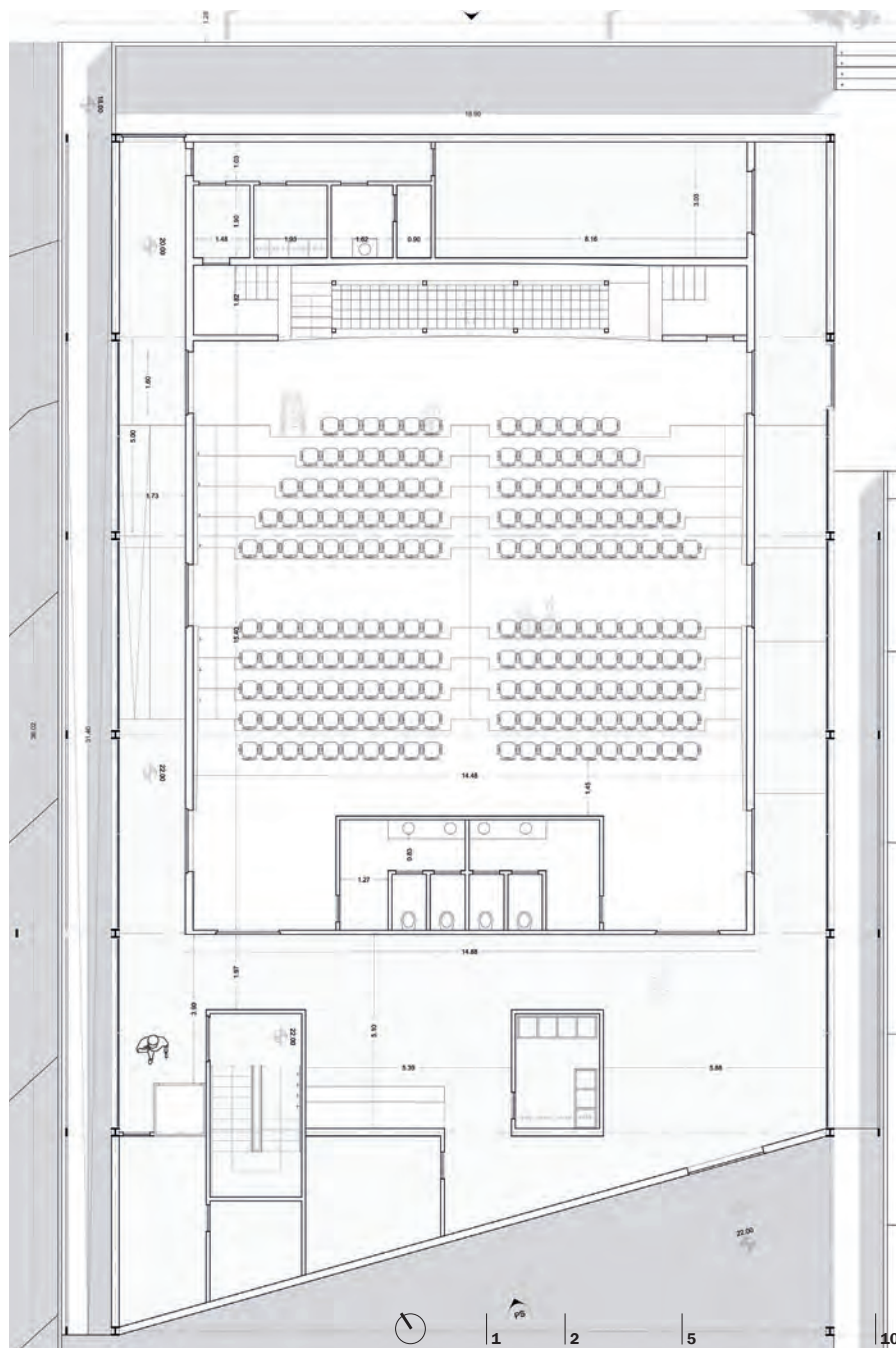


1

5

10

20



1

2

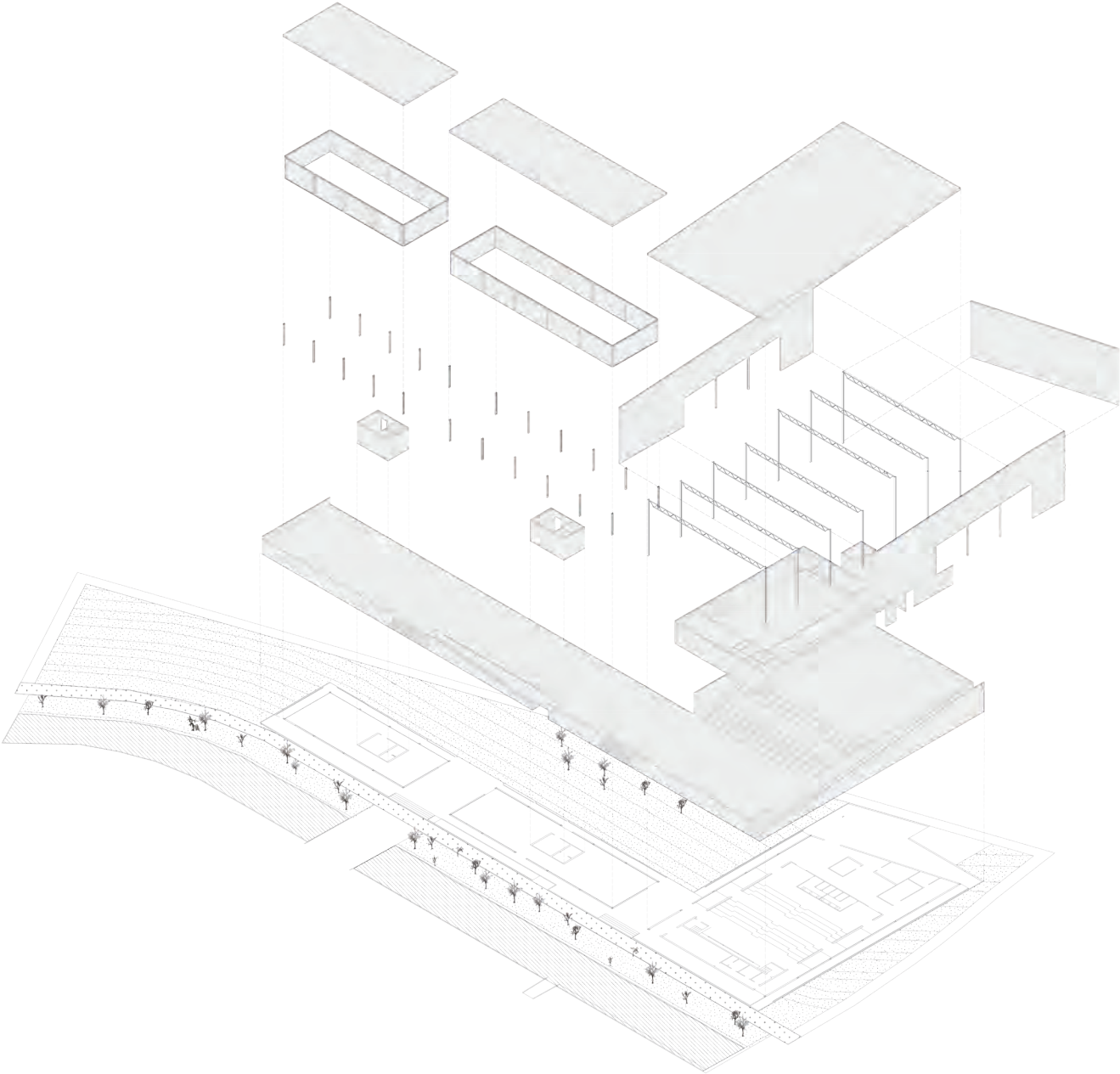
5

10



205





In going to substantiate a project hypothesis that had in its aims to trigger new urban clusters and integrate all the territorial, social, historical and economic aspects, several invariants were taken into account. The traces (natural and anthropic), soils and industrial archaeologies (identified in the city plan) that characterize the area of interest. Therefore, the multiple project purposes are manifested in forms and actions of different natures. First, the actions with long-term effects, which mainly concern the naturalistic aspects of the area and are aimed at recreating its naturalistic value (particularly the close relationship with the Rio Palazzo). A series of interventions that look at the history of the places and that spring out from the paths, from the historical axes that characterized the territory and that over the centuries have been interrupted, which make sense to be recovered and to exist. They do not arise only from the desire to recover identity fragments of the city but are in line with the development prospects of the territory and the related maps. Secondly, short- and medium-term interventions that take place mainly on anthropized spaces and that are aimed at activating new processes, which, starting from the desire to want to connect entire urban fragments together, goes to substantiate new developments that have not yet taken place within the territory.

EMANUELA MIELE - EXTENSION OF THE EDMONDO DE AMICIS PRIMARY SCHOOL

AMPLIAMENTO DELLA SCUOLA ELEMENTARE EDMONDO DE AMICIS



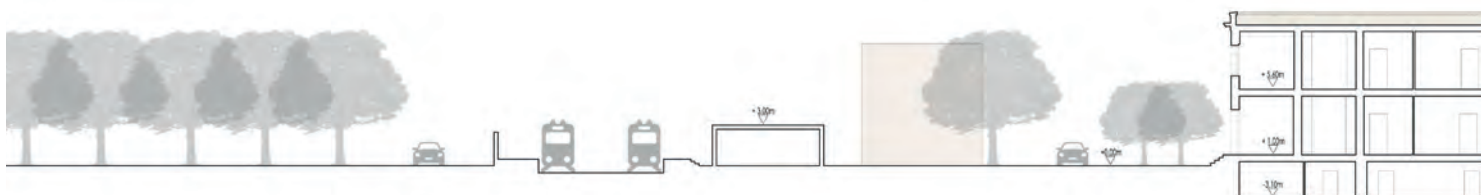
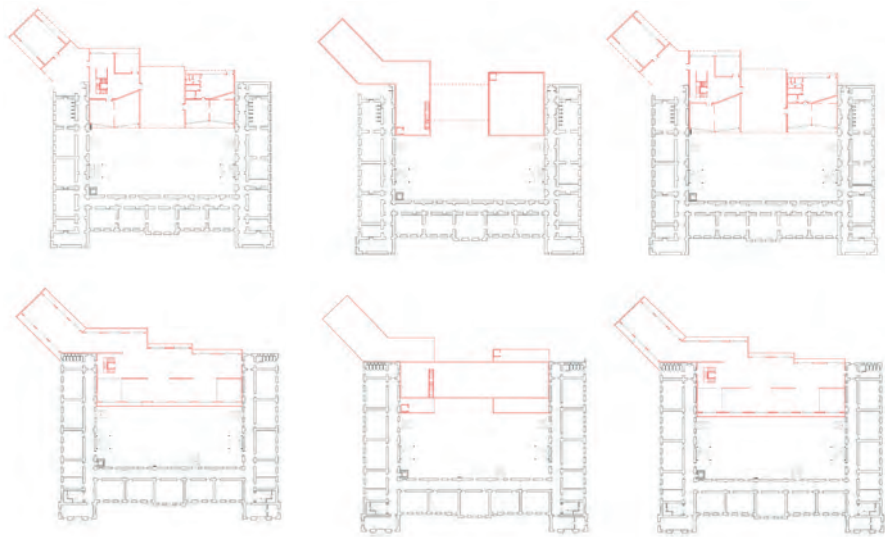
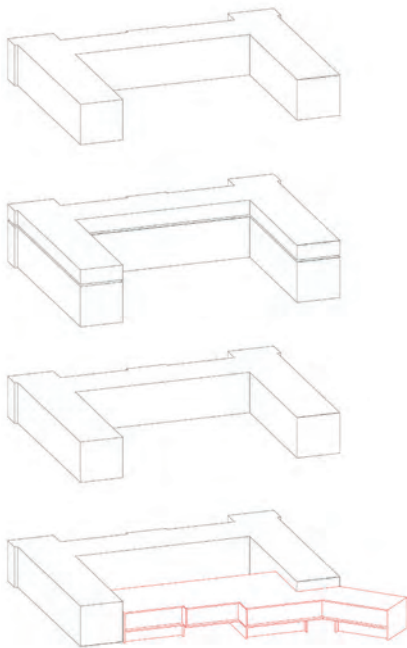


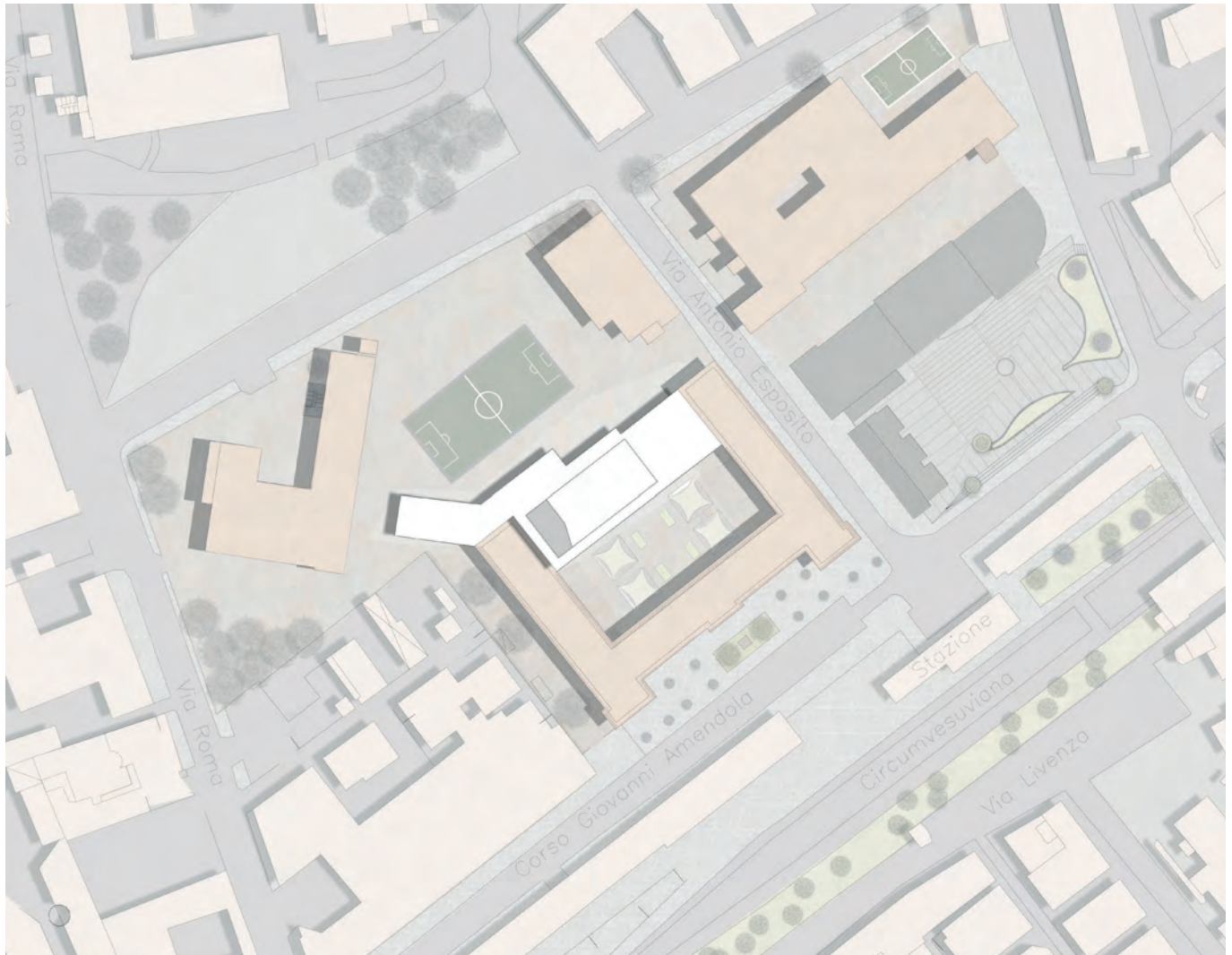
GENERAL STRATEGY

GENERAL STRATEGY

The area is located at the intersection of different grades school, in particular Edmondo De Amicis primary school (currently in disuse) and Giovanni Amendola secondary school. The project integrates school and community activities, reinforcing its role as a central hub for the city.

210





URBAN & ARCHITECTURE FRAMEWORK

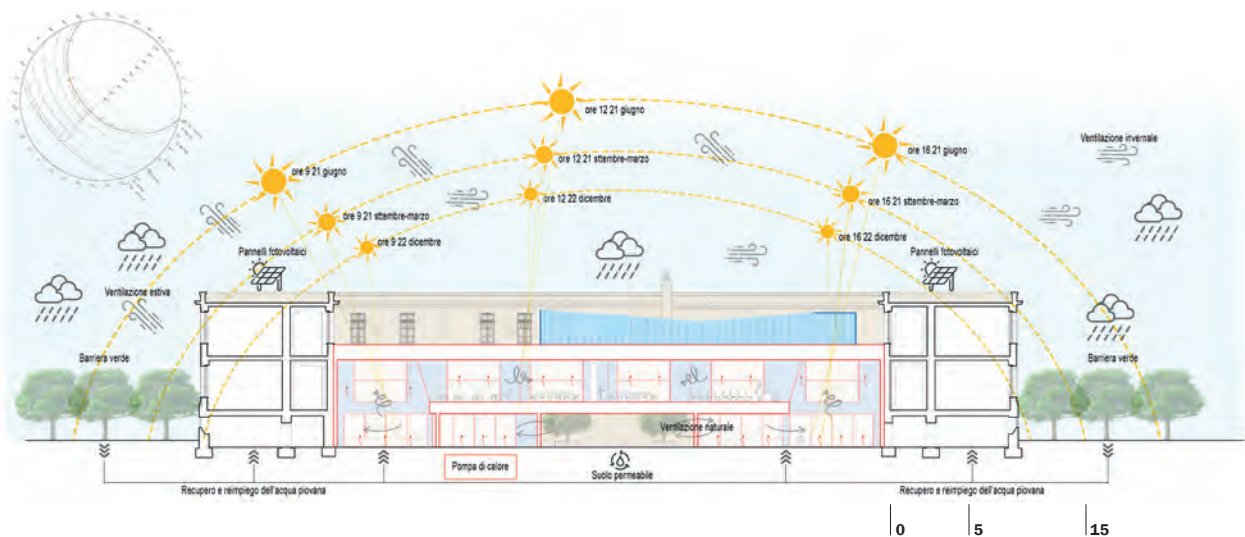
Program
sport facilities, urban park,
social and culture center

Covered area	1330m ²
Outdoor area	6661m ²
Above-ground floors	2
Built volume	6118m ³
Estimated cost	6.155.472€

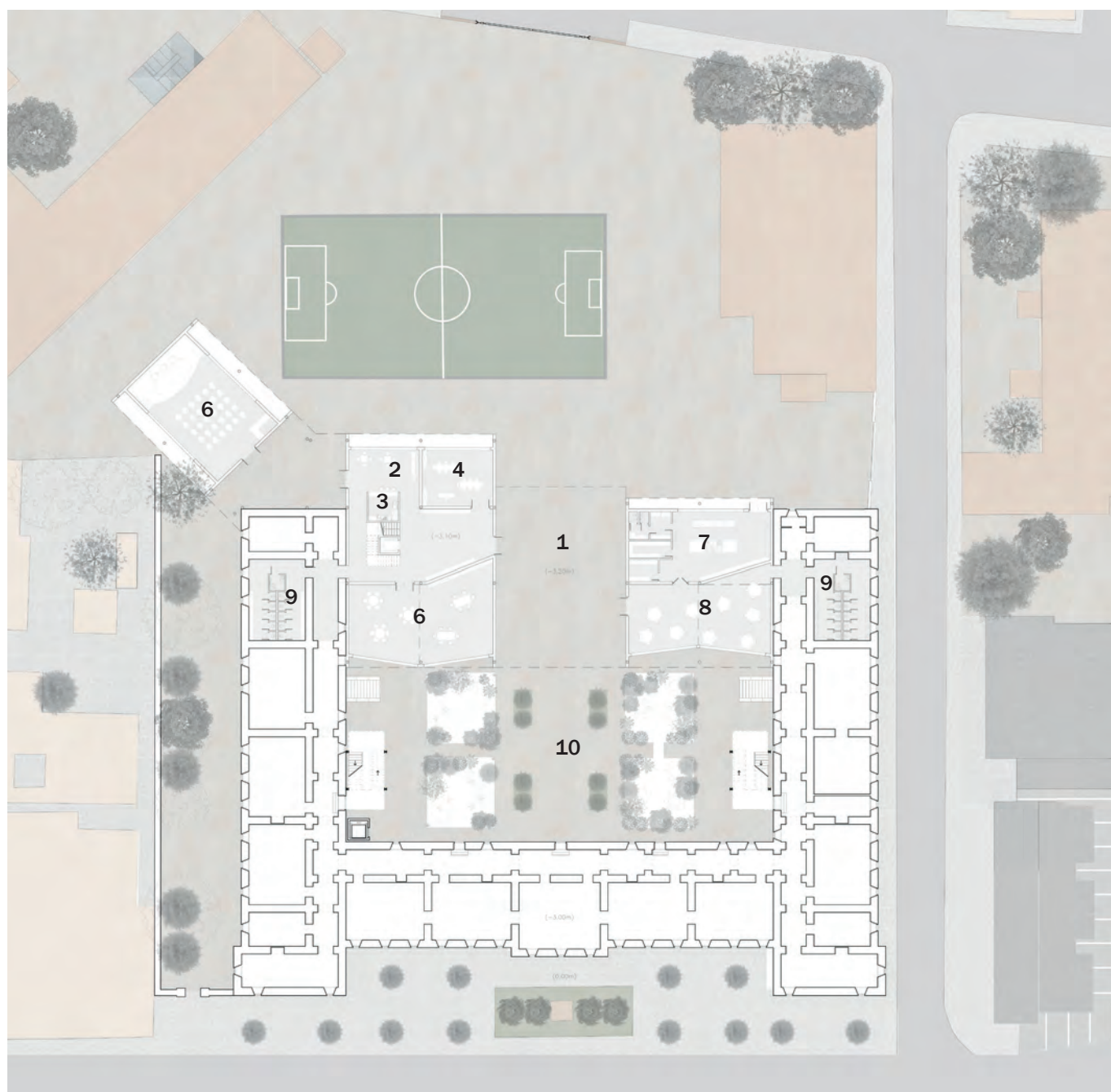
The new building is destined for different functions, since there are two other school complexes in the area under intervention: the G. Baccelli and the G. Amendola Secondary Schools. The intervention covers an area of 3,390 m², distributed on three floors. Three independent structures on the lower floor, joined to the upper floor, connect the inner courtyard with the entrance via a bridge. The lower floor accommodates the school canteen with kitchen, the conference room with independent access, two workshops open to the garden, a cafeteria, and the waiting room.

The upper floor is intended for open laboratories, with the possibility of closing them through folding doors. The labs accommodate computer studies, gardening, chemistry, reading and more. It has a practicable roof that will serve as a safe playground area. On the ground floor, where the football pitch is located, there is a garden with fruit trees and educational vegetable gardens, located in the courtyard created between the new building and the De Amicis school. The garden has covered places: structures with wooden frames and benches that also serve the canteen and the workshops.





35

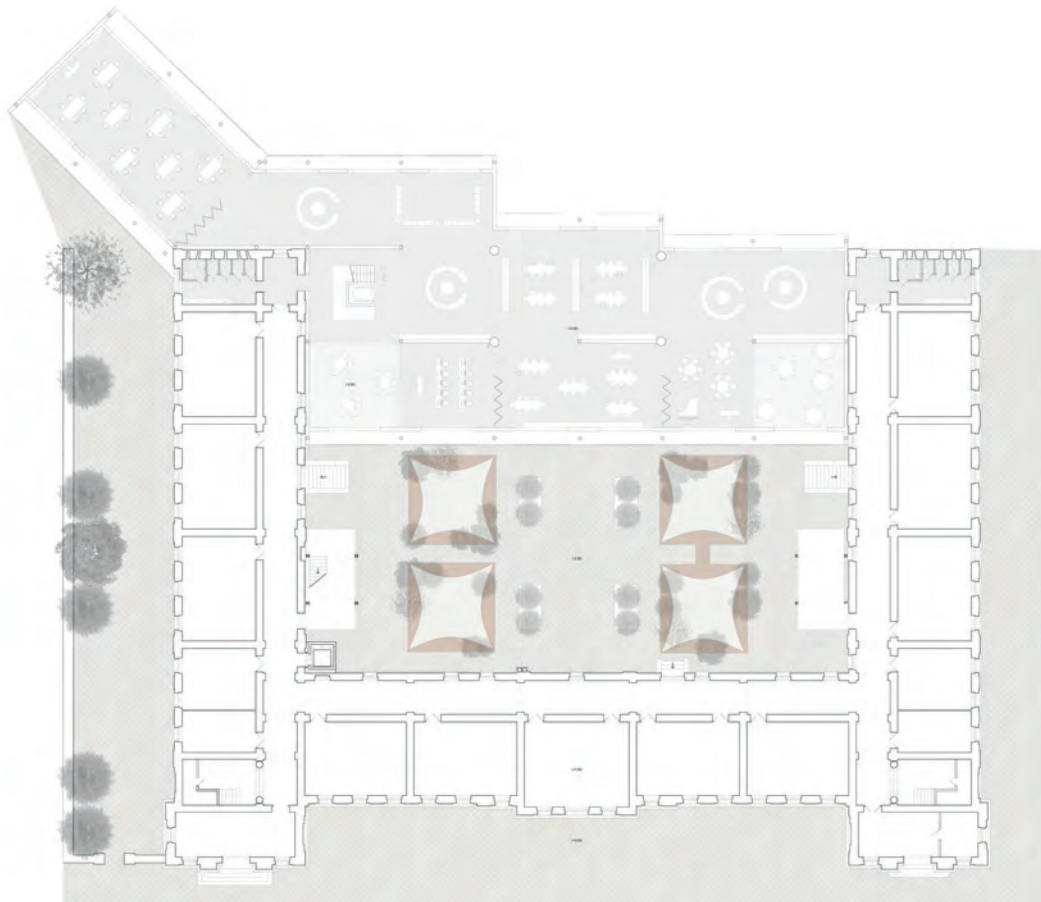


1. Hall
2. Reception
3. Café
4. Gardening lab

5. Multimedia lab
6. Conference hall
7. Canteen
8. Dining hall

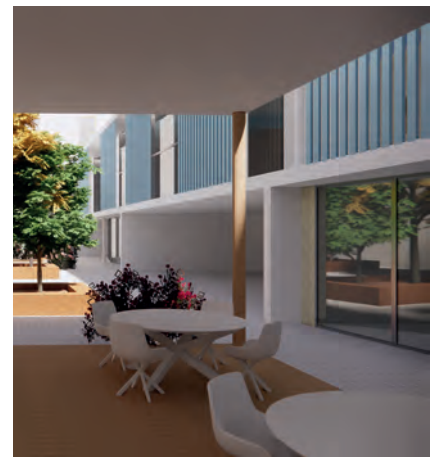
9. Toilets
10. Patio

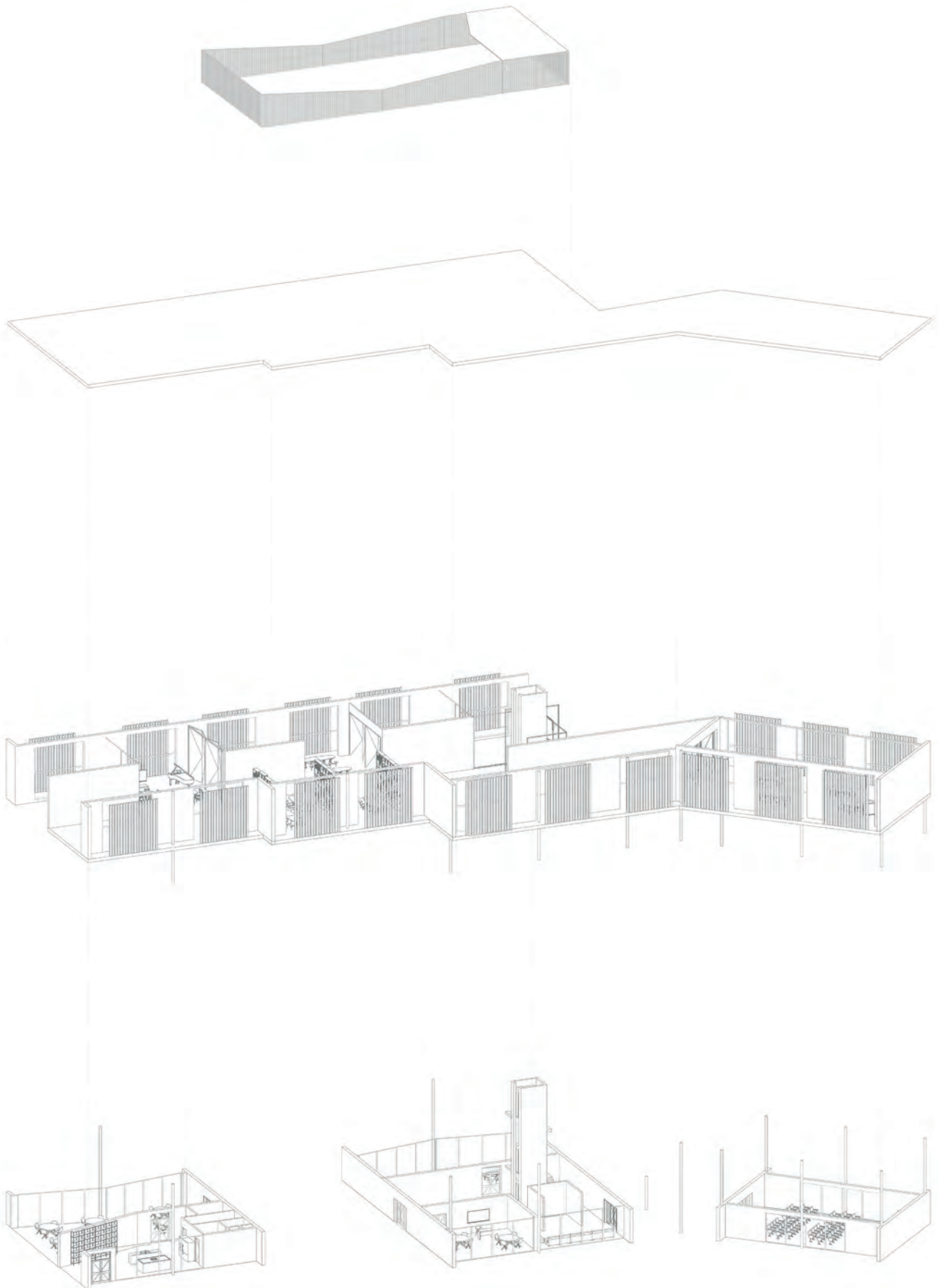




0 5 15 35

213





The project aims to extend the Edmondo De Amicis school. The building, constructed in the 1920s, has an architectural language in line with the instances of the early years of fascism, and housed the city's first primary school. In 2006 it was declared structurally unfit for use. Renovation is slowly taking place. The project aims to expand the school complex with the addition of a building adjacent to the central courtyard. Three independent structures on the lower floor, joined to the upper floor, connect the inner courtyard with the entrance via a bridge. The lower floor accommodates the school canteen with kitchen, the conference room with independent access, two workshops open to the garden, a cafeteria, and the waiting room. The upper floor is intended for open laboratories, with the possibility of closing them through folding doors. The labs accommodate computer studies, gardening, chemistry, reading and more. It has a practicable roof that will serve as a safe play area. On the ground floor, where a sport field is located, there is a garden with fruit trees and educational vegetable gardens, located in the courtyard created between the new building and the De Amicis school. The garden has covered places: structures with wooden frames, benches and benches that also serve the canteen and the workshops. The design plan emphasises the layouts of the Baccelli in such a way as to make the relationship with the existing building dialectical. The structure is made of steel. An adaptable layout in shape, with contemporary and innovative technologies, regular in the complex, but interrupted on the upper floor at some points by double heights, generating overhangs at the laboratory and school canteen, located on the lower floor. The building is connected to the De Amicis on both the lower and upper floors, thus ensuring interior permeability between floors. The project integrates school and urban activities, reinforcing its role as a central hub for the local community.

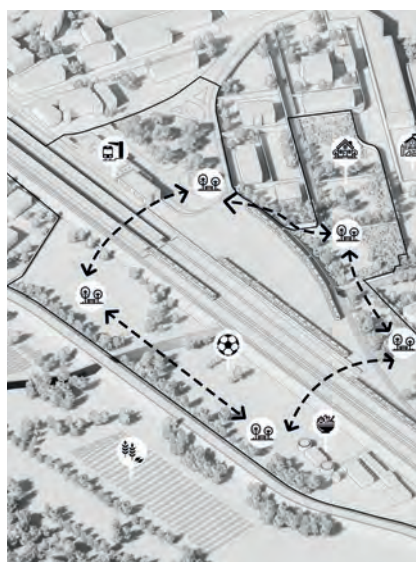
**ALESSANDRO PALLADINO - RECONNECTING SARNO:
A PARK BETWEEN THE RAILWAY AND THE RIVER**
RICONNETTERE SARNO: UN PARCO TRA LA FERROVIA E IL FIUME

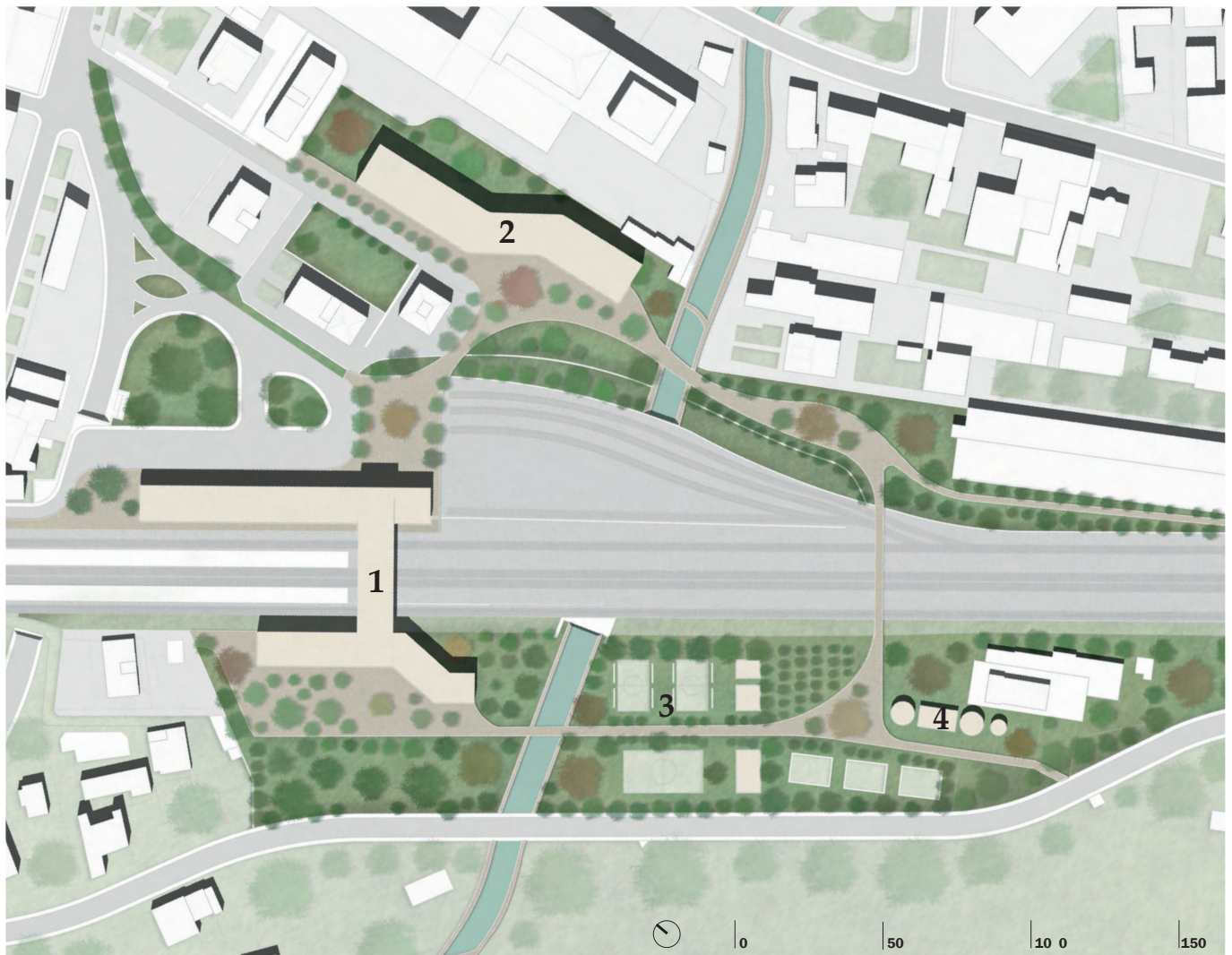




GENERAL STRATEGY

The aim is to create a central hub around the railway, an attractive point for the surrounding areas, capable of connecting the city separated by the railway and the river. A unique system born from the close collaboration of key function: transport, housing, education, and nature.





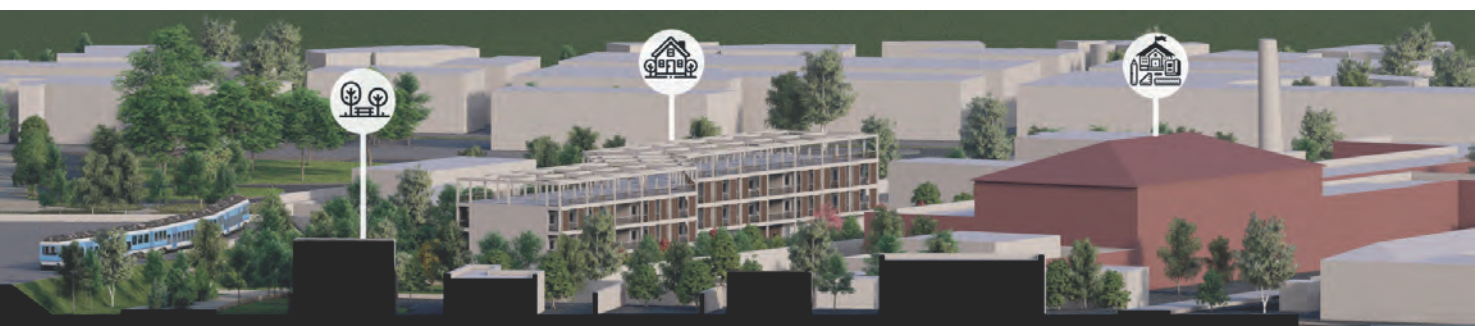
URBAN & ARCHITECTURE FRAMEWORK

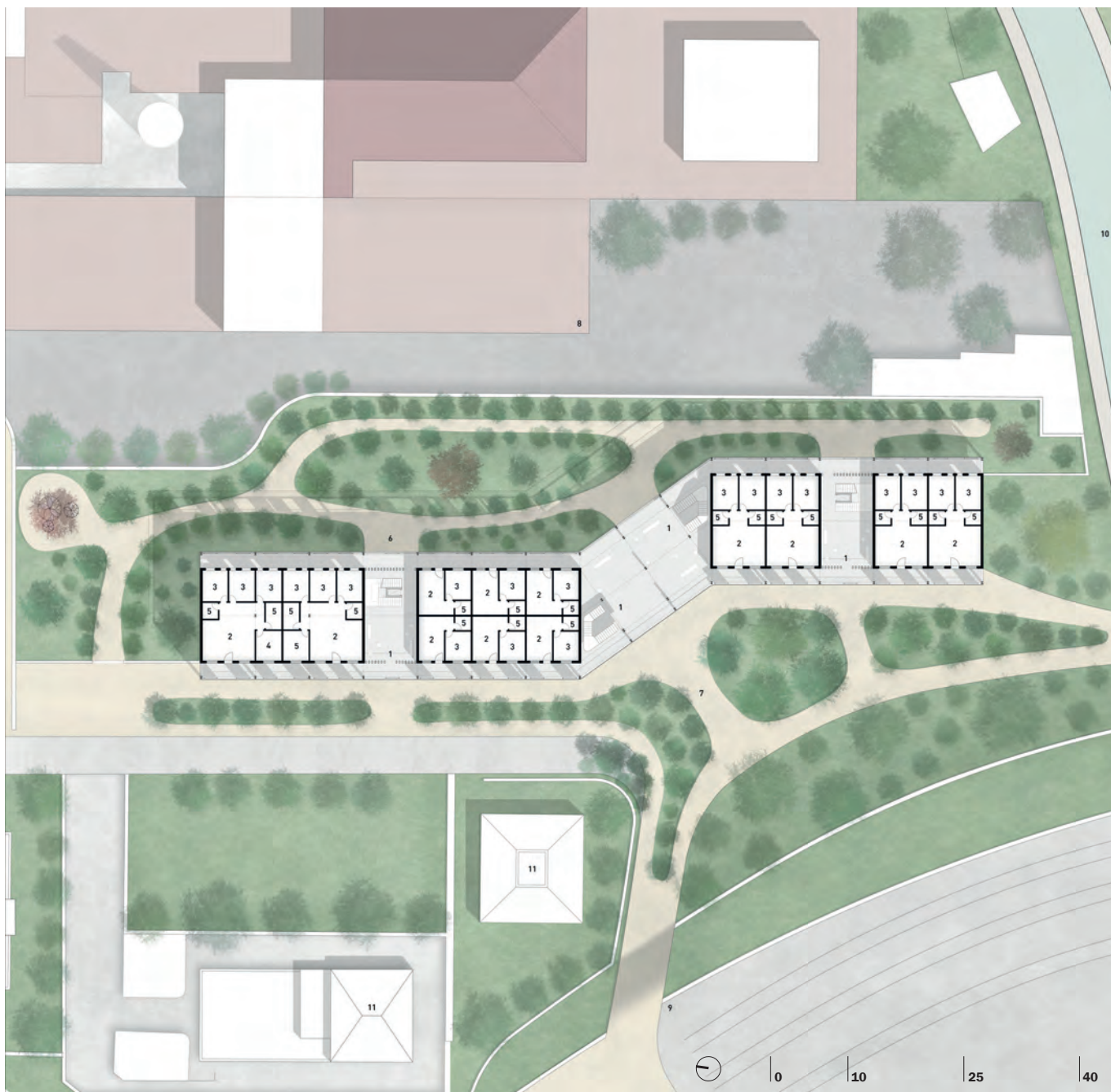
Program
urban park, housing, railway
station, sports center

Covered area	5.900m ²
Outdoor area	65.00m ²
Above-ground floors	3
Built volume	11.100m ³
Estimated cost	6.100.000 €

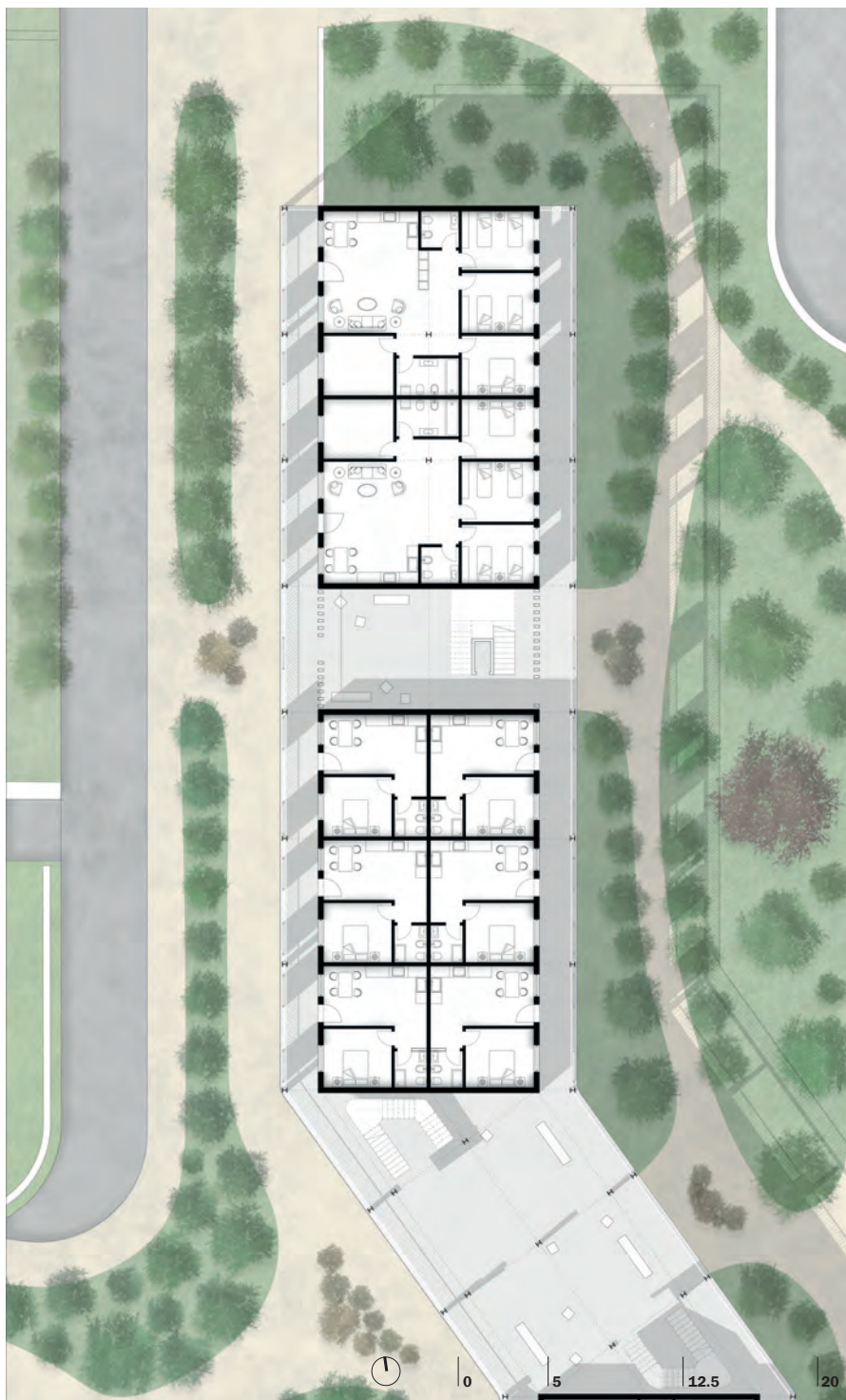
The purpose is to connect the urban area, equipped with various educational centers, to the agricultural zone. The pedestrian pathway serves as the core of the project, which not only links different parts of the city through elevated walkways but also creates a circular system among the various buildings that make up the park: the station (1), the residential building (2), and areas dedicated to school activities, such as: sports (3) and a nutritional education center (4). The entire system is immersed in greenery, featuring several recreational areas along the pathway. The design of the buildings focuses on the relationship between the built environment and nature, fostering dialogue through

portico elements and recreational areas that connect to the outside. In particular, the project analyzes the residential building (2), located according to the city plan within the ATI zone, which includes a percentage of housing designated for subsidized housing. Access to the building is provided through three entry points near the stair blocks, connecting to various recreational areas for residents, who can access their homes via an external walkway. By advancing a portion of the building, it was possible to create an internal courtyard with pathways and vegetation. Given the exposure of the long sides to the West and East, vertical sunshades have been chosen for shading. The roof includes a solar panel system.

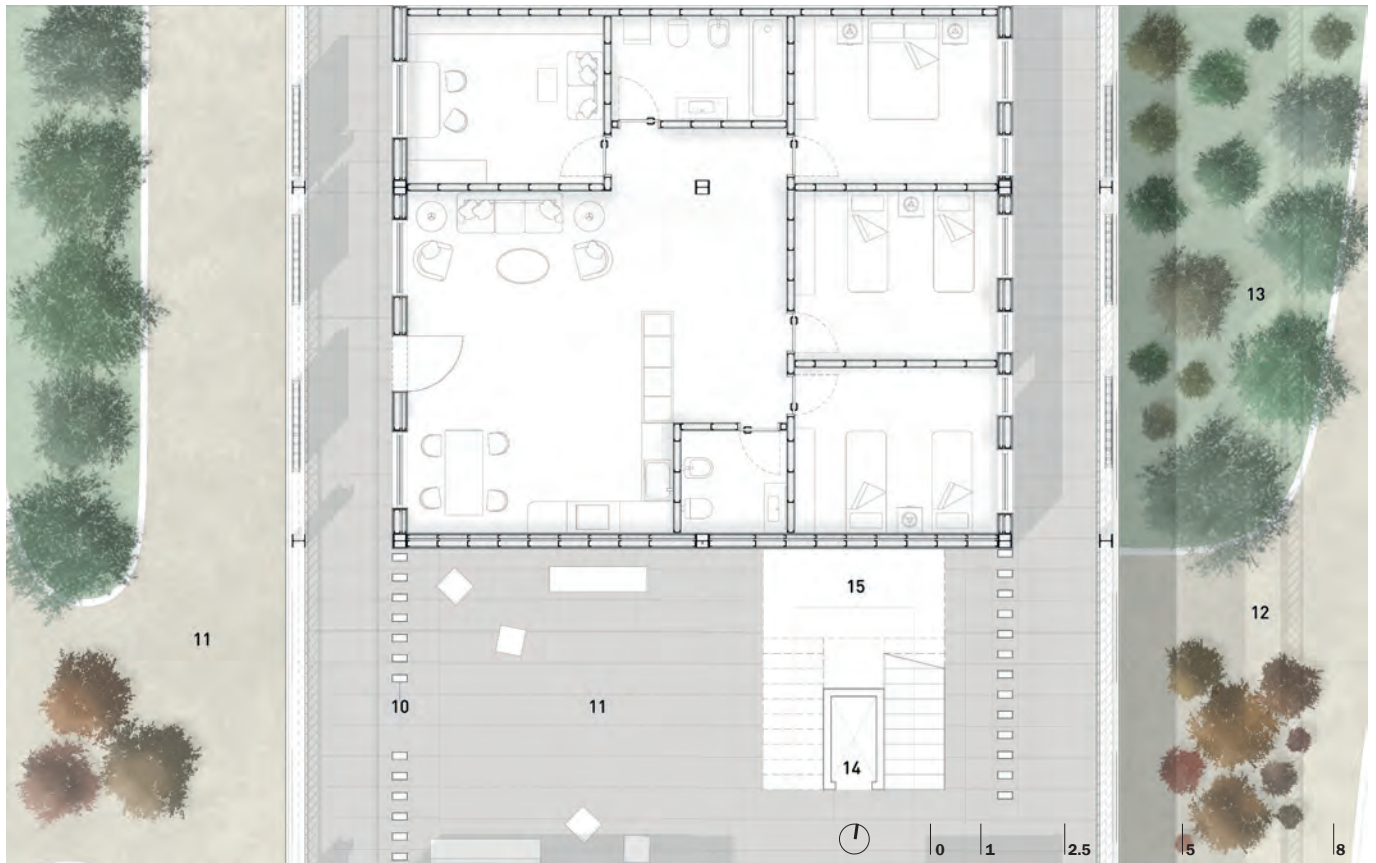
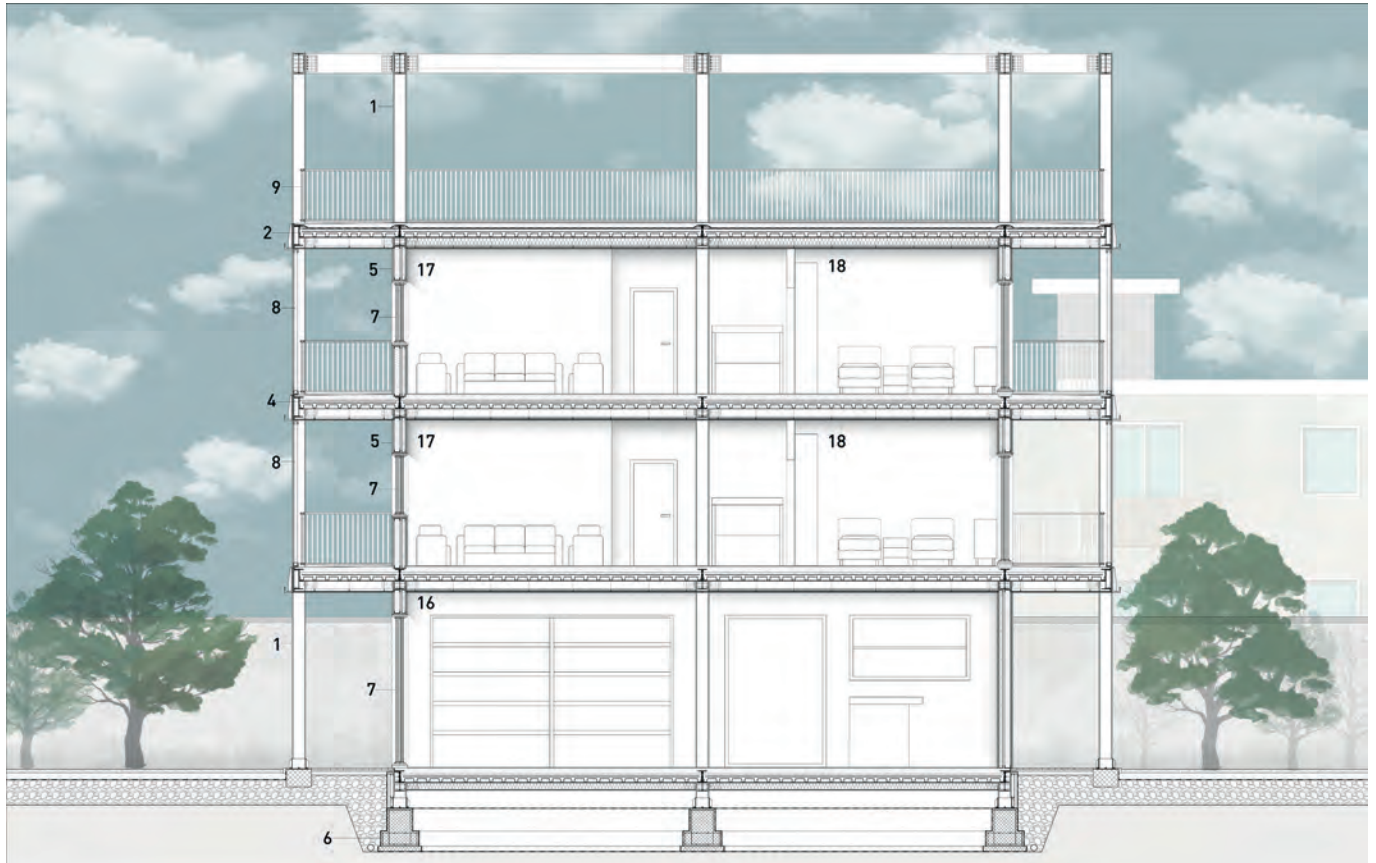




- | | | |
|----------------|-------------------------------|------------|
| 1. Hall | 5. Bathroom | 9. Railway |
| 2. Living room | 6. Private coutyard | 10. River |
| 3. Bedroom | 7. Public pathway | 11. Houses |
| 4. Studio | 8. Former industrial building | |







Restoring the connection between the urban and natural environments has become a necessity in modern times and is the central theme of this project. Paradoxically, the ultimate element of connection, the railway, always creates a clear separation between environments. This is markedly evident in Sarno, in the area around the FS station, where the system of perpendicular axes, formed by the river and the railway line, divides the city into four sectors.

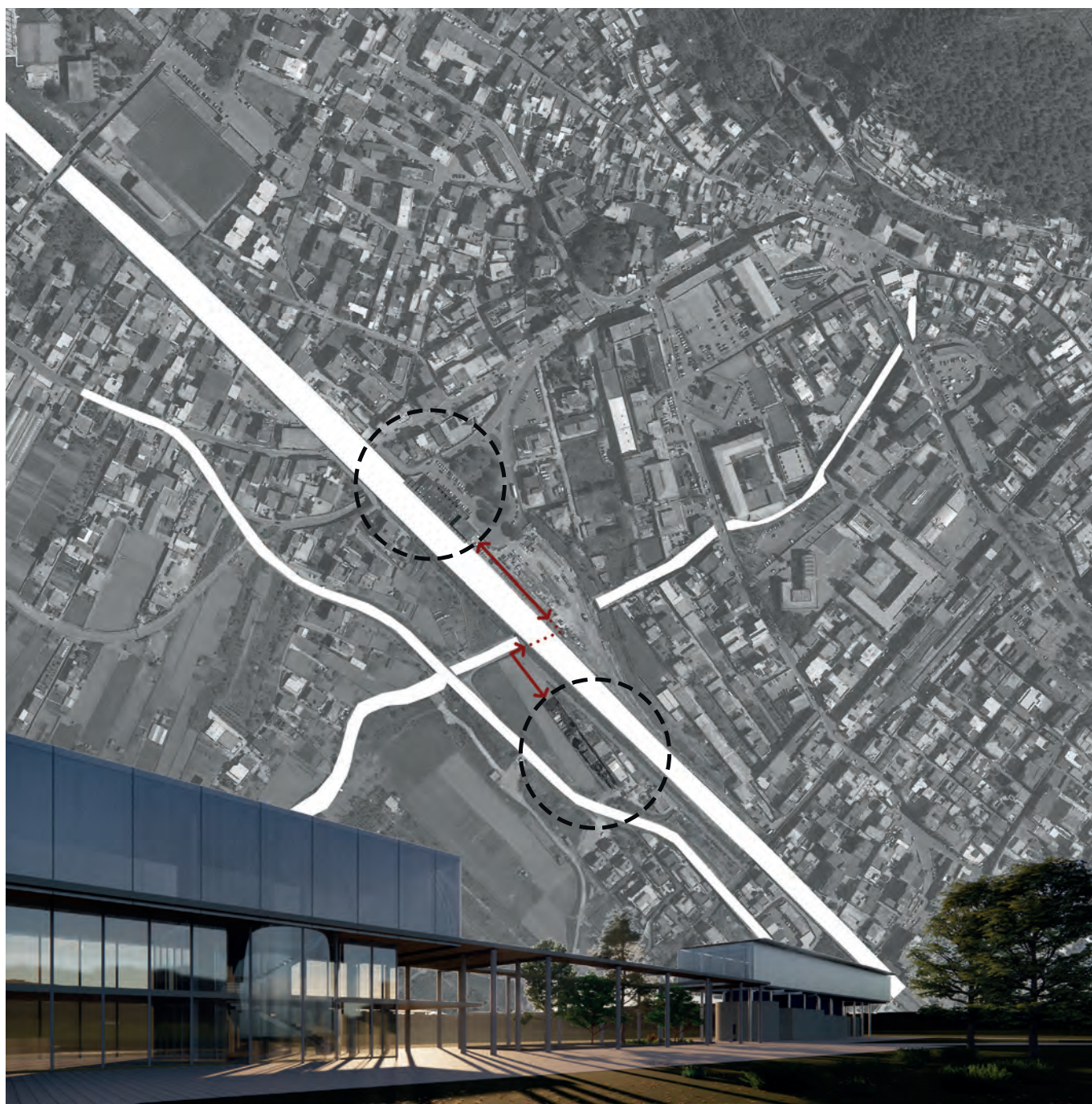
The upper portion encompasses the urban center, with a significant presence of school buildings, while the lower portion is characterized by natural/agricultural areas, with expansion plans to create the future “Urban Park 3.0”. The project aims to connect these two sides of the city through a pedestrian pathway, connecting various key points along its route in a circular manner, featuring numerous recreational areas immersed in vegetation.

224 Additionally, besides the expansion of the station with a corresponding level crossing and a new entrance on the opposite side of the railway, the project includes a center for sports and nutritional education, linked to the activities of local schools, and a partially subsidized residential building with commercial activities on the ground floor.

The goal is to redevelop an entire portion of the city, involving those marginal areas neglected due to their proximity to the railway, narrow and uncultivated lands that, when integrated, represent a huge resource for the territory, capable of restoring the lost connection between urban and rural environments, a connection across the railway and the river.

**TOMMASO MARCHESE - RECONNECTING THROUGH THE EXISTING.
THE RIO PALAZZO'S FORMER PURIFICATION STATION**

*RICONNETTERE ATTRAVERSO L'ESISTENTE.
L'EX DEPURATORE DI RIO PALAZZO*





GENERAL STRATEGY

The design strategy is based on defining a direct connection between the railway station area and its southern area. The objective is to overcome this infrastructural limit by opting for an intervention that is as natural as possible, thus exploiting the existing underpass on the river.

STRATEGIC DIAGRAMS



Polarity



Relations



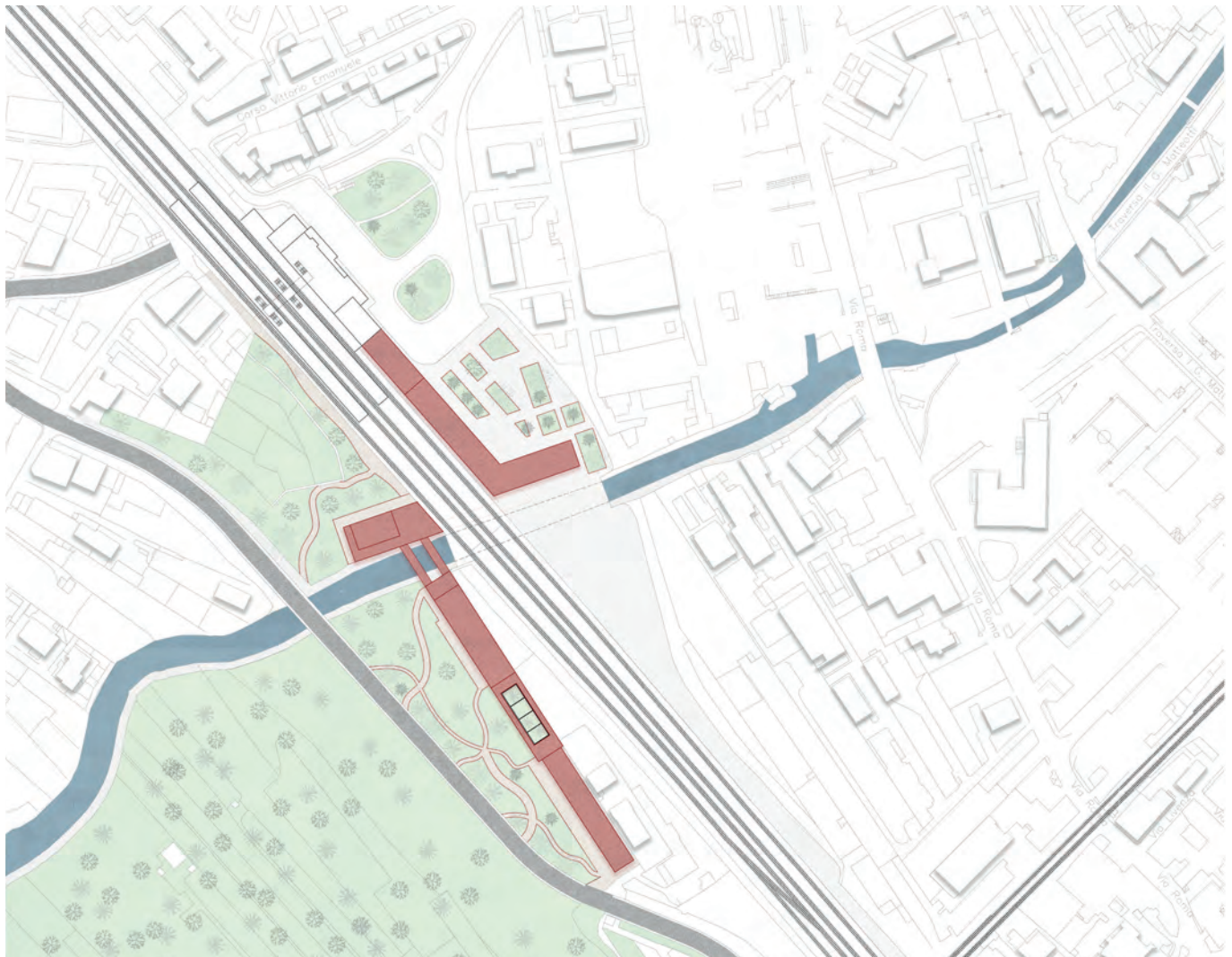
Permeability



Axes



FRONT ELEVATION



227

URBAN & ARCHITECTURE FRAMEWORK

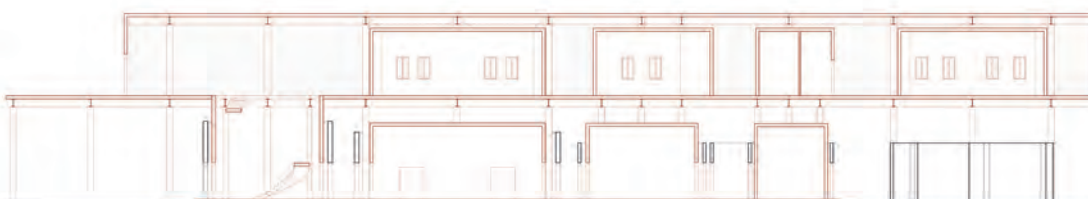
Program educational and multifunctional center

Covered area ex novo	1911m ²
Outdoor area ex novo	4672m ²
Above-ground floors	2
Built volume	9410m ³
Estimated cost	1.037.000€

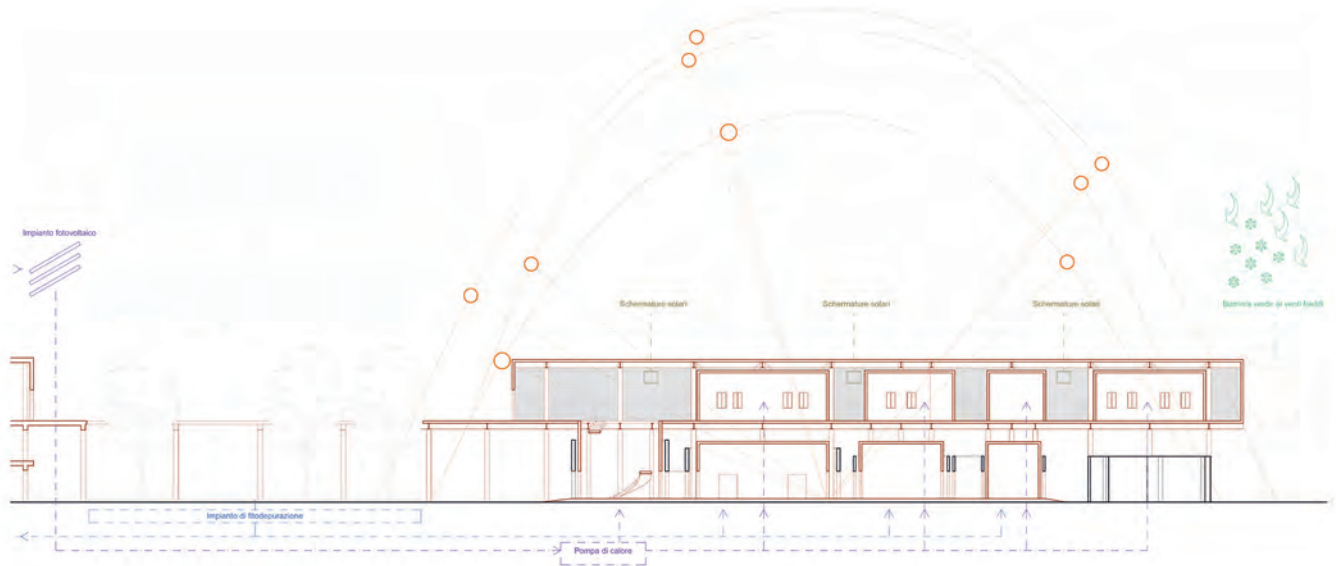
The attention fell on the issue of the disused purification station. The idea is not to demolish it. The purifier is seen as something that can tell a story, an element that symbolizes the desire to preserve and give dignity to the watercourse and the history linked to it. Therefore, the idea is to not recover it in its function but enhance it as a symbol. Almost like a monument. Its position is also strategic from this point of view. In fact, it is located at the entrance to Sarno.

The program foresees laboratories for hydrogeological studies and headquarters of the Sarno River Park Authority. The design takes shape from the location of the

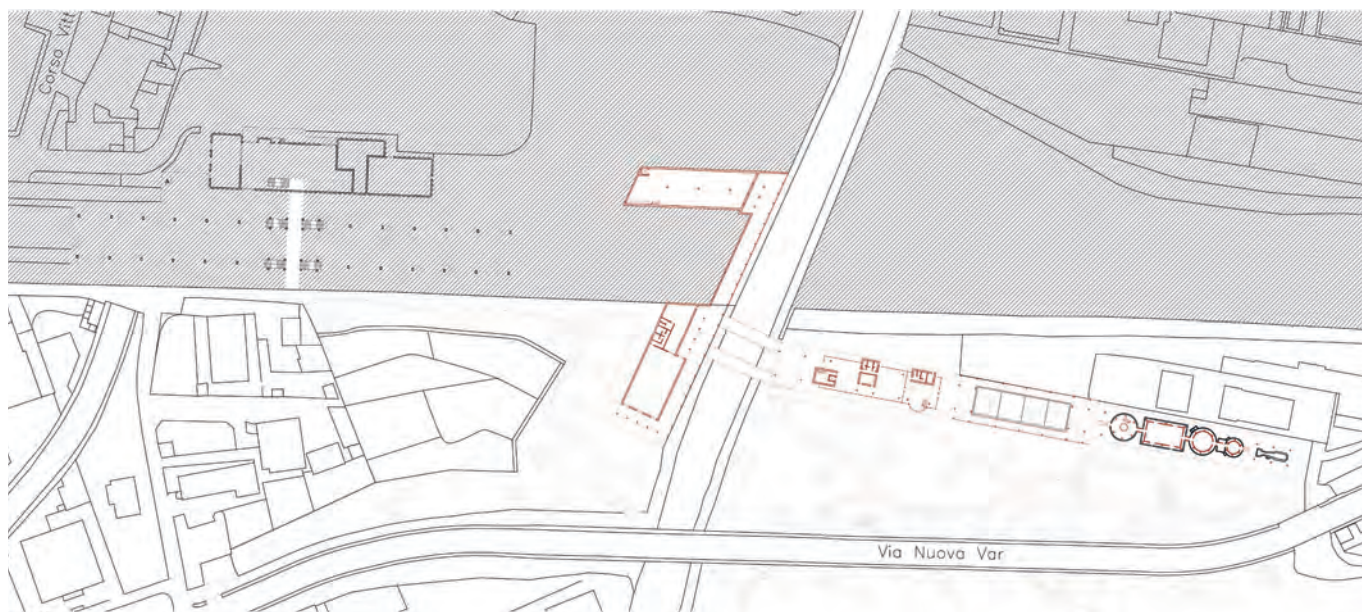
pre-existing purification station and aims to reuse the abandoned spaces reinterpreted through a new graft. Micro-architectures are inserted inside the pre-existing hollow volumes, allowing their reuse; a transversal connecting element recommends continuity between the different blocks and allows the alternation of different functional spaces. The alternation of these solid shapes is resumed above with the exception of the connecting element in order to define autonomous blocks inserted inside a steel structure. This, independent of the blocks and covered with a metal mesh, outlines the hybrid covered and open spaces.



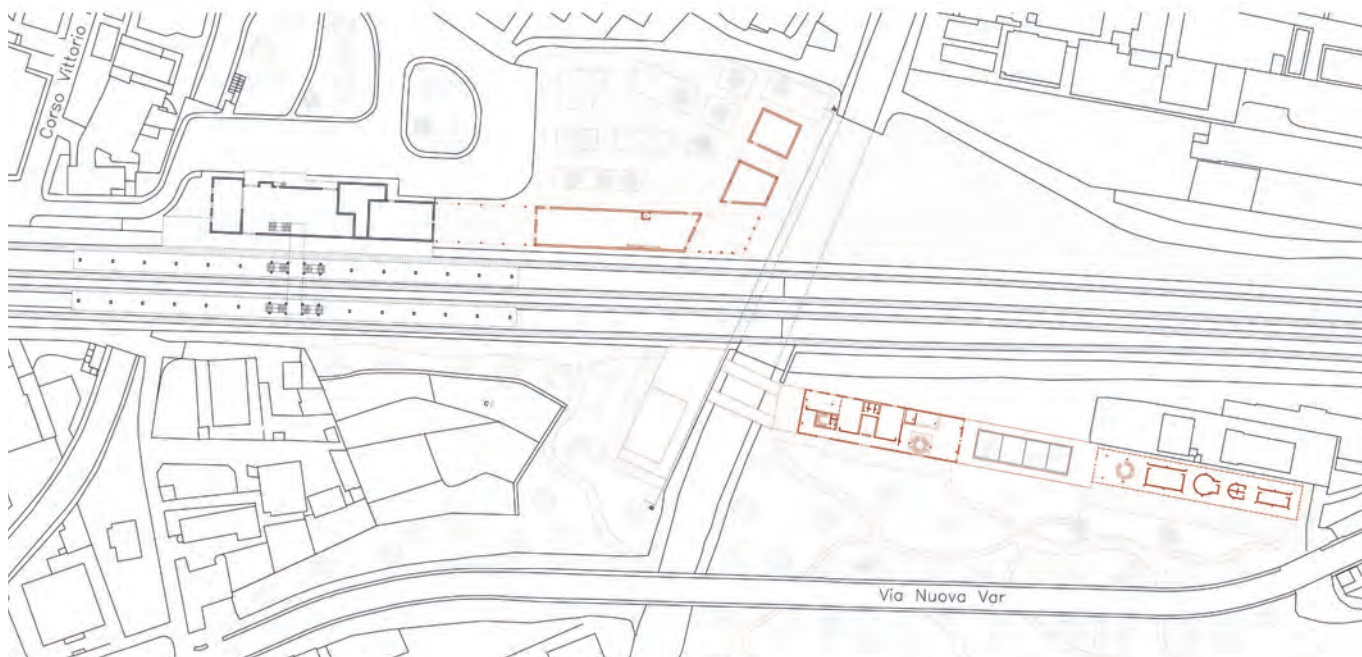
FRONT SECTION



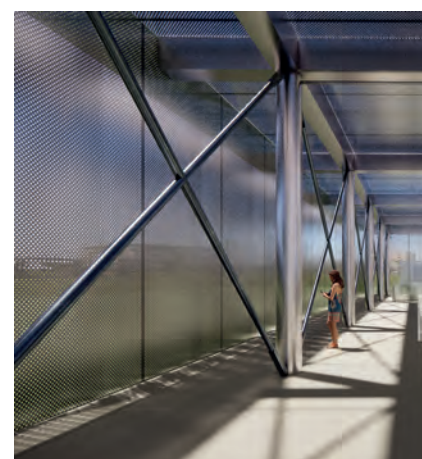
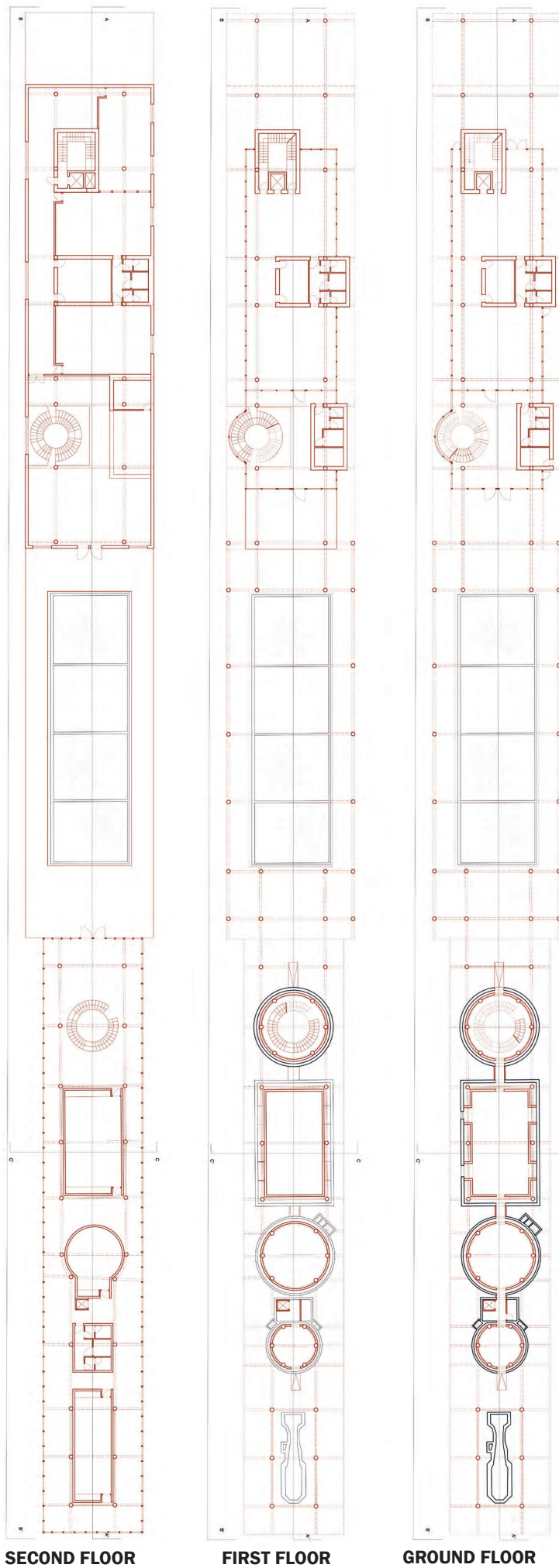
BIOCLIMATIC SECTION

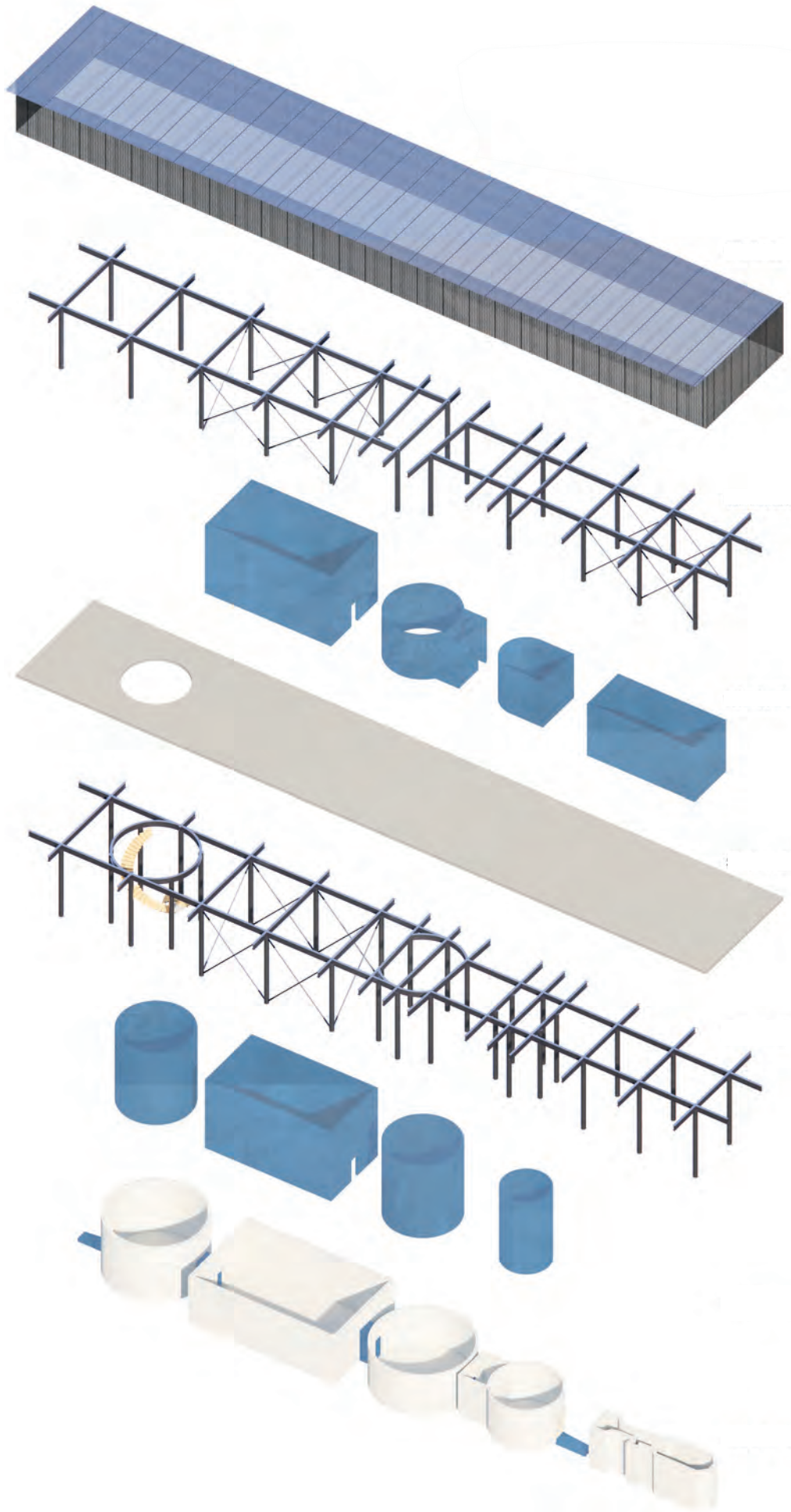


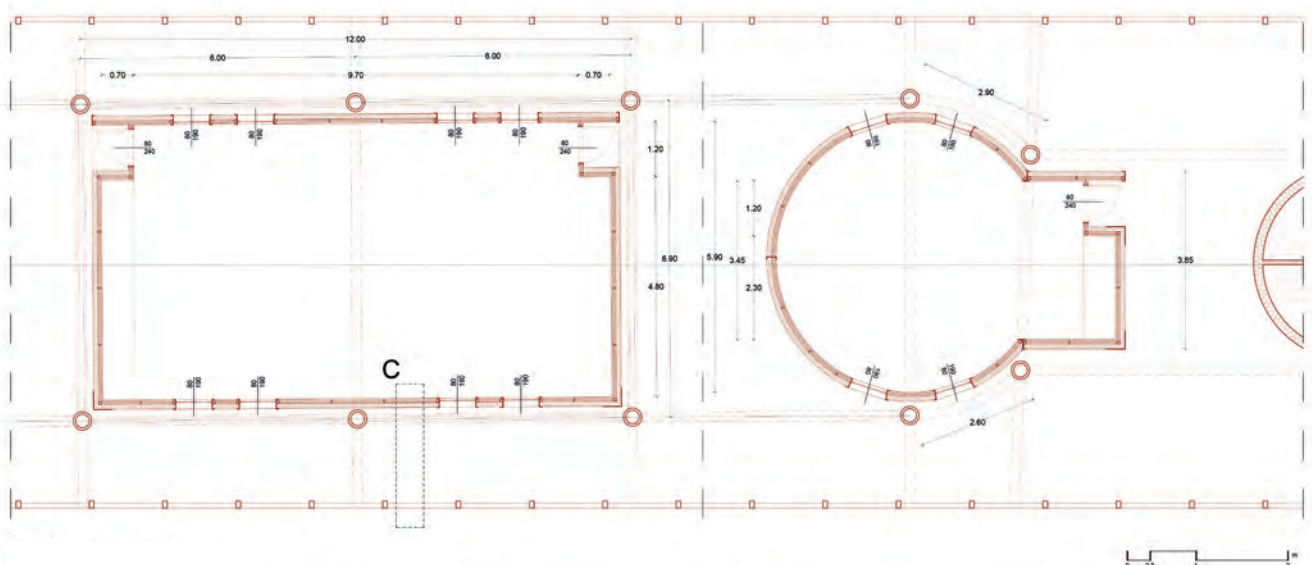
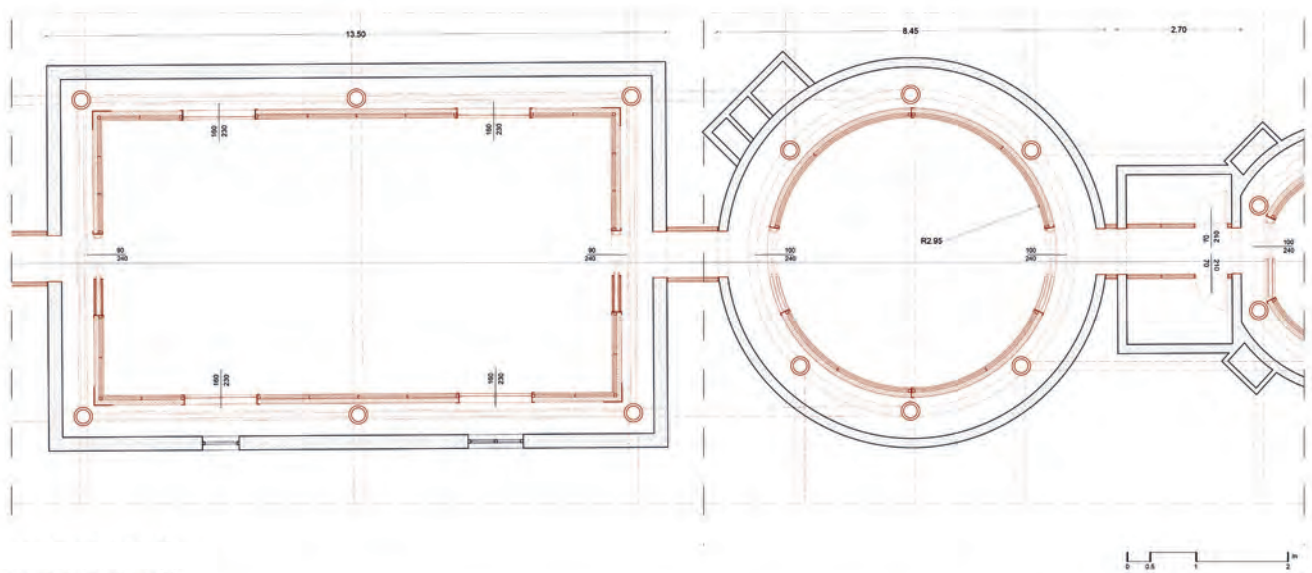
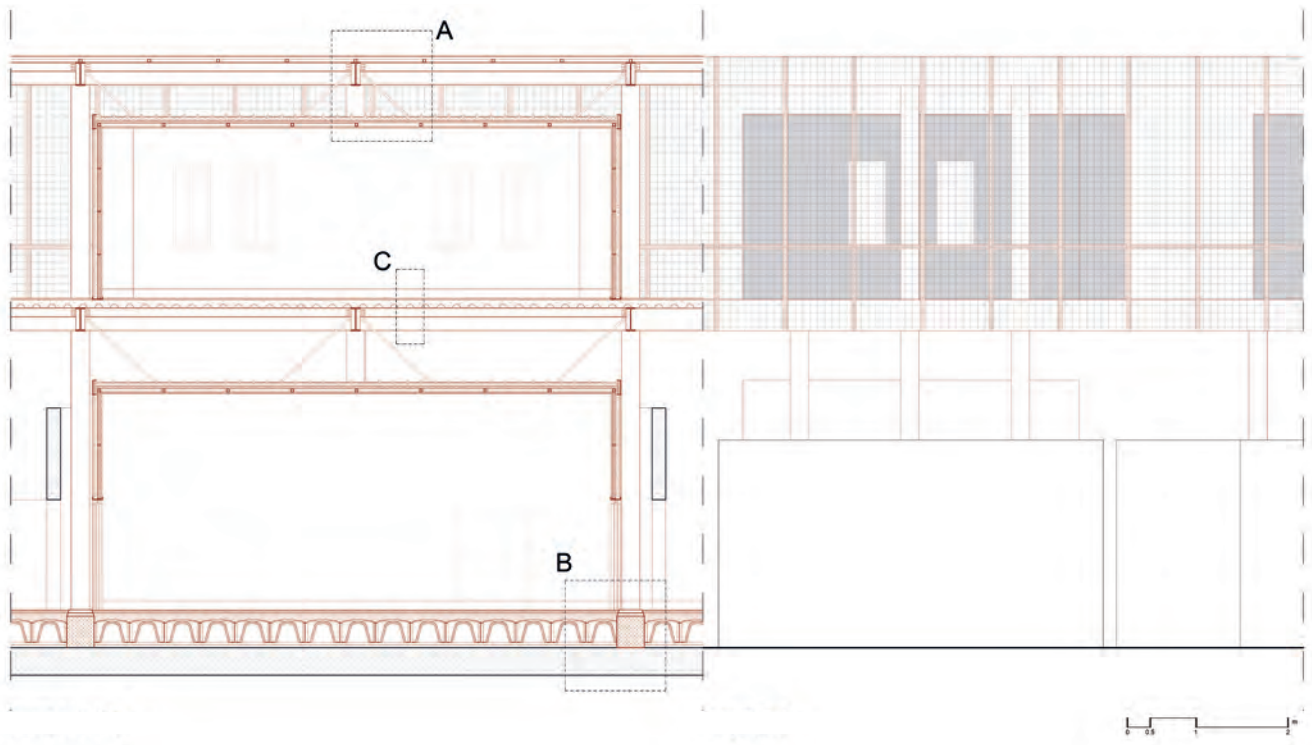
GROUND FLOOR



FIRST FLOOR







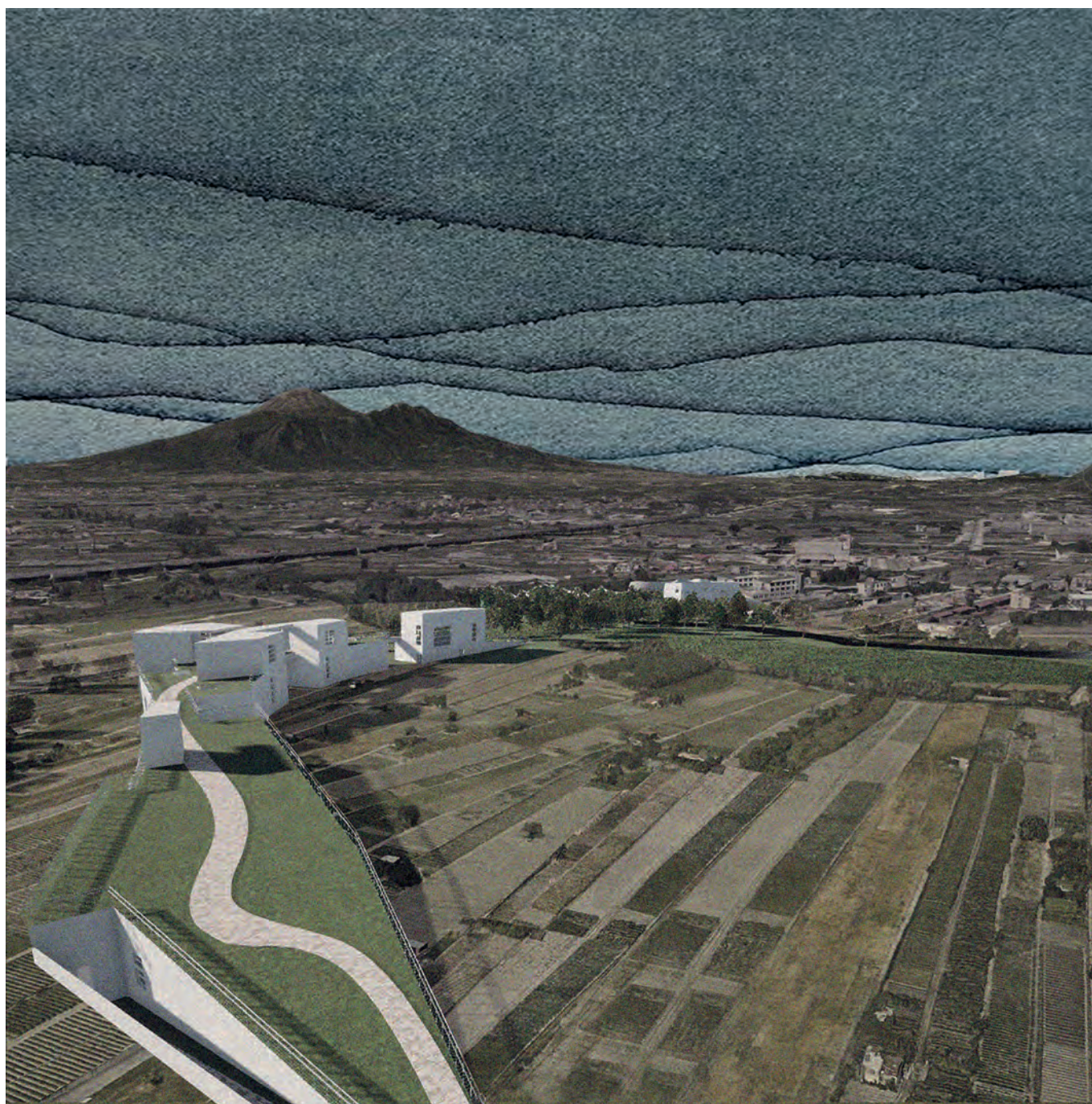
The intervention area is a well-defined portion of space that brings together different themes. It is bordered to the north by the railway, to the west by the Circumvesuviana, to the south by a high-speed road and to the east by the river. It is an area that can have different connotations: a filter area between two opposing urban conditions: to the north the totally urbanized historic center and to the south the agricultural park. Its proximity to the station also gives it a welcoming role. The main protagonists of the project are the railway station, the disused purification station and the river that holds the two interventions together. The design strategy is based on defining a direct connection between the station area and the purifier.

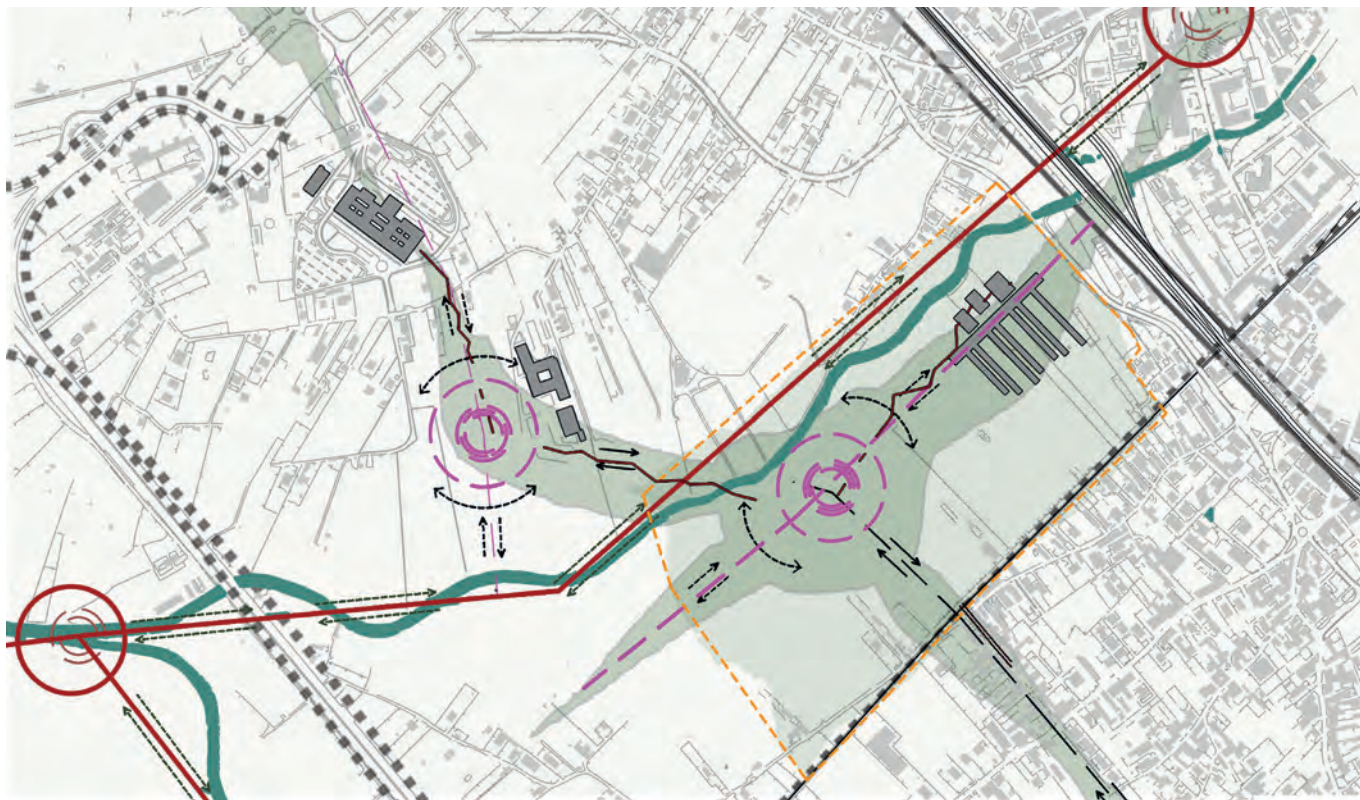
The architectural intervention consists in the addition of new grafts defined by the trace of the existing buildings, generating new axes that extend towards the river, flowing into it. The limit of the railway which currently acts as a barrier between the two spaces in question is solved by means of an underpass generated by the graft itself.

From a purely architectural point of view, the graft relating to the disused purifier was studied in depth. For the design of the external space the idea was to “hide” the second limit given by the expressway, strictly as if there were no road but this portion of space continued downwards and therefore towards the park below. This is made possible by tree-lined paths and green spaces which, through organic shapes, pass below the road which is located at a higher altitude. This intervention aims to reconnect parts of the city that are currently fragmented and divided by both natural and artificial barriers, starting and trying to reinterpret pre-existing buildings in a modern key.

VITTORIO MIGLIACCIO - THE SARNO RIVER PARK AS AGRICULTURAL SUSTAINABLE INNOVATION

IL PARCO DEL FIUME SARNO COME INNOVAZIONE AGRO-SOSTENIBILE

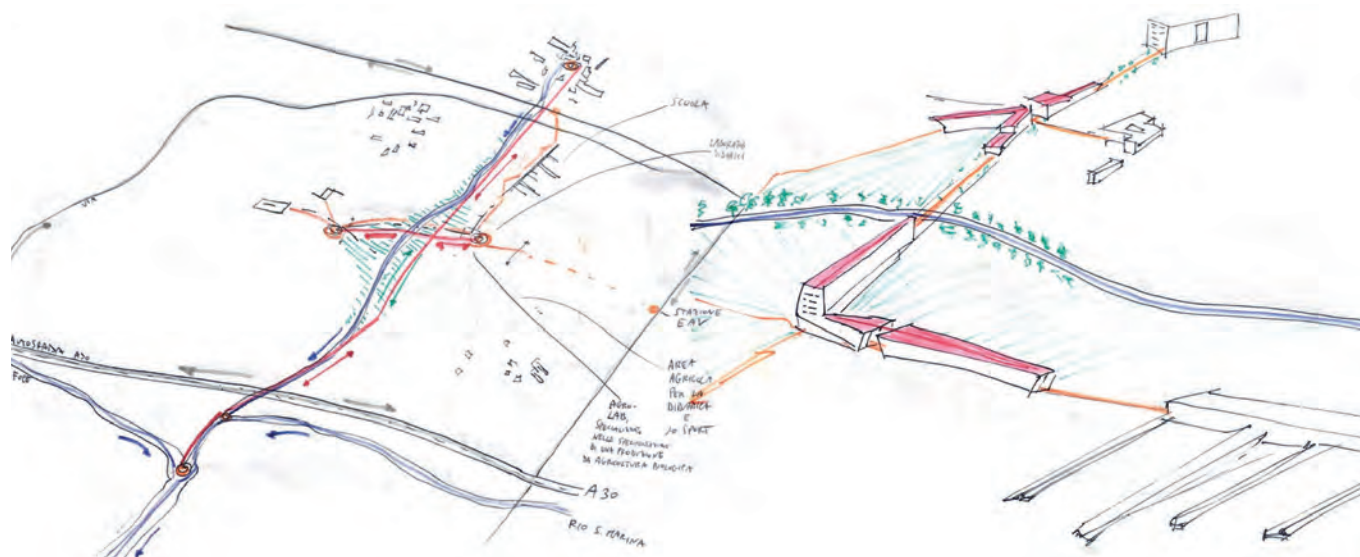




GENERAL STRATEGY

The general strategy of the project starts from the idea of reconnecting the city center with the peri-urban part to the south of the city, by creating a new centrality through the design of an agrolab center along the park Sarno river and its fields

234





235

URBAN & ARCHITECTURE FRAMEWORK

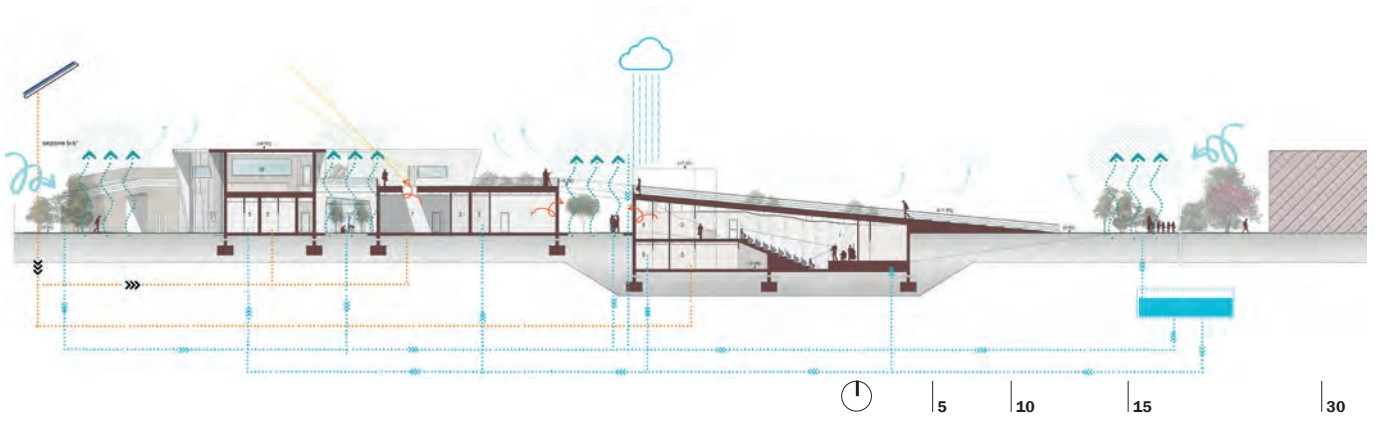
Program
urban park, agrolab, greenhouses,
laboratories, classrooms and auditorium

Covered area	1150 m ²
Outdoor area	6500m ²
Above-ground floors	2
Built volume	3500m ³
Estimated cost	€1.805.000.00

The project for this area which aims at enhancing the agricultural resources present in the Sarnese area by providing for the construction of a small complex of buildings held together by green paths that connect to the fields, the park, the existing buildings and those under construction such as the school campus. The complex can be defined as an agrolab, as the main function is linked to the dissemination of knowledge of the cultivation of the territory, its study and its conservation.

Laboratories, greenhouses, classrooms and a community space will constitute the reference elements. It is intended to encourage reception programs for foreign citizens, aimed at learning and/or improving knowledge of the Italian language, and to promote, at the same time, rural hospitality programs, nature excursions, promotion of local agri-food production, also on foreign markets. The creation of "educational gardens" located near the school city is also designed.



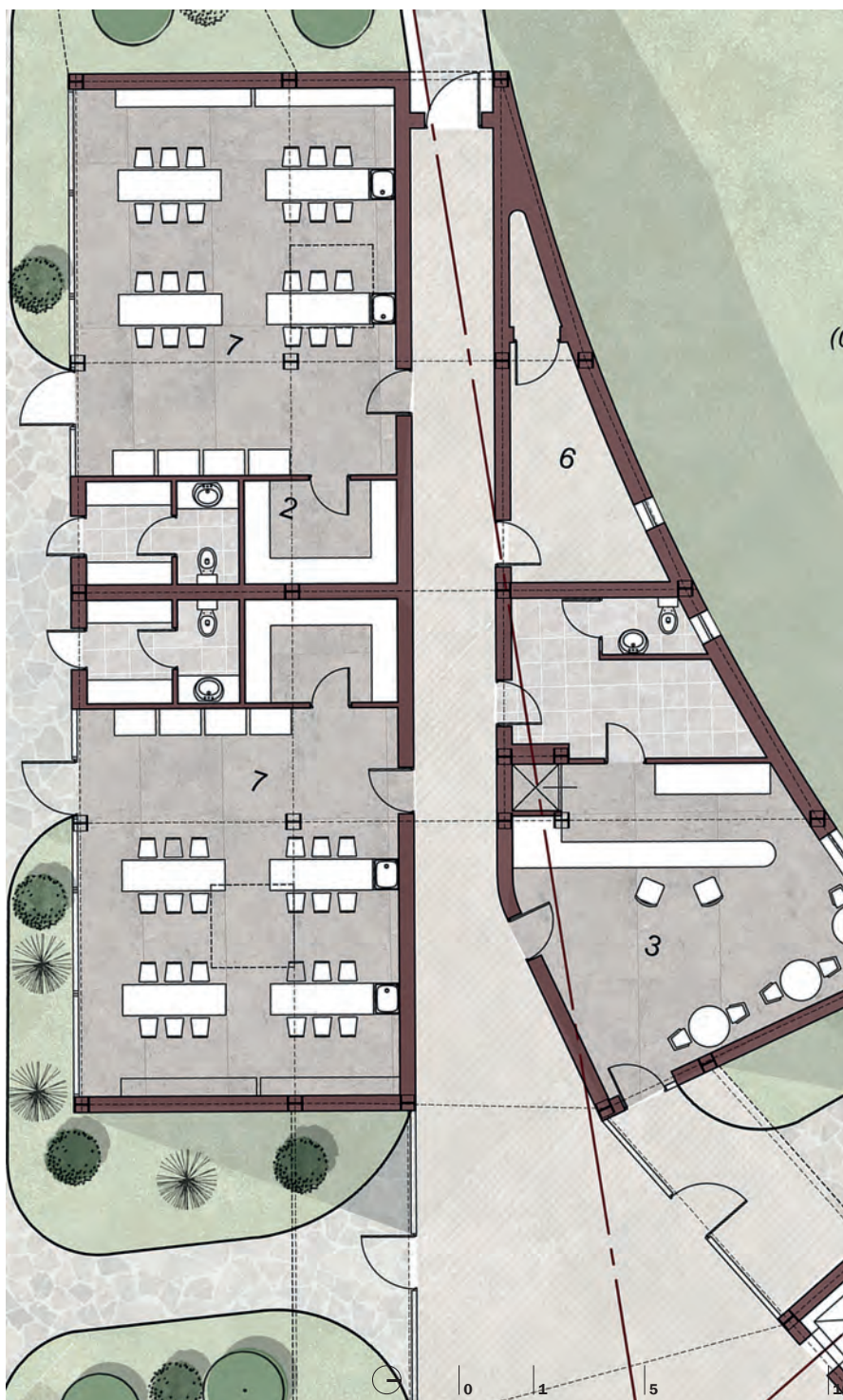


1. Auditorium
2. Storage
3. Café
4. Seeds "library"

5. Toilets
6. Technical room
7. Agriculture laboratories
8. Community vegetable gardens

9. School garden
10. Sports area
11. Farming garden
12. Forum

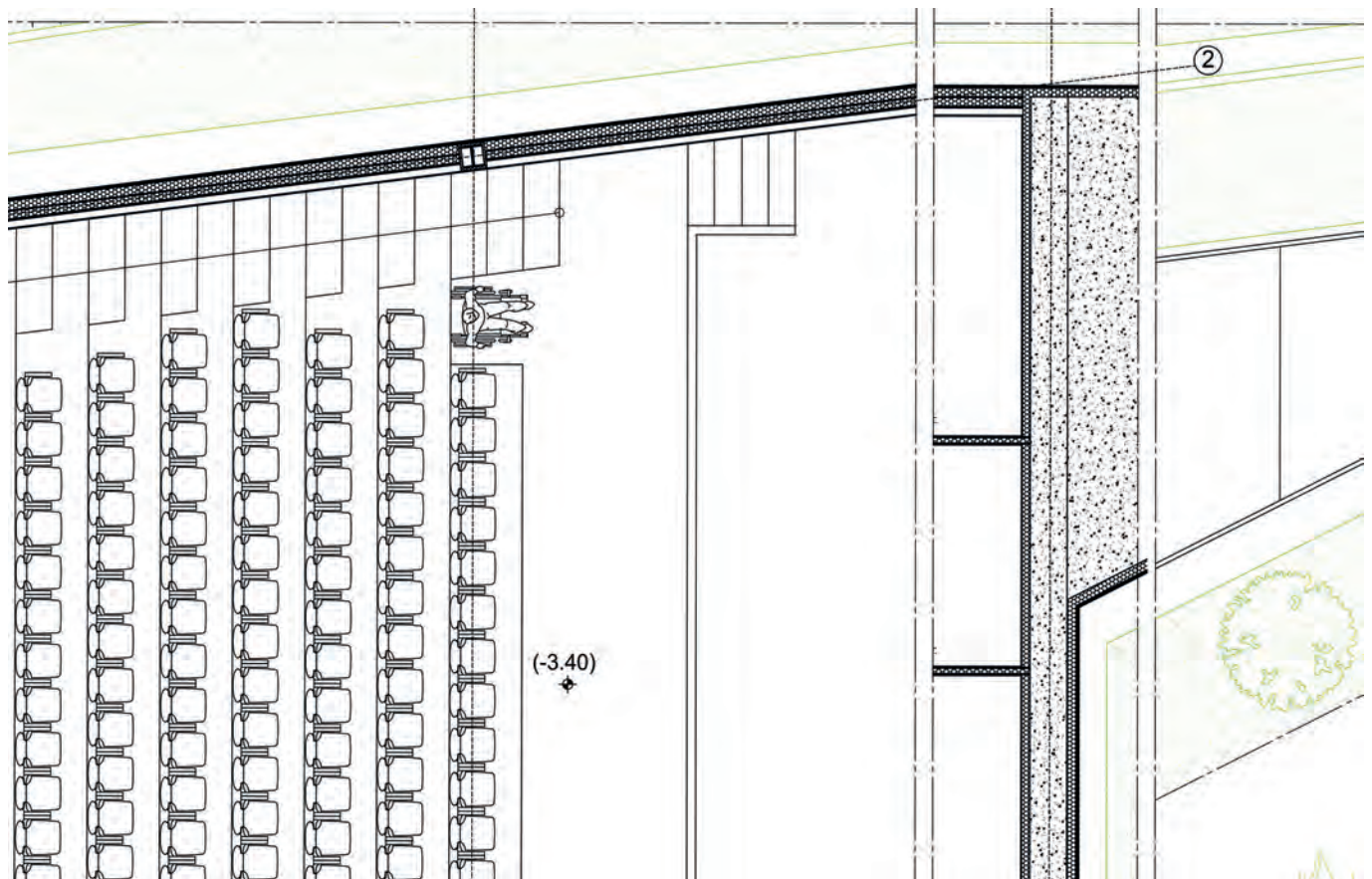
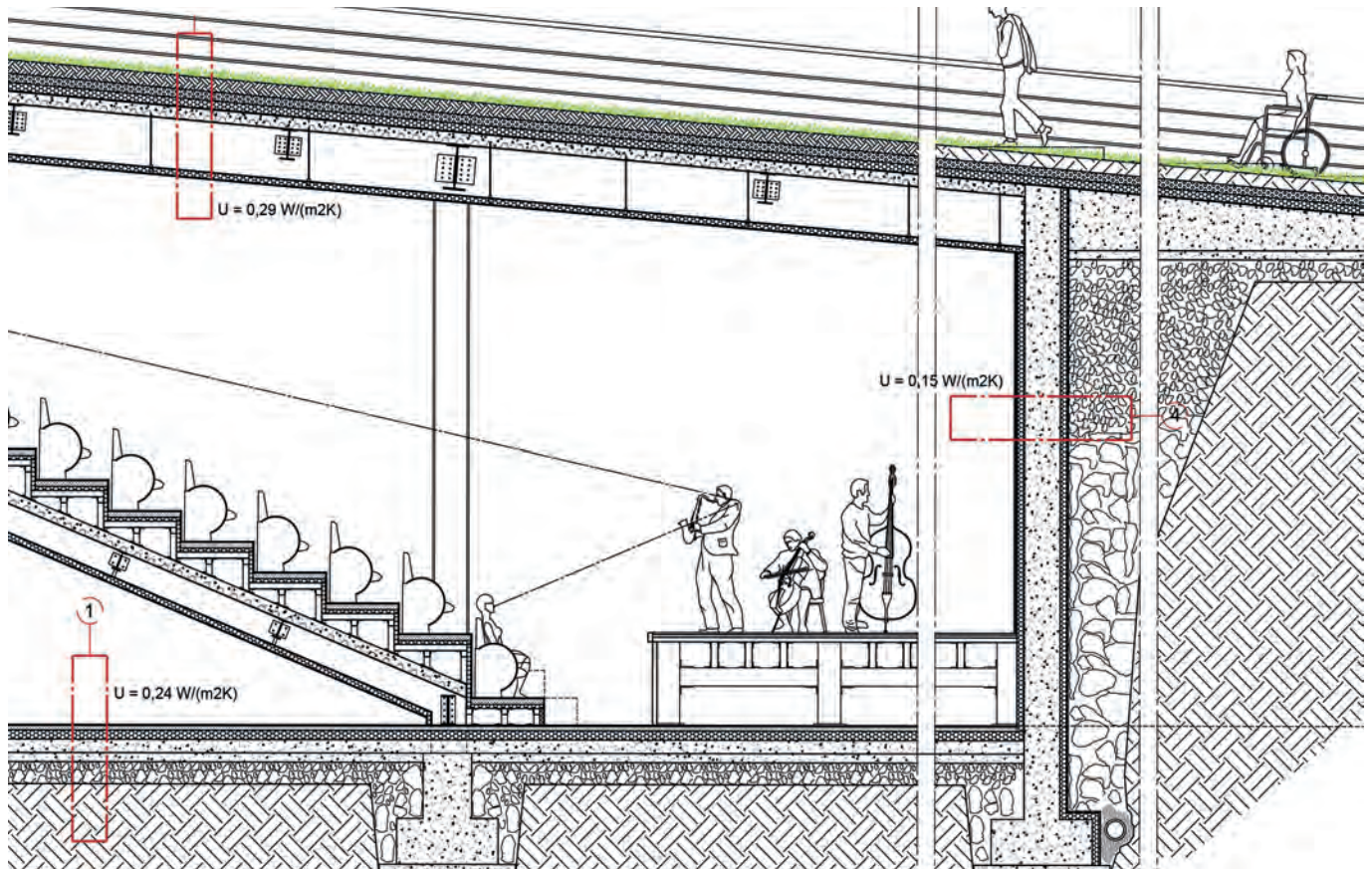
13. Offices



237







The project area is located on flat agricultural land, delimited by the Rio Palazzo, the provincial road and the railway. This context, marginal and isolated compared to the city, is addressed by emphasizing the identity of the project in an urban sense, through a careful articulation of autonomous but, at the same time, connected spaces.

For this area, the project aims to enhance the agricultural resources present in the Sarnese area by foreseeing the construction of a small complex of buildings held together by green paths that connect to the fields, the park, the existing buildings. The path of the river acts as a guide for the progress and development of the structures designed both for innovation in the technological-cultural field and in the agricultural-educational field. The centralities were identified starting from the existing structures in the area (hospital, LARS center and school center under construction) and then developing them along the city's river.

240

The project in particular concerns the creation of an educational AgroLab to support the park and the future school.

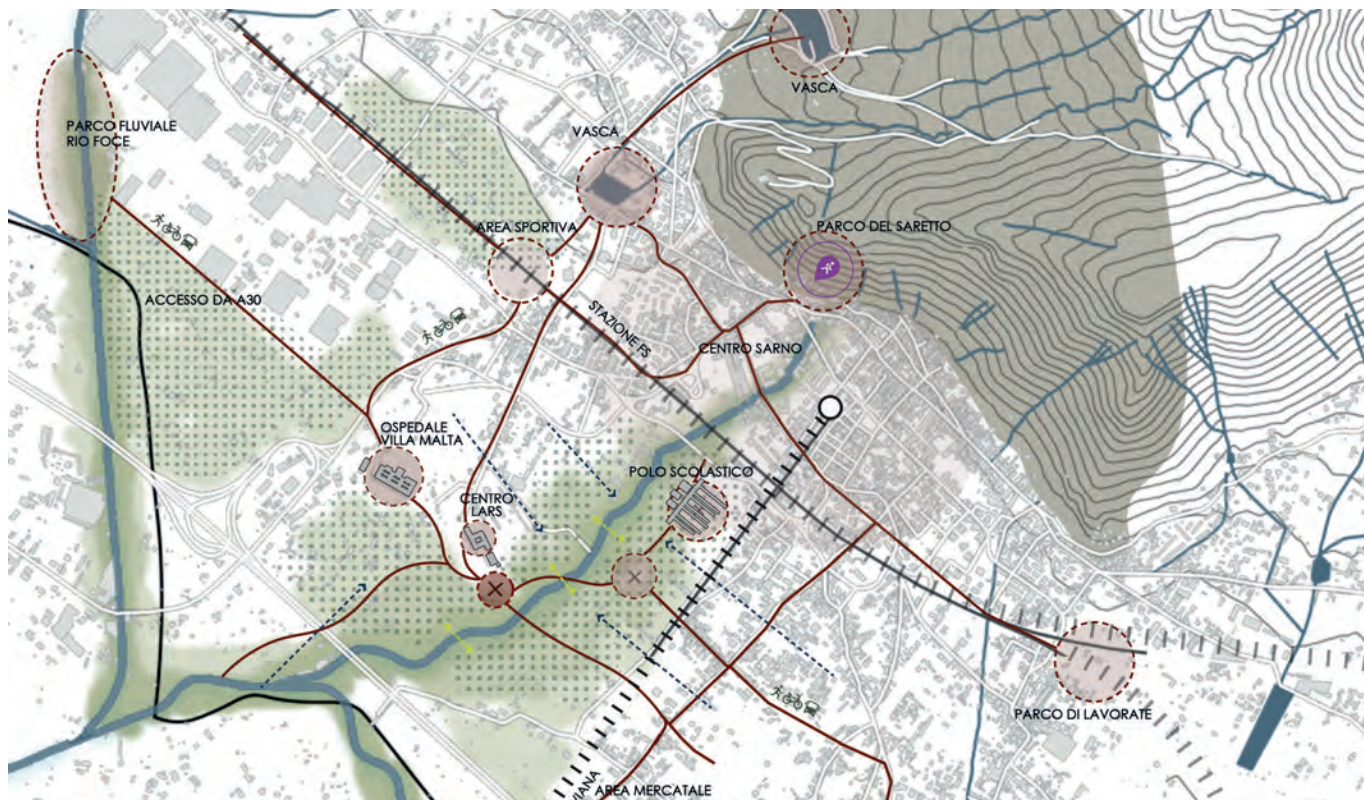
The AgroLab complex has as its main function the dissemination of knowledge of land cultivation, its study and preservation. It is visually structured in a symmetrical manner and above all follows the flow of the river. The complex includes: laboratories, greenhouses, classrooms and a forum space.

The main theme of the project is the reconnection of the fabric to promote: the restoration of new centralities to the open territory and agriculture in economic, productive, environmental, landscape, recreational, cultural and social terms; the reconnection of local ecological networks; the definition of settlement models based on the complementarity between city and rural territory.

GIUSEPPINA CACCAVALE - THE SARNO RIVER PARK AS INNOVATIVE CLUSTER

IL PARCO DEL FIUME SARNO COME CLUSTER D'INNOVAZIONE

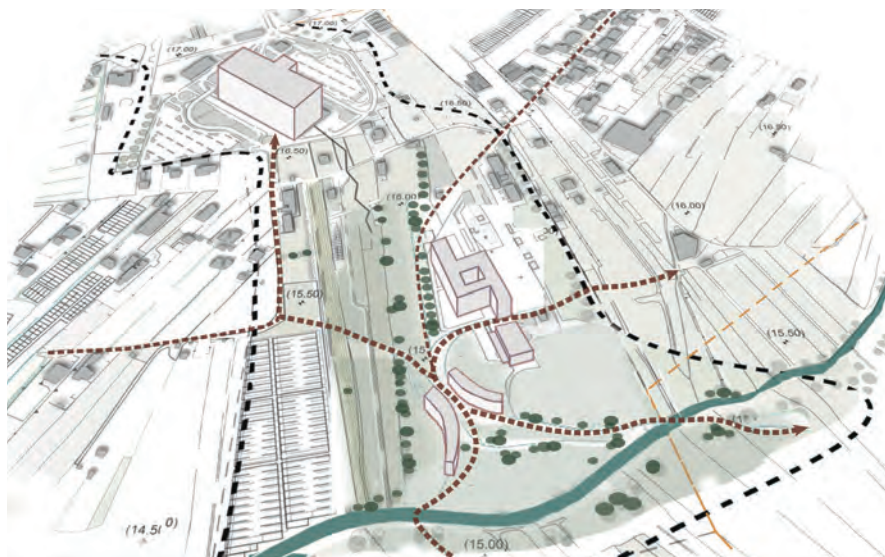
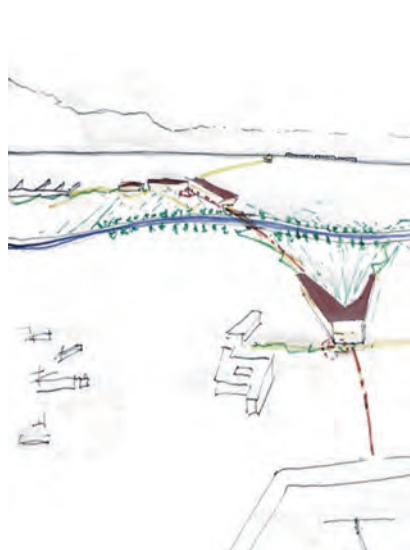




GENERAL STRATEGY

The general strategy of the project starts from the idea of mending the city center with the peri-urban part to the south of the city and at the same time give life to the innovation park planned along the river, made of centralities and new pedestrian-cycle paths.

242





URBAN & ARCHITECTURE FRAMEWORK

Program
sport facilities, urban park, guesthouse
technology, social and culture center

Covered area	950m ²
Outdoor area	3500m ²
Above-ground floors	2
Built volume	3000m ³
Estimated cost	1.305.000,00€

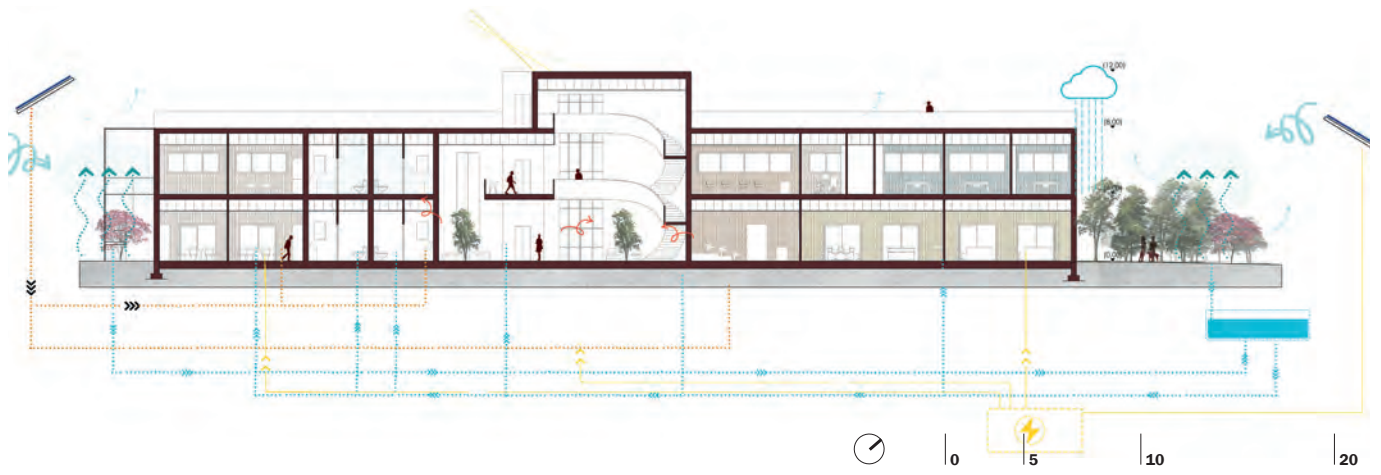
In this area the construction of two new buildings is planned, spatially and functionally linked to the two existing poles, the Hospital and Lars Center. In the same way they open towards the river, thus creating the conditions for starting to the park system planned for this part of the city.

As regards to the architecture, the buildings are characterized by an evident symmetry in shape and planimetric development but within such similar envelopes, internal solutions and development of spaces were created with different nuances that they

give each of them their own identity within a common vision. This was possible also for the different functions that are carried out inside. The first building aims to welcome people who frequent the park and nearby facilities with cafe functions and guesthouse.

The second offers a development, laboratory and joint work structure, playing the role of aggregator of innovative businesses, research teams, companies, universities that aim to develop the economic growth of the territory.



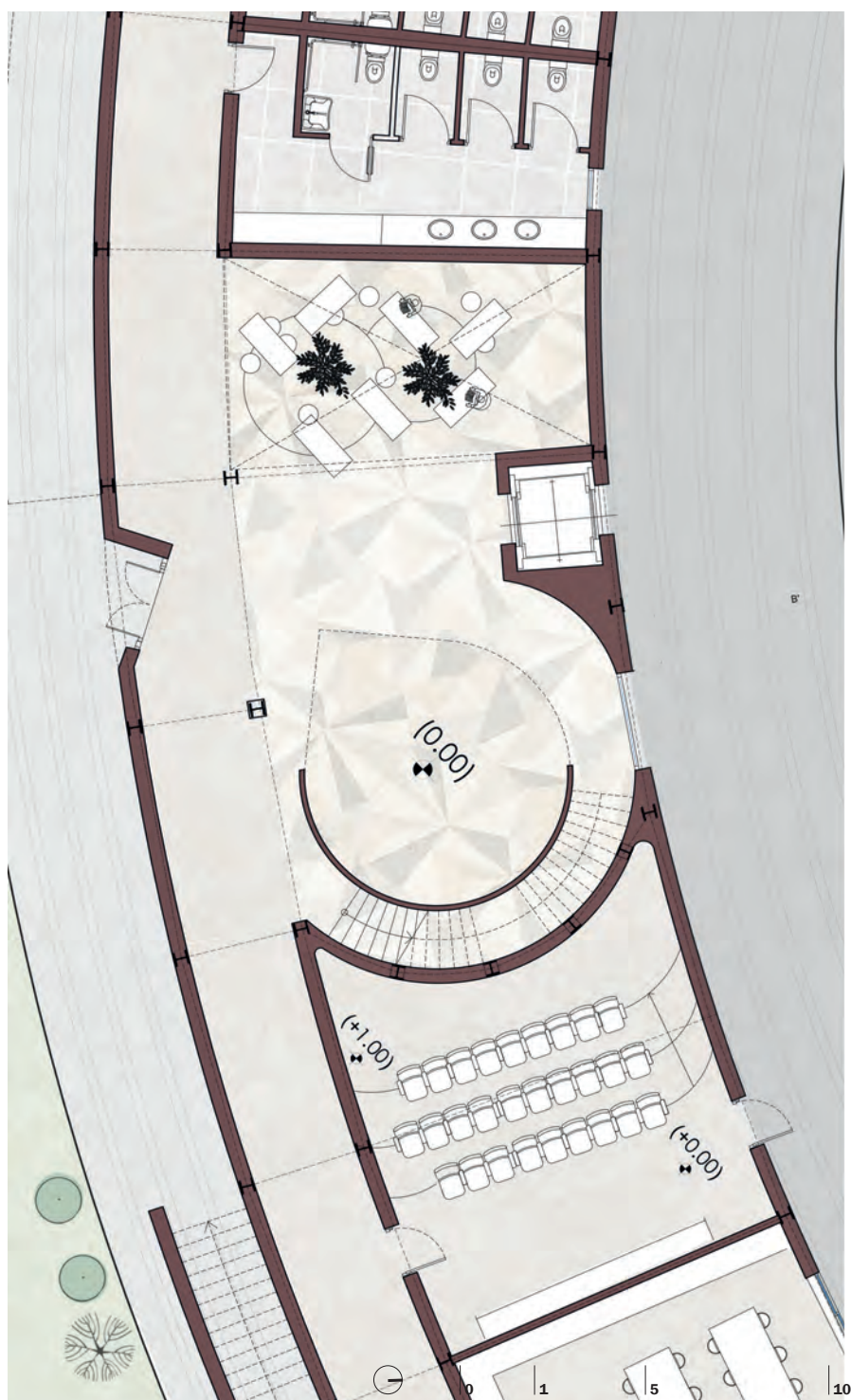


- 1. Entrance
- 2. Lobby
- 3. Guesthouse hall
- 4. Toilets

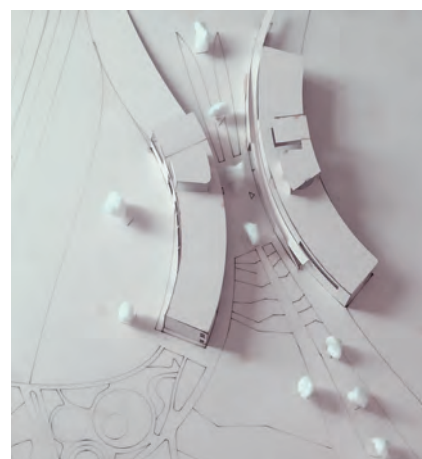
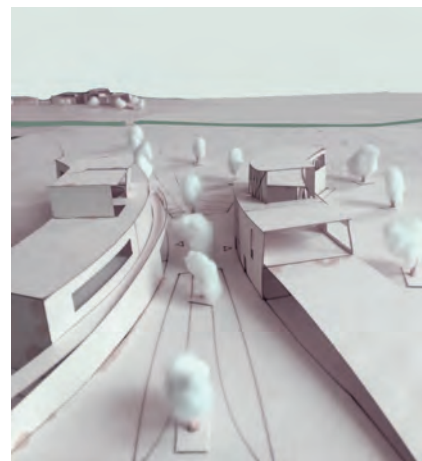
- 5. Café
- 6. Dining hall
- 7. Kitchen
- 8. Offices

- 9. Emergency stairs
- 10. Administration
- 11. Storage
- 12. Connections

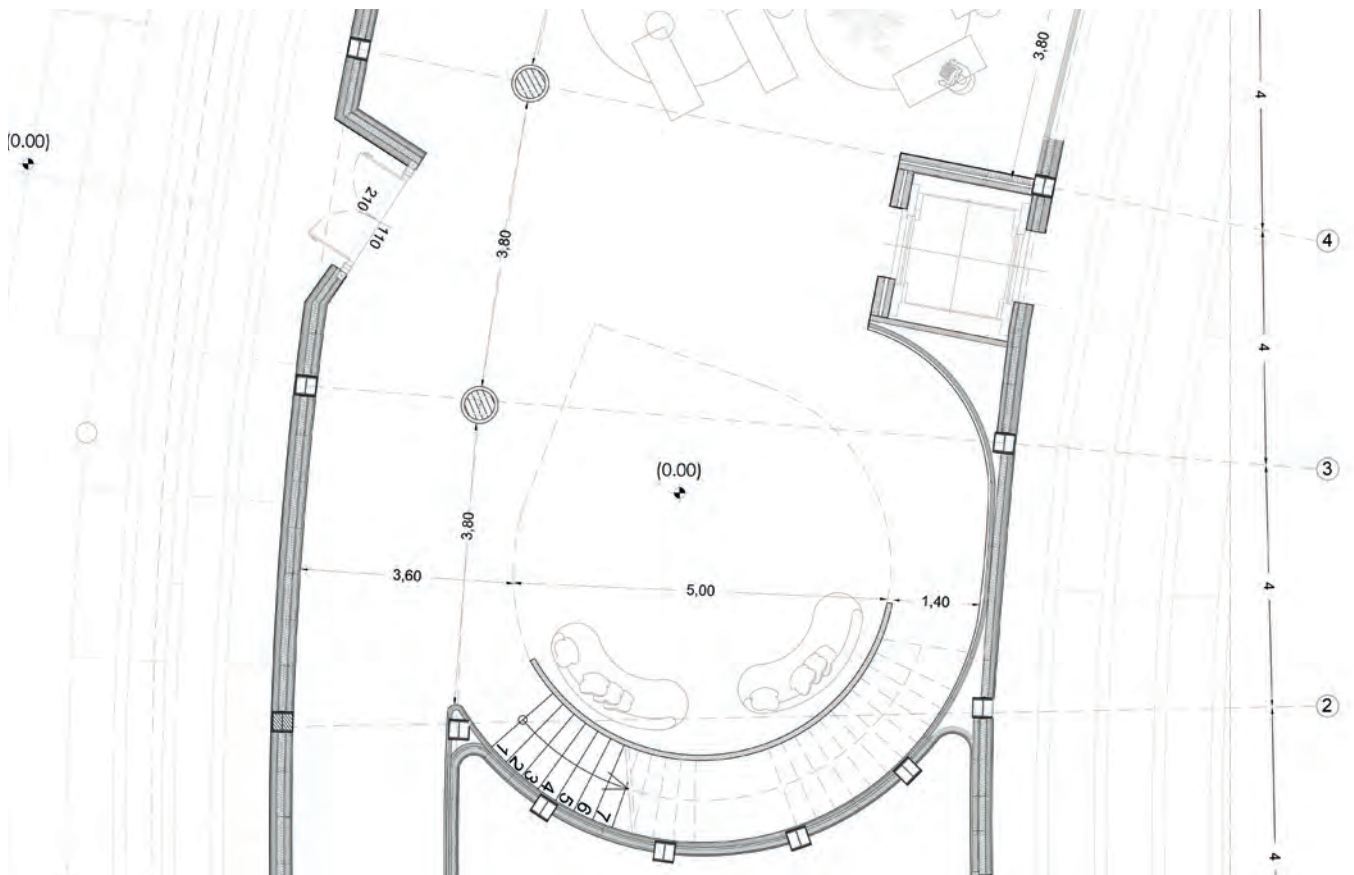
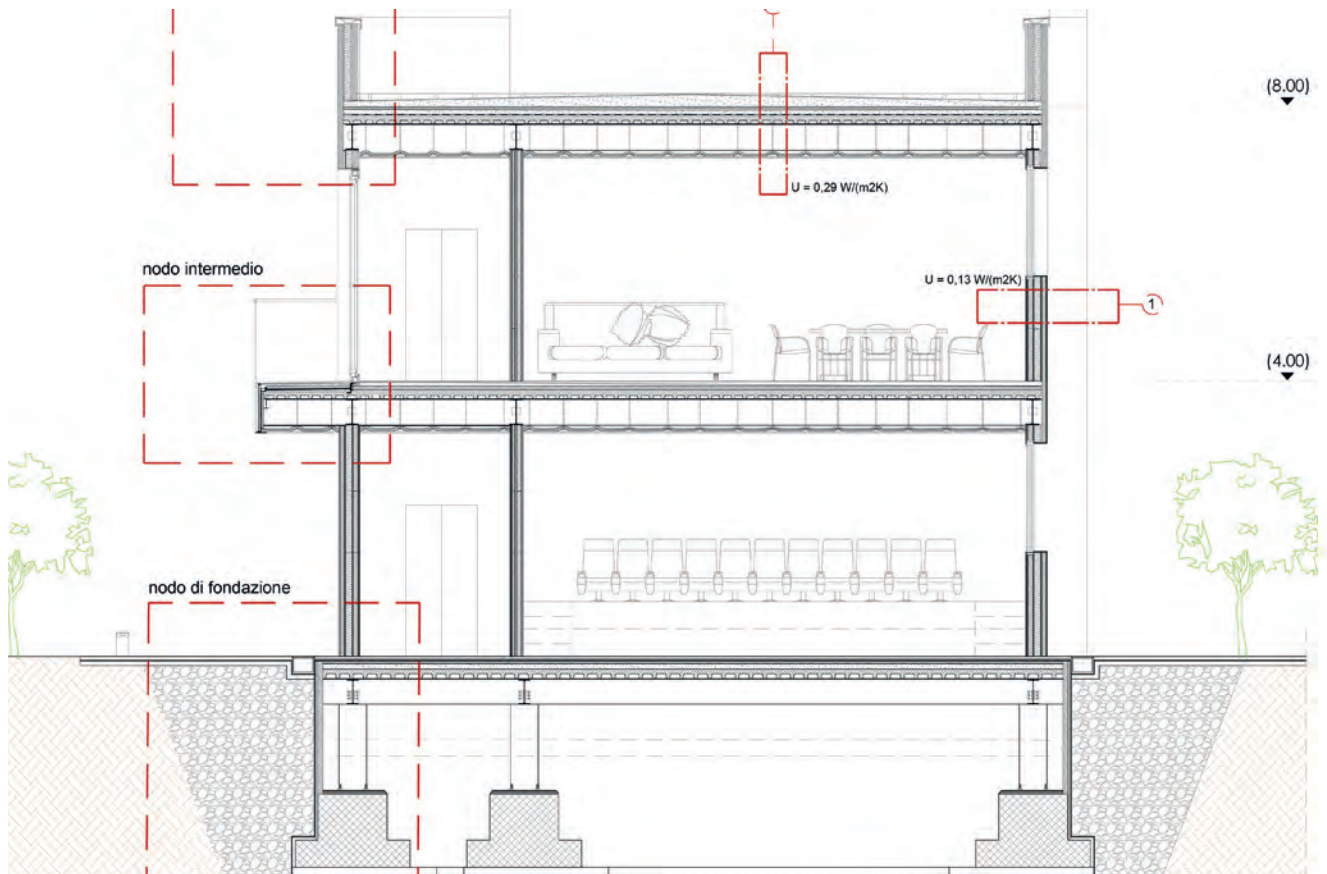
- 13. Meeting room
- 14. Multimedia hall
- 15. Co-working spaces
- 16. Ramp



245







The design work within the Municipality of Sarno examines the area south-east of the consolidated city center and falls within the boundaries of the future Park of Innovation envisaged by the city plan and specifically in the area between the new “Villa Malta” hospital, the Lars rehabilitation center and the Sarno river.

In this area, the construction of two new buildings is planned which will connect spatially and functionally to the Hospital and Lars Centre. In the same way they open towards the river, thus creating the conditions for starting the park system.

The project was conceived as a large open area that would act as a buffer between the disconnected zones in the same space.

The design action aims to guarantee an almost entirely permeable and self-sufficient area.

Another fundamental theme of the project is the reconnection of the fabric to promote: restitution of new centralities to the open territory and to agriculture.

248 As regards the architecture of the two structures, solutions have been created within similar internal envelopes and the development of spaces with different nuances which give each of them their identity within a common vision. This was also possible thanks to the different functions that are carried out. The first building is the westernmost one and is intended to welcome visitors to the park and nearby structures with functions as a cafe and guesthouse.

The second offers a structure for laboratory and joint work, playing the role of aggregator of innovative companies, research groups, universities that aim to develop the economic growth of the territory by placing it as a point from which to start innovation.

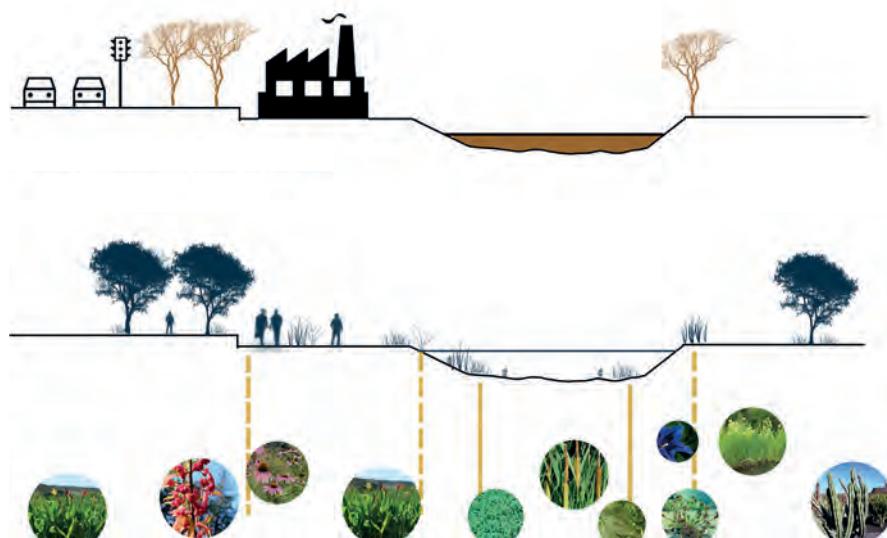
VINCENZO ROMANO - WATER CULTURE. THE AFFRONTATA AREA
CULTURA D'ACQUA. L'AREA DELL'AFFRONTATA





GENERAL STRATEGY

In the project area, the removal of industries and deposits clears a margin strip, where it is possible to design continuous wet and marshy surfaces. These by mixing with appropriate areas of semi-permeable and permeable soil give the possibility of repopulation of biodiversity.





URBAN & ARCHITECTURE FRAMEWORK

Program urban park, recreational areas

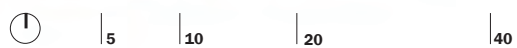
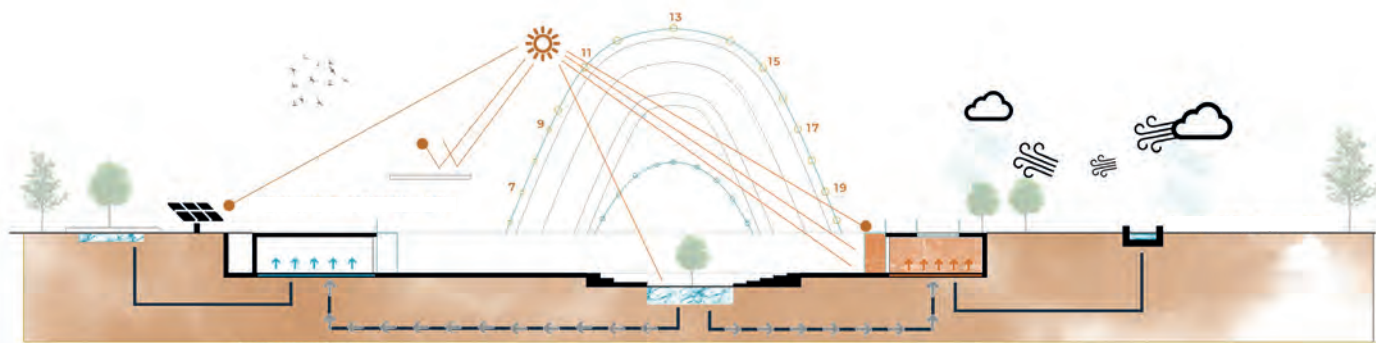
Covered area	76793m ²
Outdoor area	75132m ²
Above-ground floors	1
Built volume	4680m ³
Estimated cost	6.000.000€

One of the reasons for designing the park was given during the first survey along the riverbank. Today the buffer strips are reduced for use as residual storage by local industries, which have been the primary cause of reduced water flow since the 18th century.

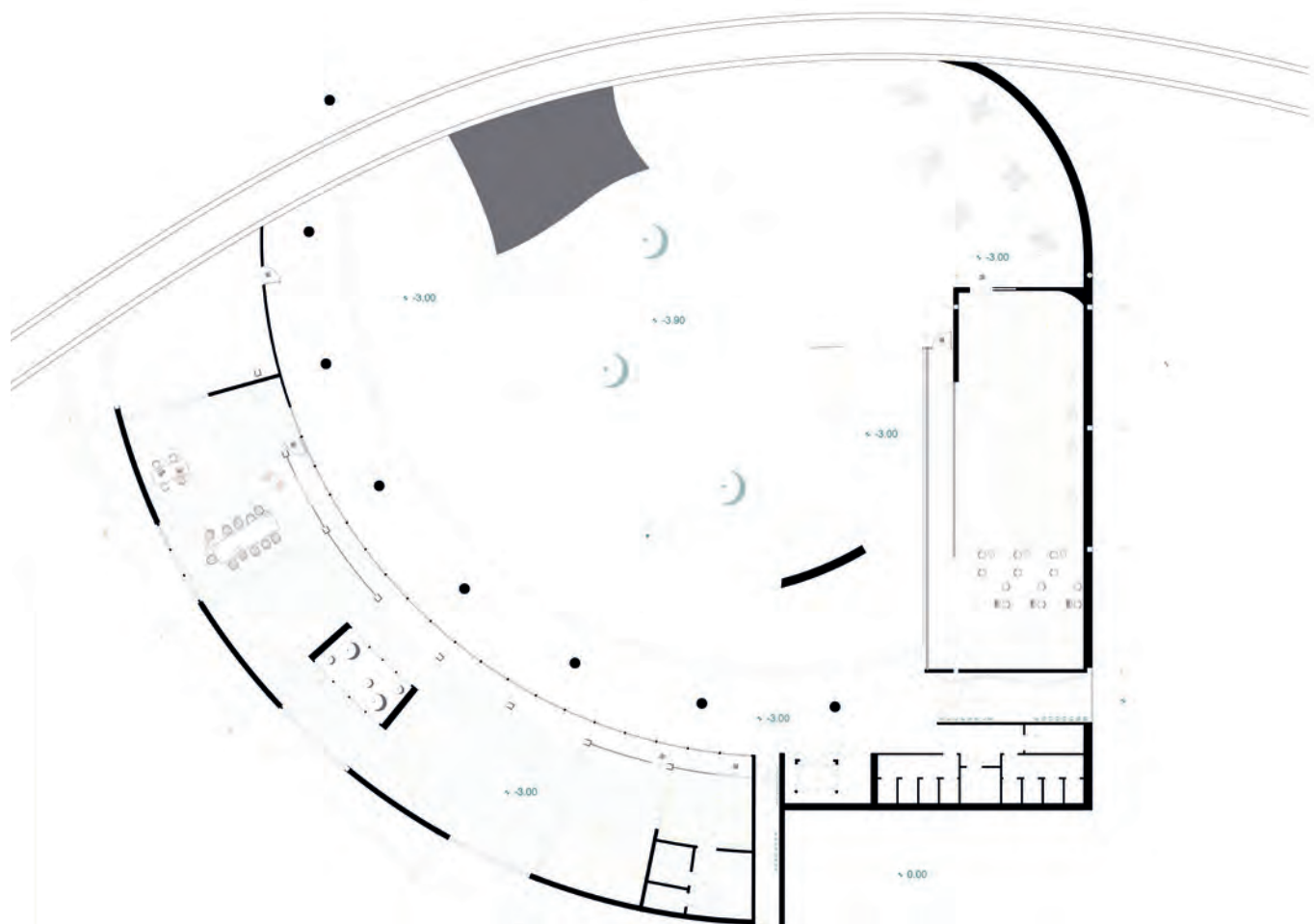
The two main elements of the park become a walkway and the underground plaza. This reaches an elevation of four meters below the level of the park and houses on either side three educational classrooms for the study and reuse of river water. The walkway intersects an artificial canal in the center of the plaza intended for the

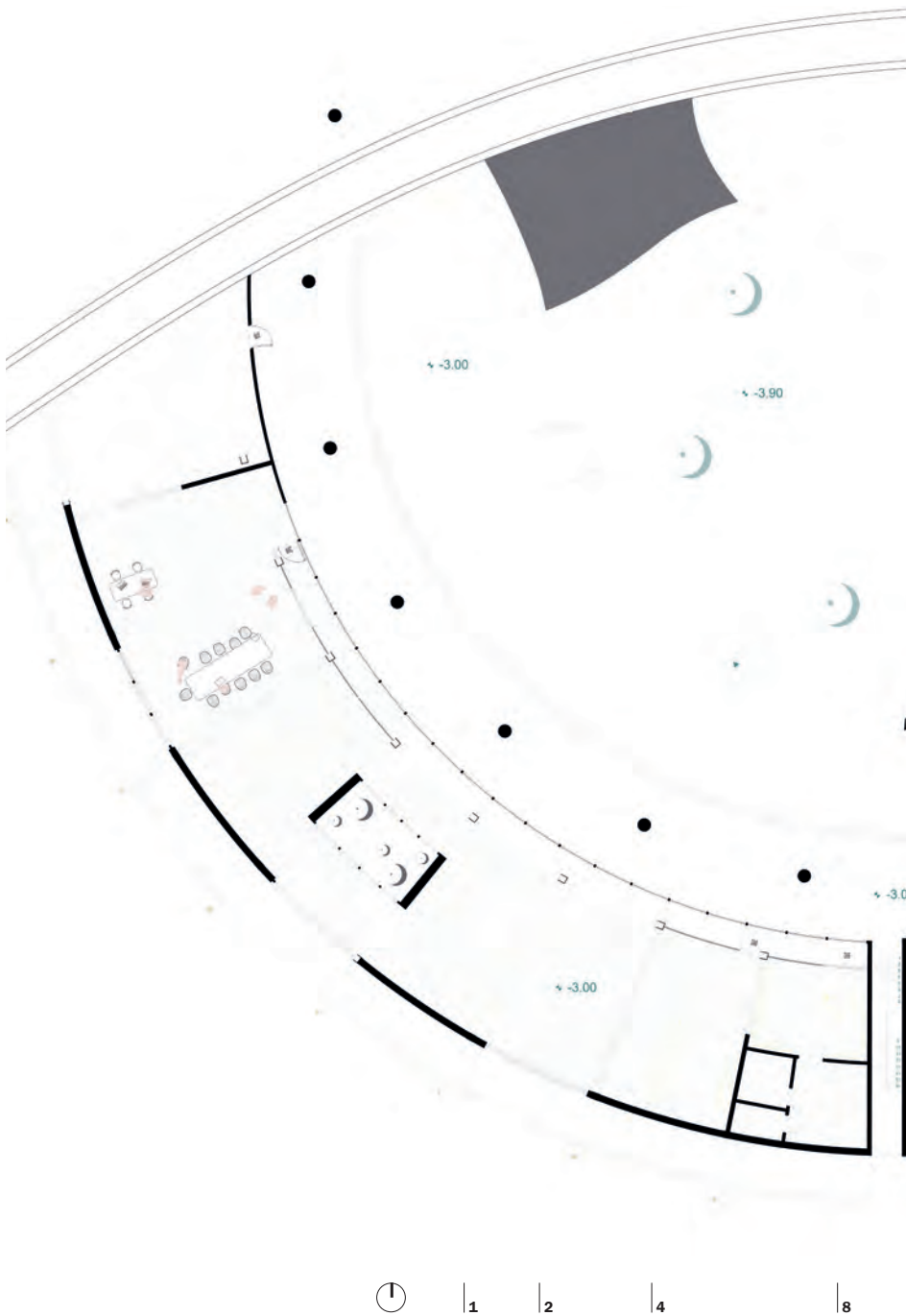
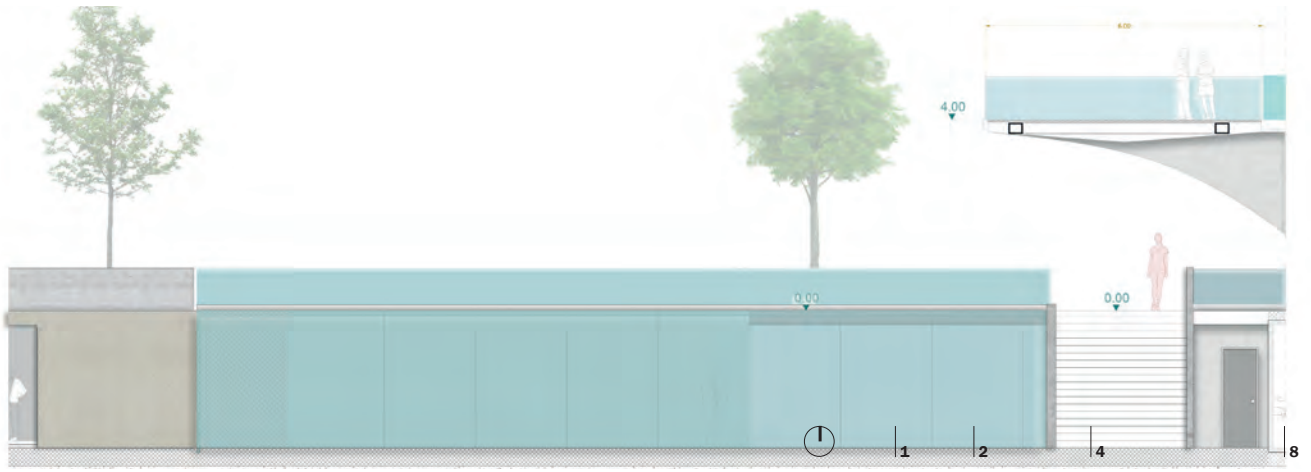
purification and filtering of river water. The canal flows into a holding tank that serves as a watersquare, from which water channels branch off to define the boundary of the plaza. The classrooms are bordered by photovoltaic windows that connect the interiors with the plaza and the walkway above. Along the walkway from the lowest elevation, one can observe the relationship between the river and the new man-made canal, a relationship that reaches the apex of the overall dialectical interaction at the highest point of the walkway, from which one can observe the underground plaza and the surrounding landscape.





252





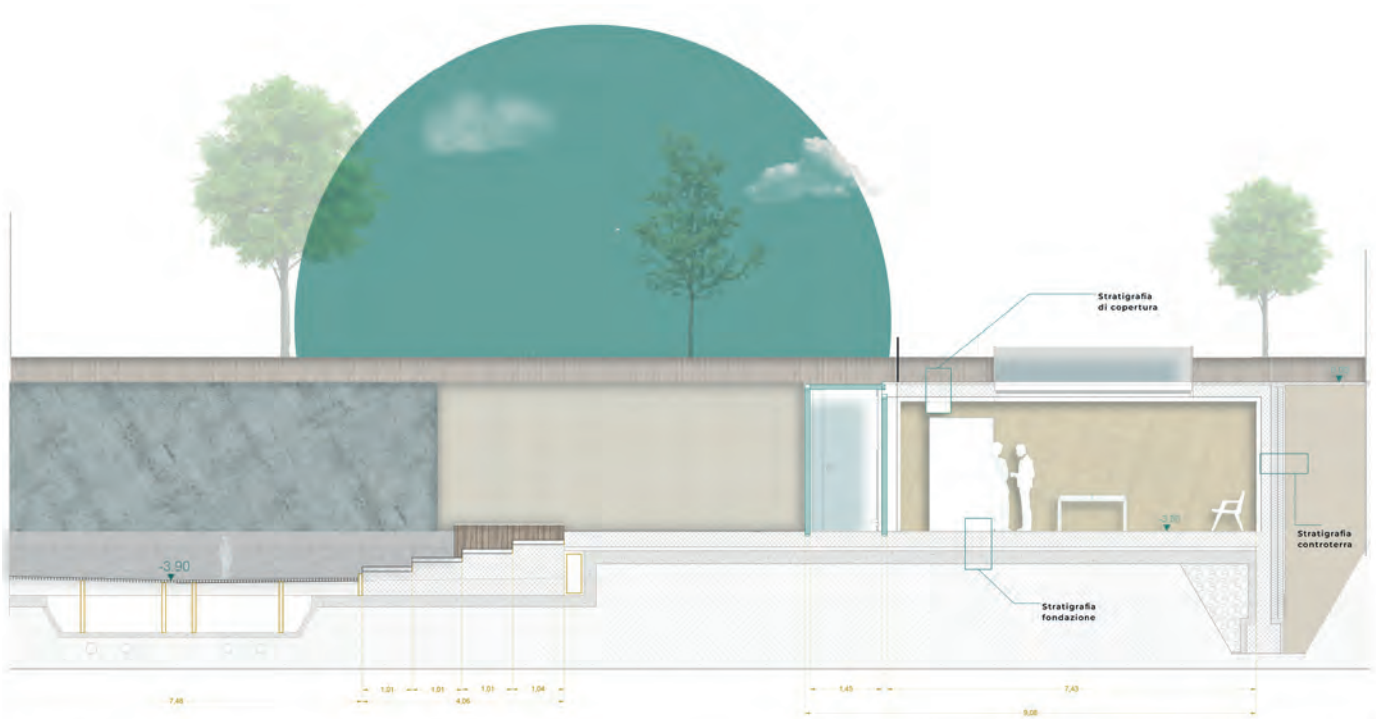
253



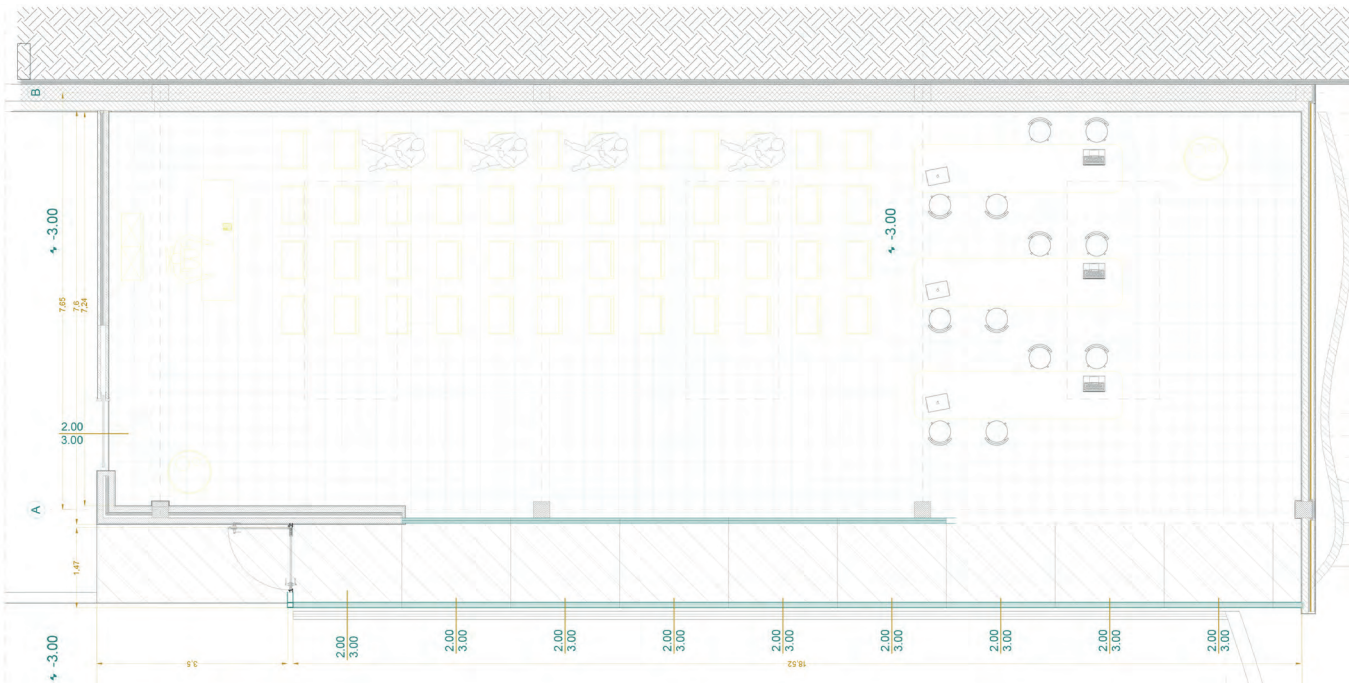


254





255



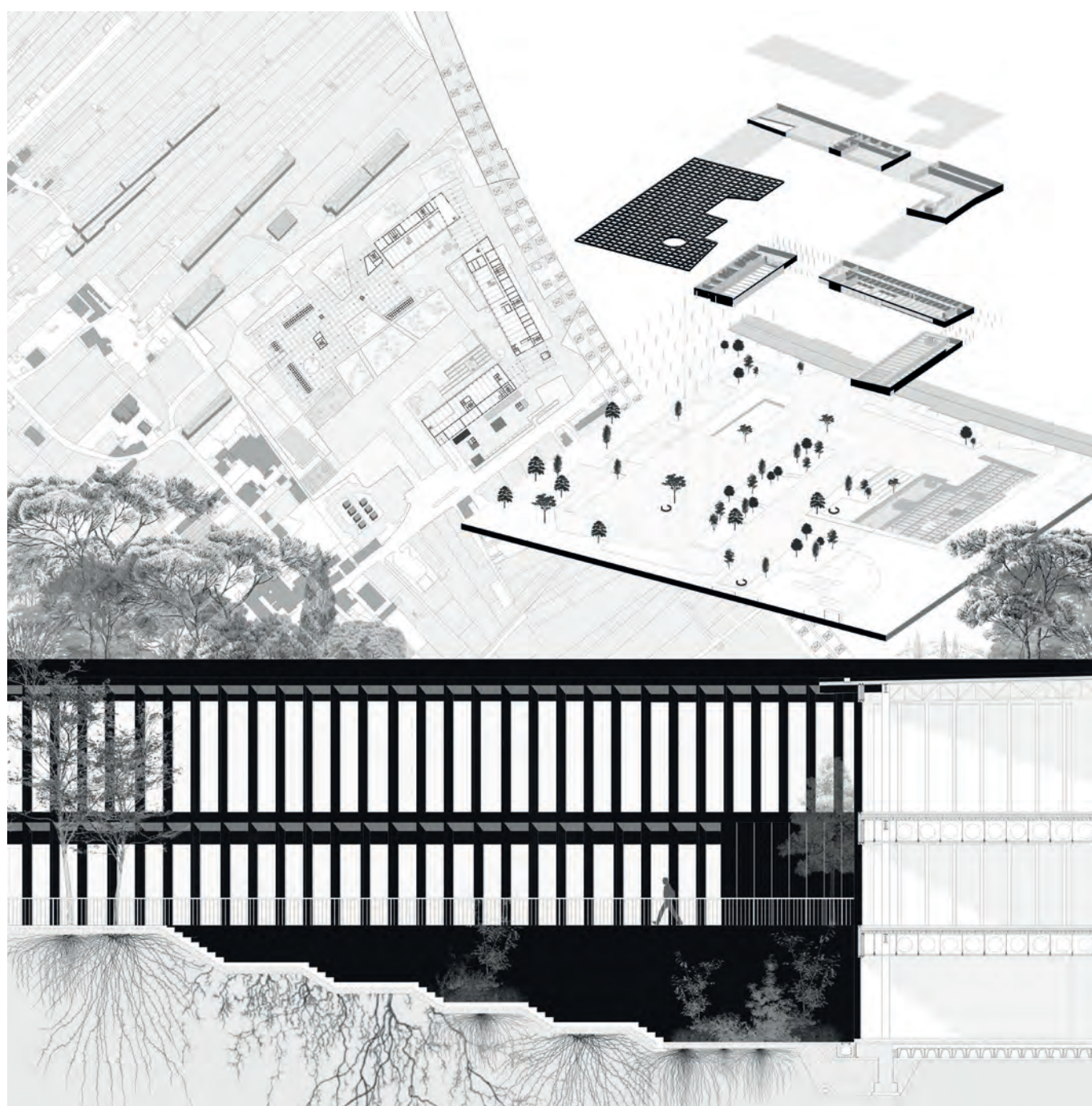
The design of the park intended for water reclamation in the Nocerino-Sarnese valley is located at the intersection of the three Sarno river's tributaries, Rio Foce, Rio Palazzo, Rio Santa Marina.

The two main elements of the park are a footbridge created from the earthworks needed to create the other element, the underground plaza. Walking along the footbridge from the lowest elevation, one can observe the relationship between the river and the new artificial canal, a relationship that reaches the apex of overall dialectical interaction at the highest point of the footbridge, from which one can observe the underground plaza and the surrounding landscape.

The riverfront dialogues with the landscape and becomes an integral part of the square, where the relationship between the new and the historic landscape takes on the role of local community identity.

EMANUEL LONGOBARDI - PERIURBAN LINE. FOOD RESEARCH HUB IN THE MARKET PUBLIC AREA

LINEA PERIURBANA. POLO DI RICERCA ALIMENTARE NELL'AREA DEL MERCATO PUBBLICO

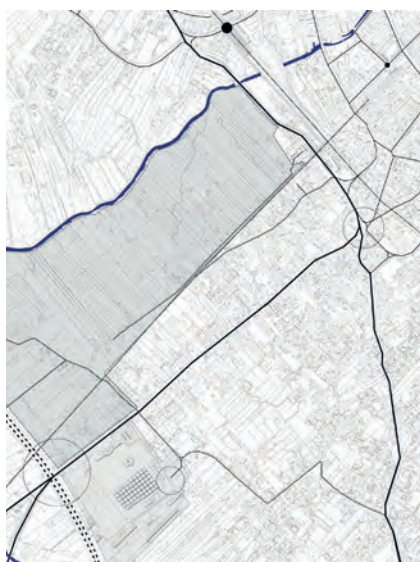




GENERAL STRATEGY

The general strategy aims to define an edge line capable of communicating with the different elements surrounding the project area. The objective is to reconnect the market area to the adjacent innovation park by enhancing the system of agricultural fields that surround the site.

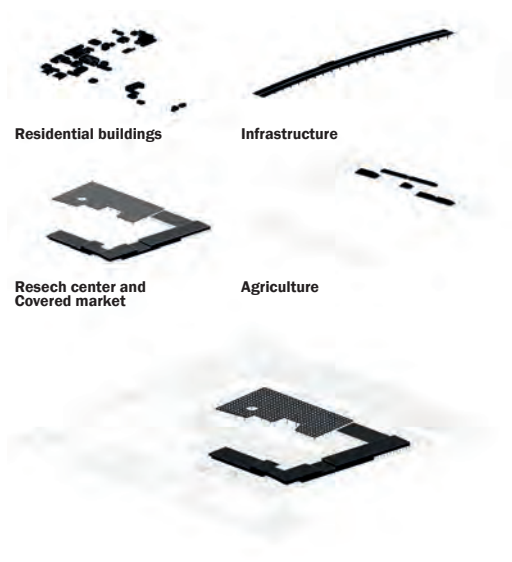
258



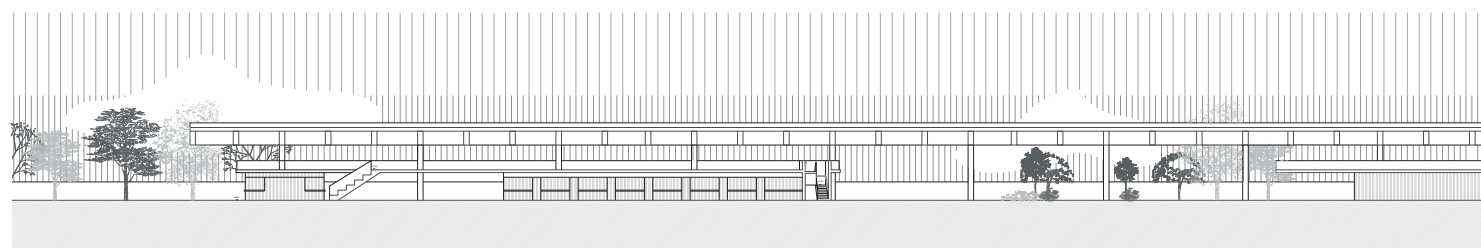
General analysis



Permeability



Relations





0 10 50 100

259

URBAN & ARCHITECTURE FRAMEWORK

Program

Covered market, research hub,
exhibition area, social and culture center

Covered area **21856m²**

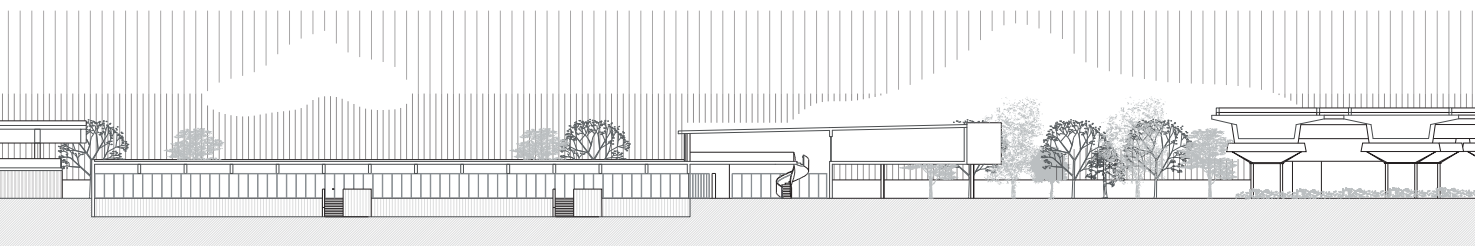
Outdoor area **54035m²**

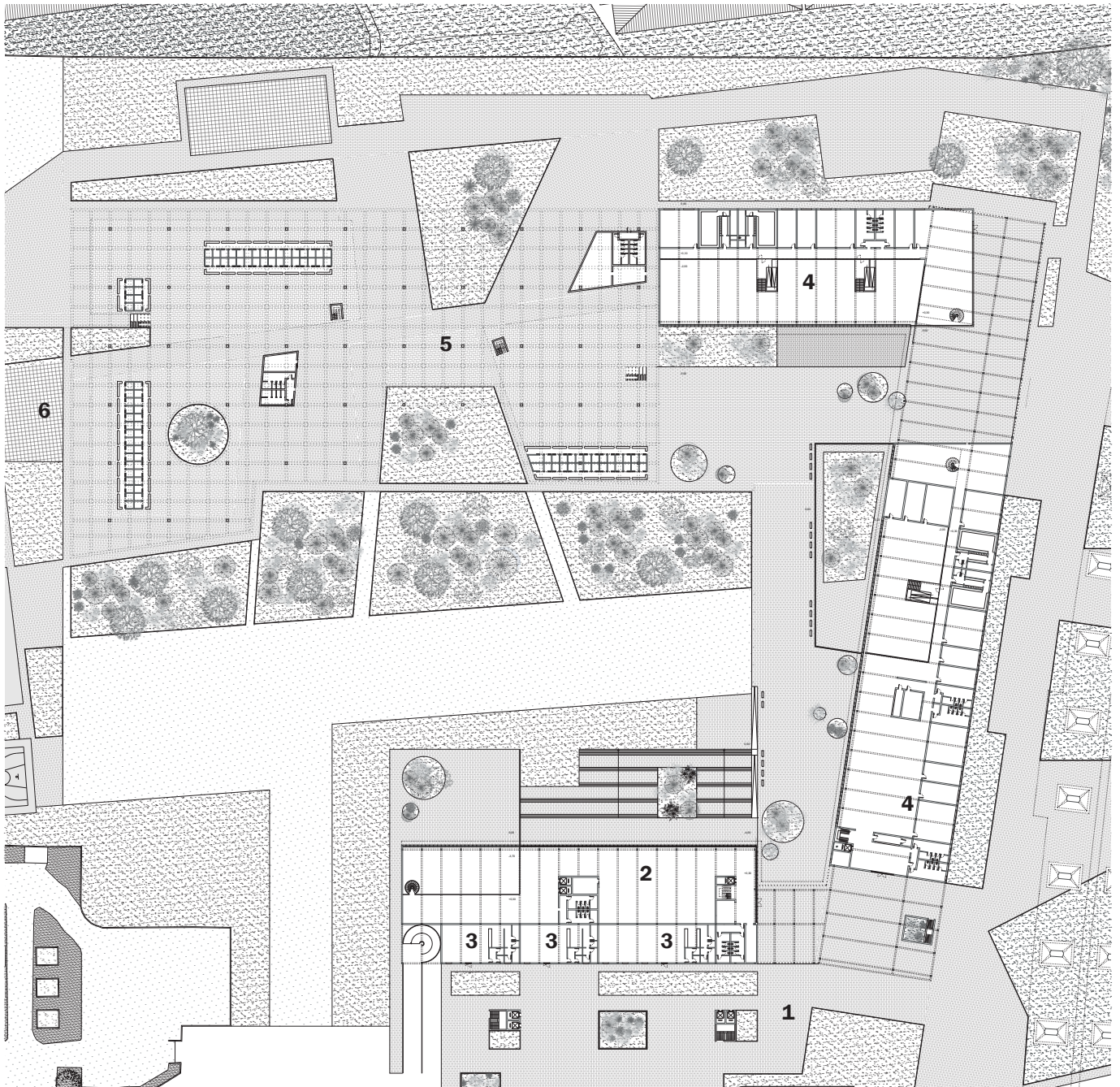
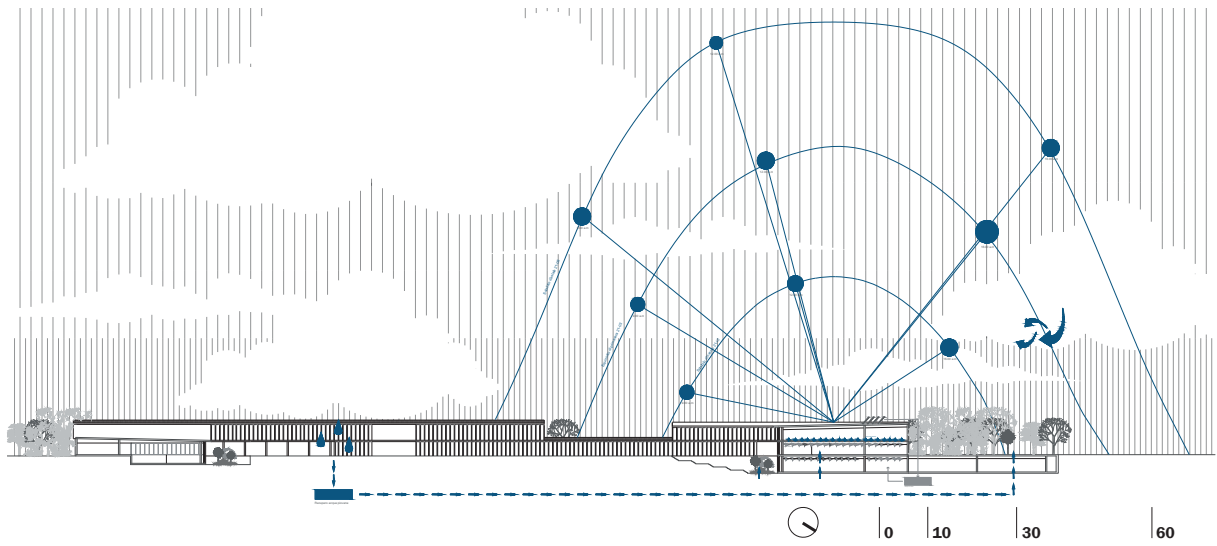
Above-ground floors **2**

Built volume **112354m³**

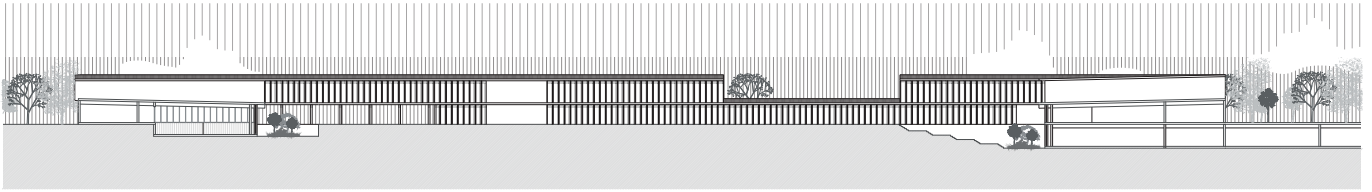
The current configuration of the project site sees the presence of a covered market for retail sales characterized by the presence of crumbling concrete structures and a large courtyard aimed at hosting the local market. The site is located south-east of the territory of the municipality of Sarno, representing one of the main accesses to the city, divided from the surrounding territory by motorway bridges that define a well-defined border line. Among the main project objectives there is therefore the need to redesign a new urban front that enhances this access to the city. The project intervention also aims to establish new relationships between the innovation

park, the agricultural field system and the covered market. The architectural intervention consists of the construction of one building located along the edge of the area capable of communicating with the surrounding space and absorbing its layouts, and a final structure which includes the new roof for the covered market. Through subtractions, the buildings define multiple accesses, defining the area as completely permeable. The design of the external spaces in turn tends to underline the accesses and make the edge of the site less defined, sometimes trying to blend in with the surrounding space and extend towards it.





- 1. Public space
- 2. Exhibition
- 3. Retail
- 4. Food research and quality center
- 5. Market
- 6. Playground



0

10

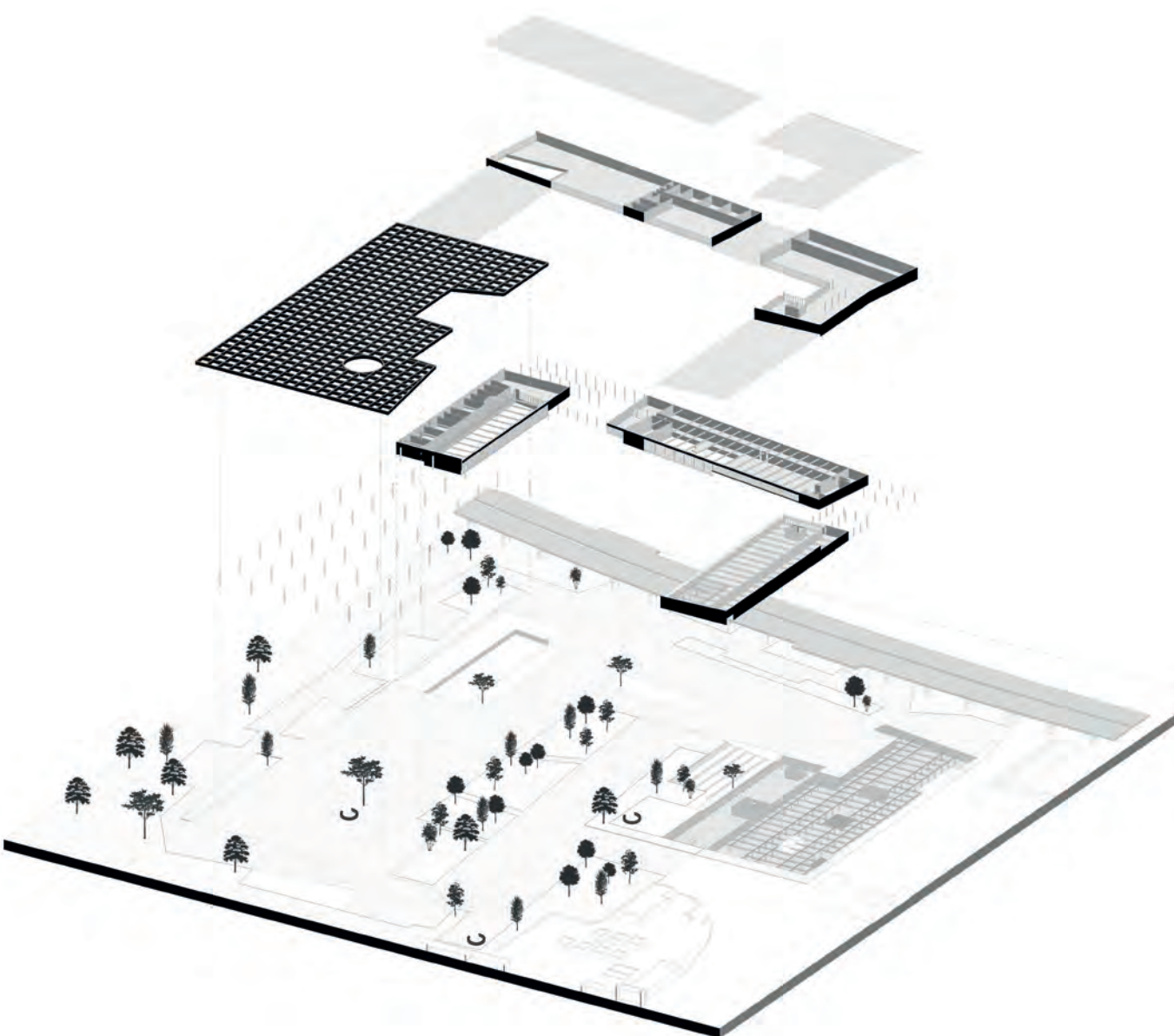
30

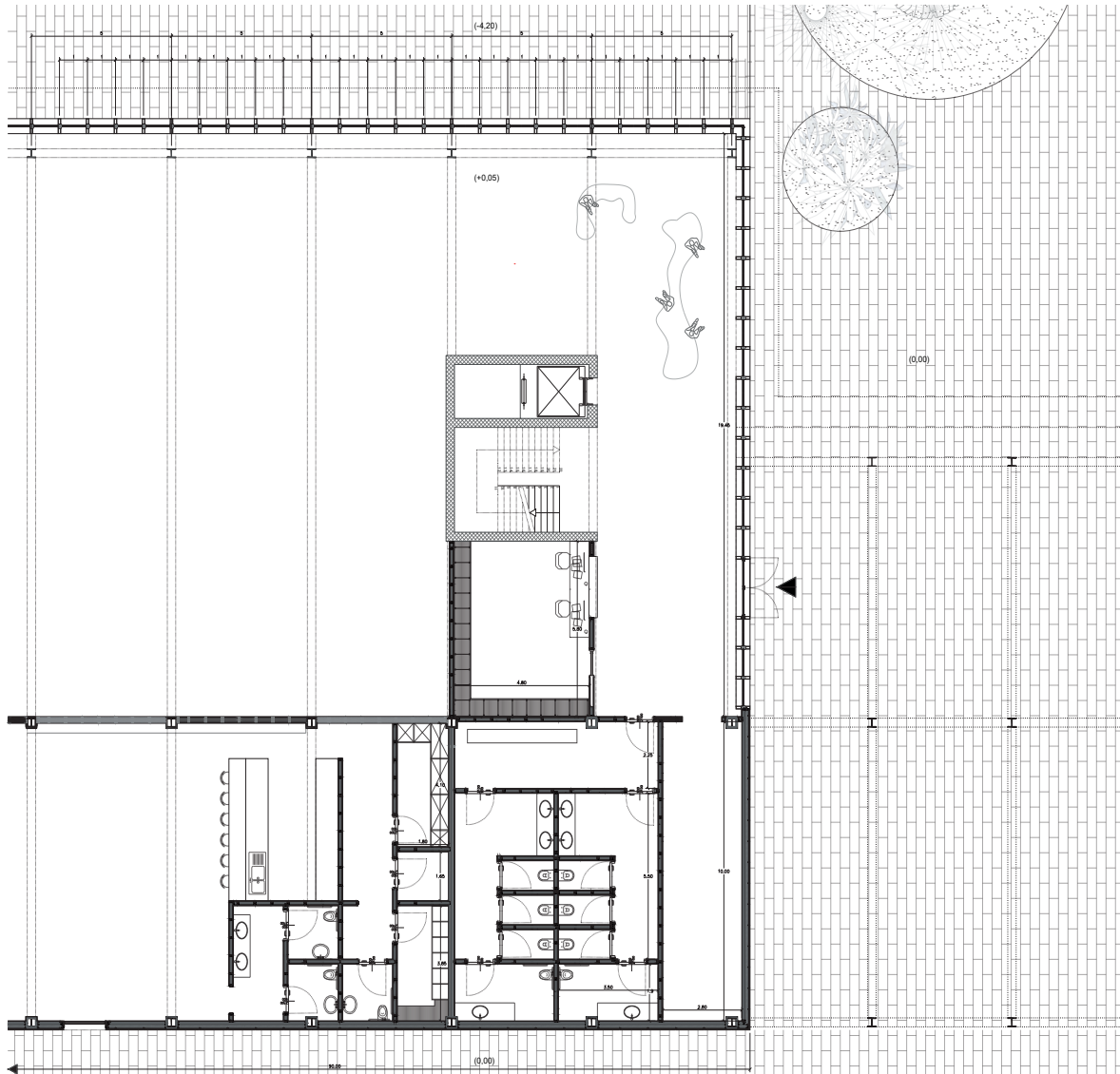
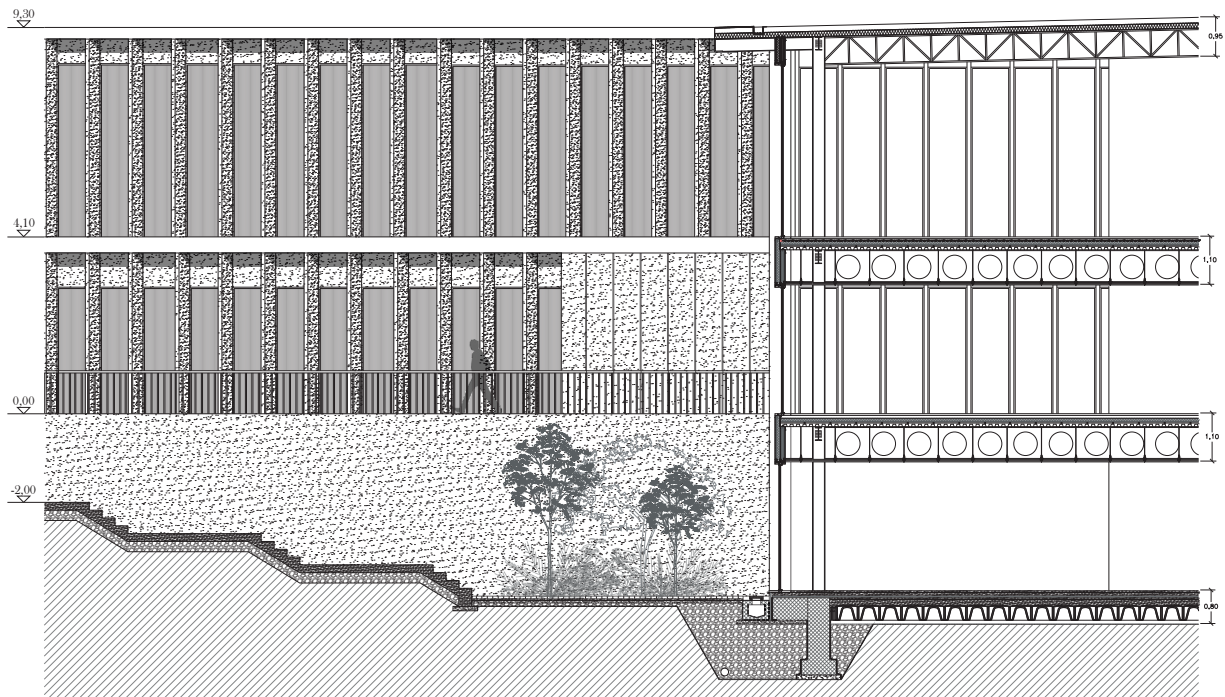
60



261







The architecture is composed through a single building which, articulated in the free space, contains multiple functions. The plan is based on a rule both from the point of view of shape and from the construction point of view. On the external sides of the building there are service areas such as offices, warehouses, meeting rooms and services highlighted on the outside with compact surfaces and regular openings. The main rooms are located on the internal sides of the building, such as exhibition rooms and food control laboratories. If the external front is compact and with few well-defined openings, the internal fronts overlooking the courtyard have large modular windows, revealing the presence of the large laboratory spaces on the outside and showing the life and processes within it. The plan of the covered market, on the other hand, is conceived as an open space, completely usable, where the multiplicity of routes determines both the accesses and points of conviviality between the various sales areas. The architecture of the market is characterized by a large skeleton made up of pillars and a large roof, which is the element of greatest expressive value of the project.

**MARIKA DEL CORE - ARCHITECTURE AND PRE-EXISTENCE.
A NEW CENTER FOR THE LOCAL CIVIL PROTECTION**

ARCHITETTURA E PREESISTENZA.

UN NUOVO CENTRO PER LA PROTEZIONE CIVILE LOCALE

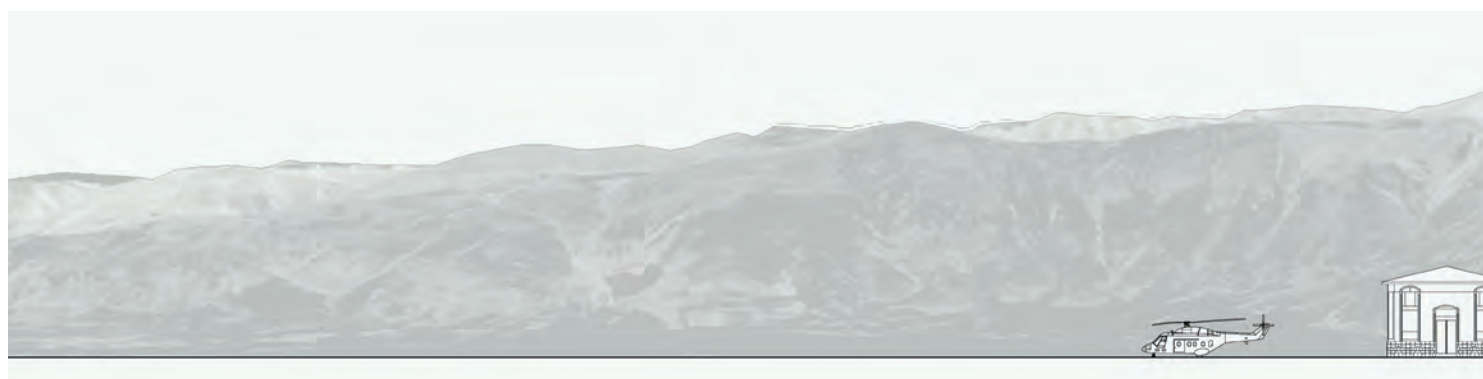
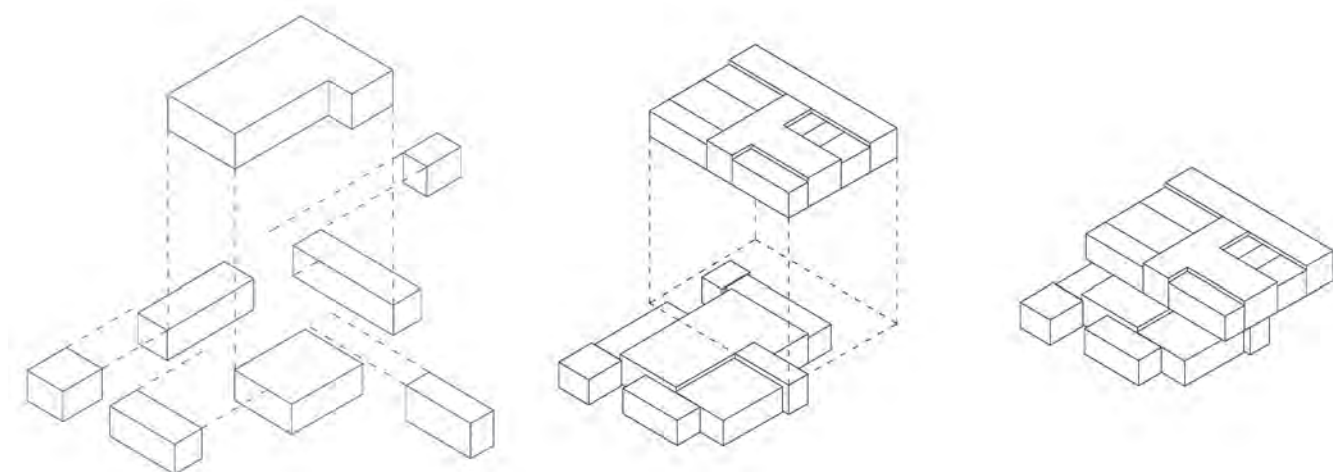




GENERAL STRATEGY

The project area was identified following an analysis of the territory of the municipality of Sarno. It presents a territory of particular morphological importance. It is geographically part of the Agro Nocerino Sarnese and is developed on the slopes of Mount Sarò and on the banks of the Sarno River, from which it takes its name.

266



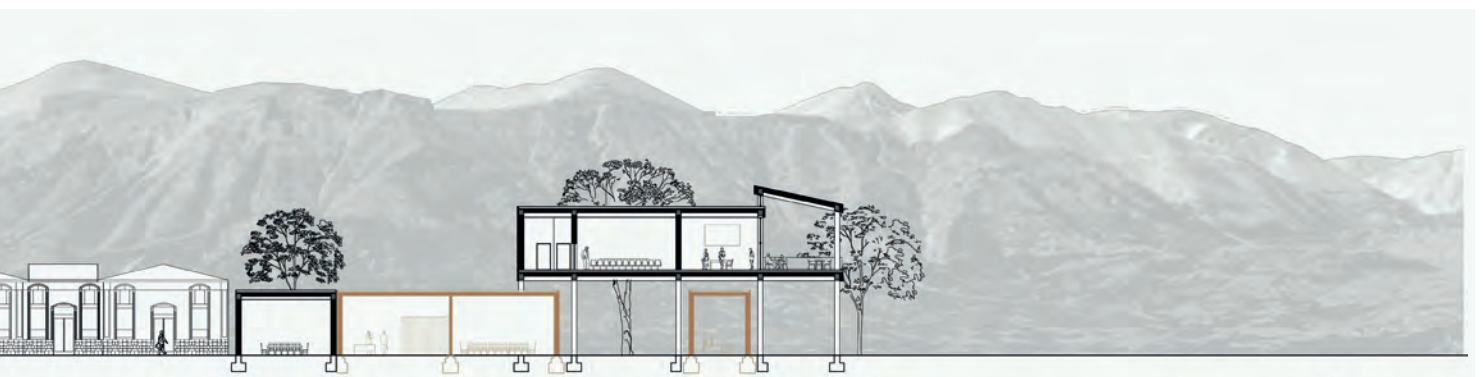
URBAN & ARCHITECTURE FRAMEWORK

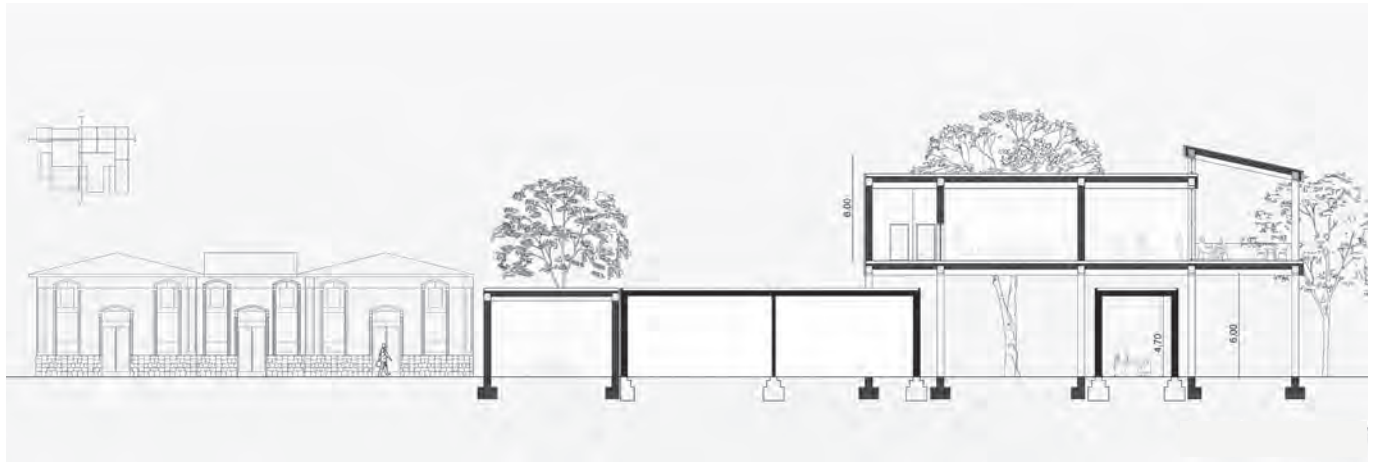
Program Civil Defense Center

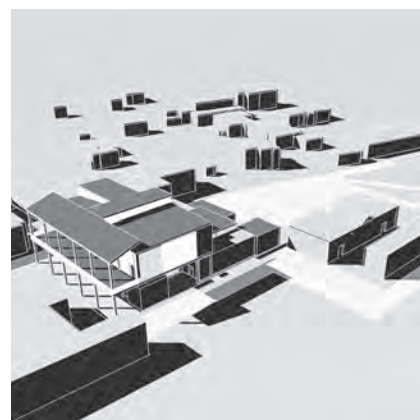
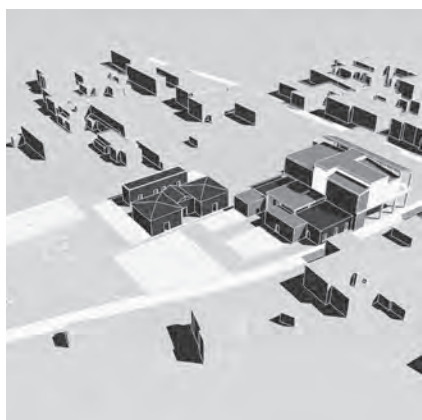
Covered area	1417 m ²
Outdoor area	2356m ²
Above-ground floors	3
Built volume	17.000m ³
Estimated cost	2.100.000€

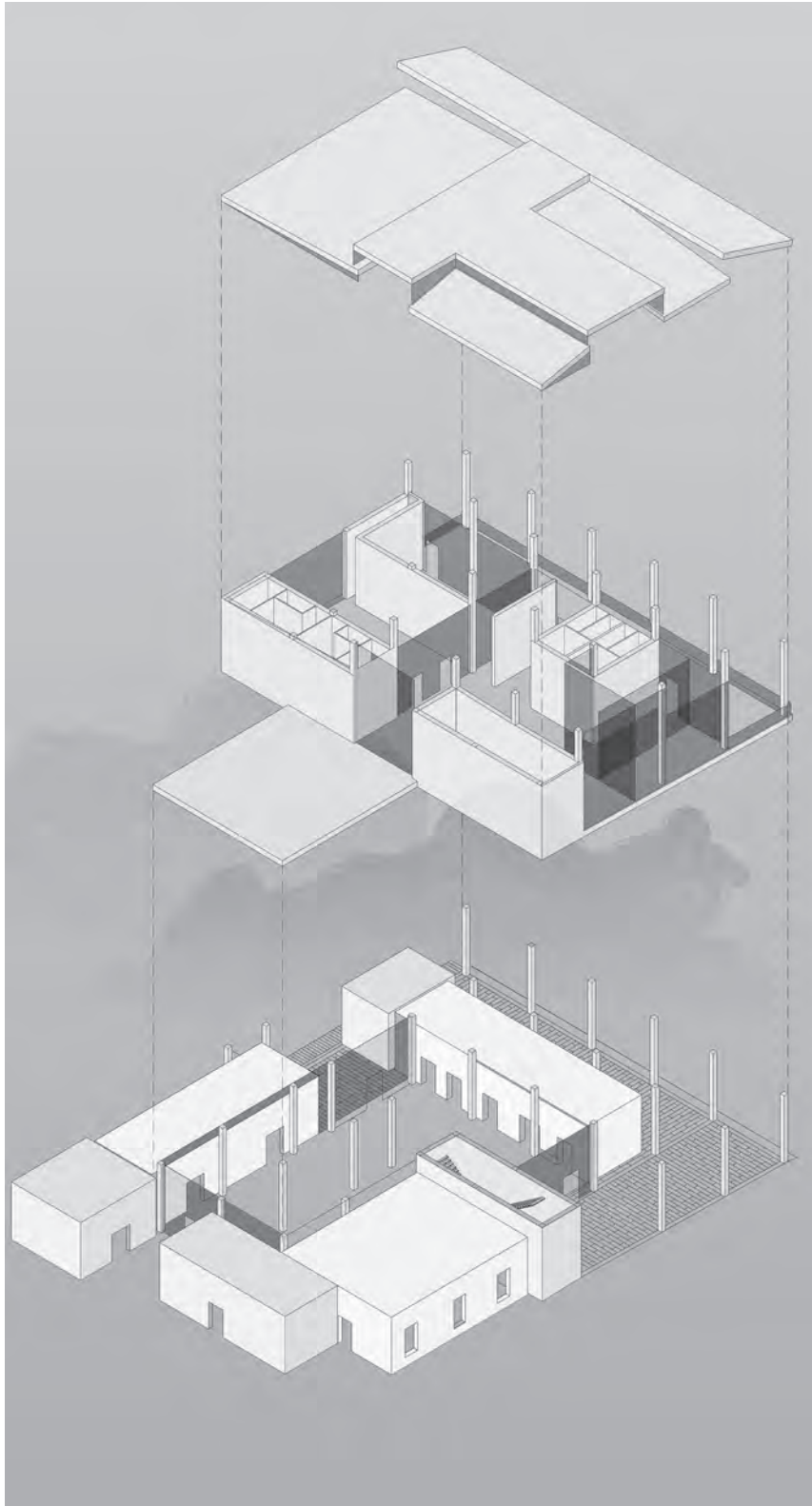
In the project area the strategy is to keep the pre-existence and, according to it, the design aims to incorporate it, to keep the facades as much as possible in view, and to bring the dimensions back into the design of the new building. It is precisely in the area of the "court," then on the ground floor, that the project is developed, enclosing the interior facades of the three buildings with full-height windows to give this area as much light as possible. Also arranged in the area are three small buildings that echo the number

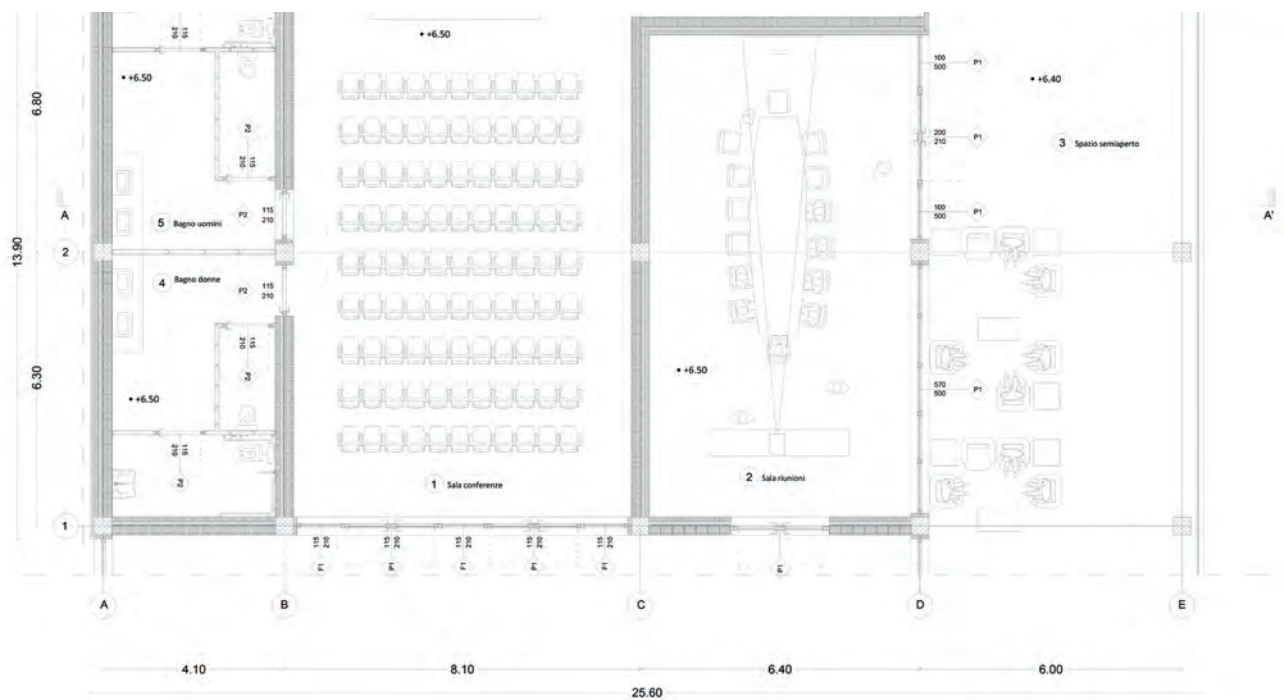
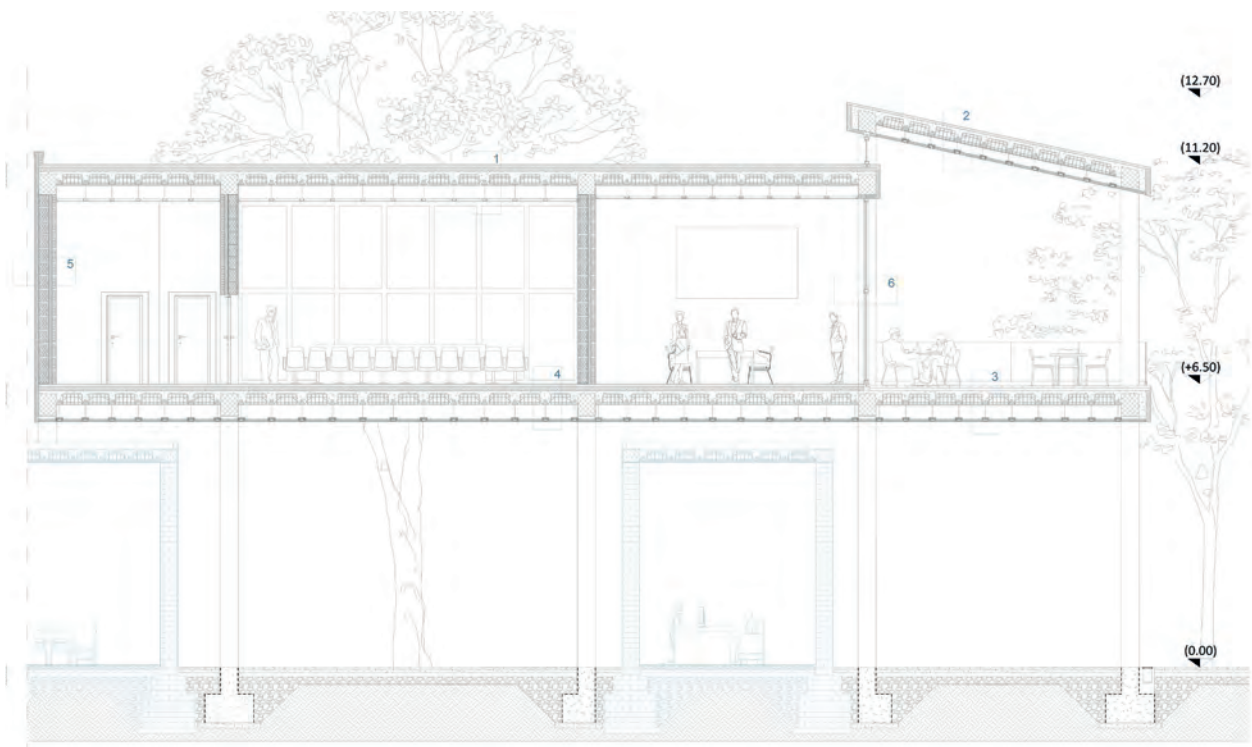
and size of the pre-existing buildings that respectively house the restrooms, a room for laboratories and an area dedicated to facilities. In addition, it was decided to relate as the pre-existing building does to the street, following its course. The existing state presents a fence with a height of one meter along the entire perimeter of the lot. The goal is to return an open space to the city, without filters and limits, thus eliminating barriers, creating involvement and influence within the social sphere.











In addition to the large center for the Civil Protection, a new building is designed. The structure will have a double entrance, leading to a large open space in front of the former slaughterhouse building. The program foresees various activities that the association organizes, two parking lots one for the public and employees and the other for Red Cross ambulances, and an existing soccer field. The westernmost area is dedicated to a landing strip for the helicopter ambulance. It was decided to keep the pre-existence and the design was done according to it, trying to incorporate it, to keep the facades as much as possible in view, and to bring its dimensions back into the design of the new building. It is precisely in the area of the “court,” then on the ground floor, that the design is developed, enclosing the interior facades of the three buildings with full-height windows to give this area as much light as possible.

272

The second floor is served by two staircases and two elevators that can be accessed from outside and inside, respectively, to allow those who need to reach the upper floor not to enter the ground floor. Here a space for laboratories is designed, reversible, with special dividers that allow the space to be divided into several zones. The ultimate goal of the project is to give back to the city a large space that will serve both as a support for the hard work done by the Civil Protection but can also become a means of learning and understanding the importance of their role for an education purpose.

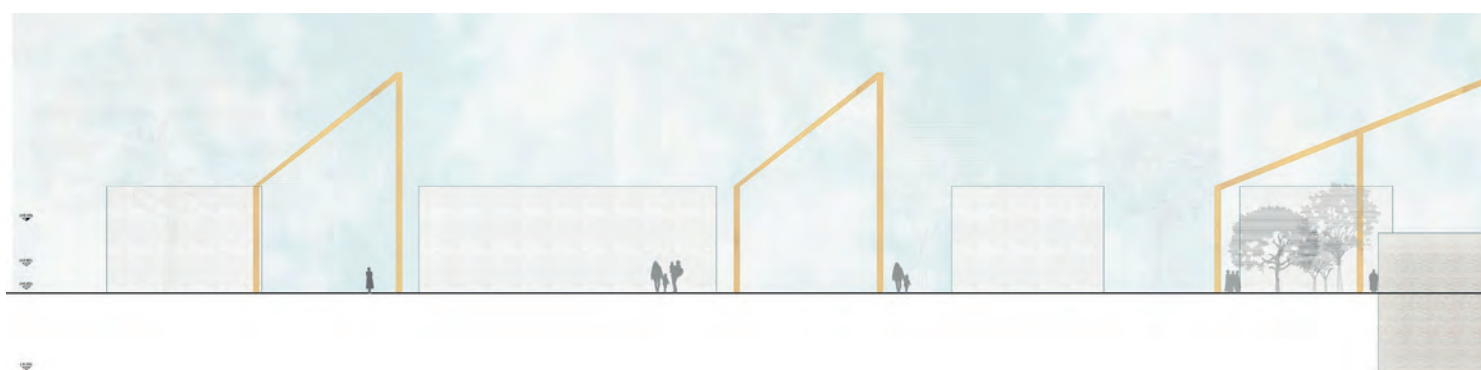
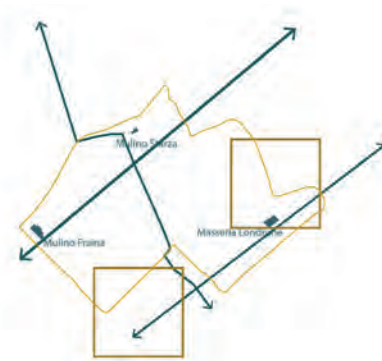




GENERAL STRATEGY

The final objective of the project is the mending of the rural fabric with the city centre, by using an area characterized by the presence of the ruin of historic mills that used to serve the Sarno river.

274





275

URBAN & ARCHITECTURE FRAMEWORK

Program

rural park, winemaker

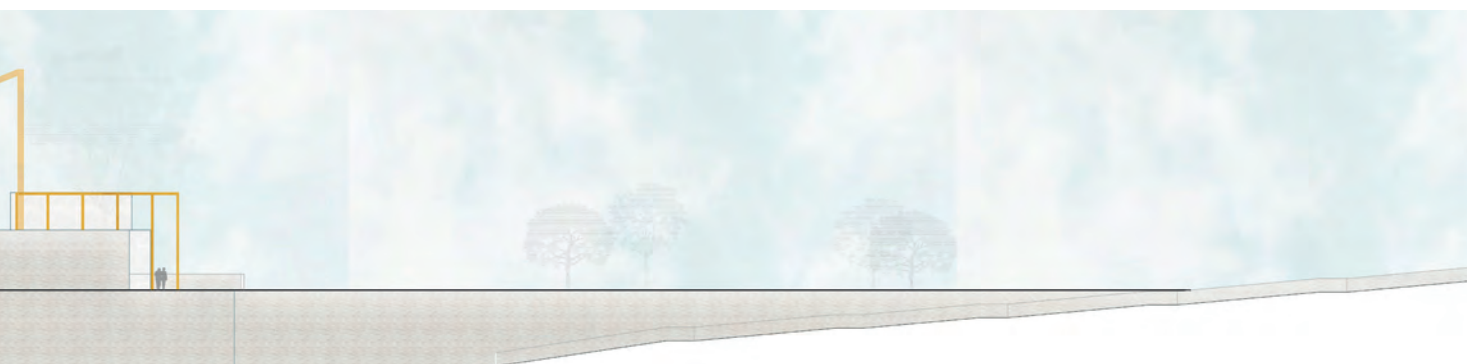
Covered area	3000 m ²
Outdoor area	200000m ²
Above-ground floors	1
Built volume	1200m ³
Estimated cost	€ 2 189780

The reason of choosing for a program connected to the production of wine is suggested by functional needs for the transformation of the productive system into a structure that can support other activities for the community (like places for samplings and an area for the team's education).

The incline of the pitches in the upper story allows to insert a photovoltaic system to make the cellar fast electrically

autonomous, calling for a system of recovery of rainwater to employ in the production of wine.

A fundamental aspect was the economic-financial evaluation, because thanks to a forecast of production and determining a hypothetical final price of the product, it was quite evident how the investment would have been largely recovered over a decade.



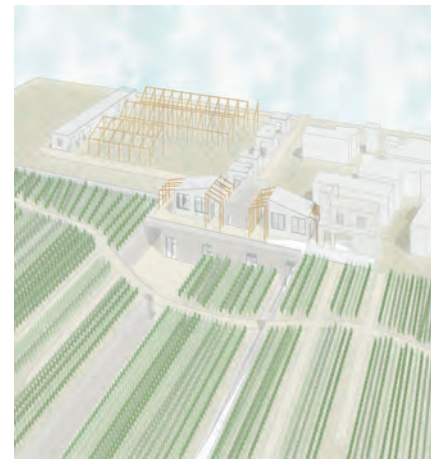




⌚ | 0 | 5 | 12 | 20

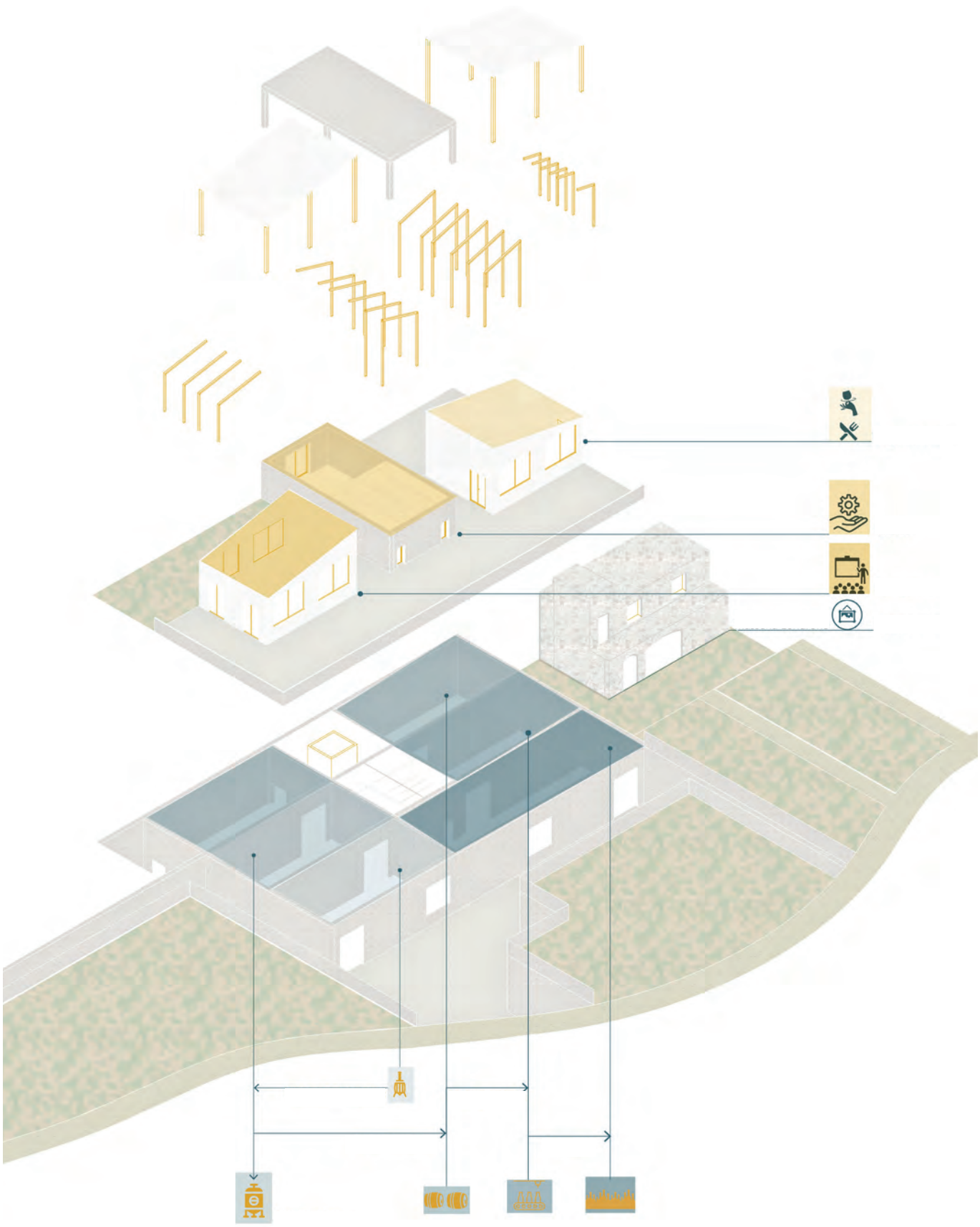


⌚ | 0 | 5 | 12 | 20



277









URBAN AND ARCHITECTURAL DESIGN

Pasquale Miano

with *con*

Adriana Bernieri

Vincenzo Valentino

During the Advanced Design Studio 2020-2021 of the Master's Program, architectural and urban design have played the role of coordinating and summarizing the different points of view and disciplinary contributions, engaging on the theme of Acerra, through the rethinking of its own characters and the interactions that distinguish its territory.

The architectural project moves from the identification of an urban theme, recognized and studied in terms of its spatial relations. The current condition of the places, although often in a state of abandonment and degradation, has been addressed with the tools of the architectural and urban project, identifying the existing city as the basis material of the project. On these elements the dynamics of the students' individual projects have been settled, through which multiple correlations were established among new grafts, connection elements and the existing reimagined within a new scenario.

It has been a wide-ranging work that, subsequently, was gradually focused on some nodes of the whole system, identifiable architectures, developed at scale and level of detail. In this sense, reasoning on forms and uses has been very much explored, aiming at offering perspective for reversing the existing equilibrium, without claiming to determine a new overall situation of a definitive type. The final restitution is a complex design framework in which operating not with macro-interventions but through the systematic and capillary action of the urban and architectural project.

URBAN PLANNING

Libera Amenta

with *con*

Rosaria Iodice

The Urban Planning course focuses on the enhancement, regeneration and adaptive reuse of urban and territorial resources, through innovative strategies.

To align with the overarching objectives of the Advanced Design Studio and ensure coherence with the various integrated modules, this course adopted a theoretical framework that synthesizes the concepts of urban metabolism and circular economy. It aimed to equip students with specialized knowledge on how design and urban planning practices can reconfigure 'waste' (wasted material resources) and 'wastescapes' (wasted landscapes) into valuable resources, thereby fostering the creation of new materials for sustainable urban development.

The course is based on a systemic and multi-scalar approach applied to the case study of the Municipality of Sarno, where students engage with local critical issues. The main objectives of the course are the identification of transformative solutions and actions, developed at various scales, that ensure resilient and sustainable growth. This aims to address contemporary challenges and the needs of local communities, enhancing 'wastescapes' as urban laboratories where innovative eco-design interventions with long-term effects can be tested.

APPRAISAL AND EVALUATION

Domenico Tirendi

The course of Economics and Environmental Appraisal aimed to provide students with methodological approaches and operational tools to develop a Decision Support System (SSD) which - taking into account multi-dimensional indicators for assessing and monitoring the state of environmental, economic and social resources - has been addressed to researching of main criticalities and potentials within the investigation context in order to support the construction of a short, medium and long term strategic vision linked to the actions and project objectives. A mapping of the main Stakeholders - which are directly or indirectly interested in the planned transformations - has been, subsequently, carried out in order to hypothesize a management model for buildings and designed urban spaces, according to their prevailing functions. A financial feasibility report has been, therefore, drawn as tool to assess

the level of risk of investments for realization and management of the various urban transformation interventions, through the identification of the Net Present Value (NPV) and the Internal Rate of Return (TIR). In conclusion, the final project phase has been assessed through an economic point of view due to the "Bill of Quantities" and the "Economic Framework", highlighting respectively the main expenditure items for building of project components and the related phases for its construction, in order to determine the total cost and the unit cost of different interventions.

PROGETTAZIONE ARCHITETTONICA E URBANA

Nel Laboratorio finale del quinto anno del Corso di Laurea Magistrale 5UE 2018-2019, la Progettazione architettonica e urbana ha svolto il ruolo di coordinamento e di sintesi dei differenti punti di vista e apporti disciplinari, impegnandosi sul tema di Acerra, attraverso il ripensamento dei suoi stessi caratteri e delle interazioni che lo contraddistinguono.

Il progetto di architettura muove dall'individuazione di un tema urbano, riconosciuto e studiato sotto il profilo dei rapporti territoriali e spaziali. La condizione attuale dei luoghi, pur spesso in condizione di abbandono e degrado, è stata affrontata con gli strumenti del progetto architettonico e urbano, individuando la città esistente come il materiale base del progetto. Su questo materiale si è innestata la dinamica dei singoli progetti degli studenti, attraverso la quale si sono stabilite correlazioni multiple tra nuovi elementi di innesto e di connessione e il preesistente rimesso in campo. Si è trattato di un lavoro ad ampio raggio che,

successivamente, si è gradualmente concentrato su alcuni nodi del sistema, architetture identificabili, sviluppati alla scala e al livello di approfondimento di maggiore dettaglio del progetto architettonico. I ragionamenti sulla forma e sugli usi diventano in questo senso molto approfonditi, con l'obiettivo di offrire prospettive di ribaltamento degli equilibri esistenti, senza la pretesa di determinare una nuova situazione complessiva di tipo definitivo: la restituzione finale è un quadro progettuale complesso, in cui si opera non per macro-interventi ma attraverso un'azione sistematica e capillare del progetto urbano e architettonico.

PROGETTAZIONE URBANISTICA

Il corso di Progettazione Urbanistica si è focalizzato sulla valorizzazione, rigenerazione e riuso adattivo delle risorse urbane e territoriali, attraverso strategie innovative. Per contribuire al programma generale del Laboratorio di Sintesi Finale (Advanced Design Studio) e in sintonia con i diversi moduli con cui si integra, questo corso ha impiegato un framework teorico che combina i temi del metabolismo urbano e dell'economia circolare, fornendo agli studenti le conoscenze specialistiche utili a indirizzare il progetto e la pianificazione verso l'individuazione di 'waste' (materiali di scarto) e 'wastescape' (territori di scarto) in nuovi materiali per l'urbanistica.

Il corso si basa su un approccio sistemico e multiscale applicato al caso di studio del Comune

di Sarno, in cui gli studenti si confrontano con le criticità locali. Gli obiettivi principali del corso sono l'individuazione di soluzioni e azioni trasformatrici che, sviluppate a diverse scale, possano garantire una crescita resiliente e sostenibile. Questo per rispondere alle nuove sfide contemporanee e alle esigenze delle comunità locali, valorizzando i 'wastescape' come veri e propri laboratori urbani dove sperimentare interventi progettuali eco-innovativi con effetti a lungo termine.

283

ECONOMIA ED ESTIMO AMBIENTALE

Il corso di Economia ed Estimo Ambientale è stato indirizzato a fornire agli studenti approcci metodologici e strumenti operativi per sviluppare un Sistema di Supporto alle Decisioni che - tenendo conto di indicatori multidimensionali per la valutazione e il monitoraggio dello stato delle risorse ambientali, economiche e sociali - ha consentito di rilevare criticità e potenzialità nel contesto di indagine, al fine di supportare la costruzione di una visione strategica di breve, medio e lungo termine legata alle azioni e agli obiettivi del progetto. In seguito, è stata effettuata una mappatura dei principali Stakeholder, direttamente o indirettamente interessati alle trasformazioni messe in campo, al fine di ipotizzare un modello di gestione degli edifici e degli spazi urbani progettati, a seconda delle loro funzioni prevalenti. È stata, pertanto, redatta una relazione di fattibilità finanziaria quale strumento per

valutare il livello di rischio degli investimenti per la realizzazione e la gestione dei vari interventi di trasformazione urbana, attraverso l'individuazione del Valore Attuale Netto (VAN) e del Tasso di Rendimento Interno (TIR). In conclusione, la fase finale del progetto è stata valutata dal punto di vista economico grazie al "Computo metrico estimativo" e al "Quadro economico", evidenziando rispettivamente le principali voci di spesa per la realizzazione delle componenti del progetto e le relative fasi di realizzazione, al fine di determinare il costo totale ed il costo unitario dei diversi interventi.

TECHNIQUES OF CONSTRUCTION

Roberto Tartaglia

The integrated course of Construction Techniques has been articulated through three main phases: frontal lessons, collective exercises and reviews. During the first part of the course, the construction work as a whole has been introduced; some fundamental themes from the point of view of the structures and their behaviors have been explored, addressing the attention to the specific design case studies of the students. In particular, materials resistances, performance requirements, security aspects as well as regulations have been investigated according to the functions and uses chosen during the design phase process. A very important part of the course schedule has been dedicated to the wind and earthquake actions, to the buildings response possibilities and the correct structural design approach to these phenomena. Particularly, foundations systems have been studied in depth, considering the fragile and delicate territory of Acerra which presents a very high groundwater system.

In the second part, the course has been characterized both by single reviews and choral discussions about the individual project cases, following their development or way of conception so that even those who did not have elements to submit would listen and participate in the solutions of the various cases proposed. This approach demonstrates that there is no unique structural solution for an architectural proposal, but more a wide range of possibilities among which one can be chosen through a coherent investigation between shape, details, materials and structures specific behaviors.

TECHNIQUES OF ENVIRONMENTAL CONTROL

Margherita Mastellone

The modular course of "Techniques of Environmental Control" - after previous studies of thermodynamics, heat transfer and psychrometry, with particular reference to the course of "Applied Thermodynamics, Heat Transfer for Buildings" and "Architectural Technology" - investigated all issues concerning the macro - topic of the energy efficiency in the construction sector, in the framework of the legislative and regulatory acts, as presently in force or established for the next years. Starting from necessary thermal comfort requirements for both the indoor and urban environments, and in particular by fulfilling traditional and adaptive thermo-hygrometric requirements of comfort, the students, during theoretical lessons, in-depth meetings and individual reviews, tried to design buildings characterized by high-quality standards, by taking into account energy efficiency and environmental preservation, with reference to all involved systems, from the single component of the thermal envelope to the architecture as a whole. The students' evaluations concerned critical issues and energy-efficient

solutions by pressing all levers connected to energy demand and conversion in buildings, with a view to the microclimatic control, by including the design of the building envelope, bioclimatic architecture solutions, heating systems, air conditioning equipment, conversion from renewable energy sources. The laboratory has contributed, together with previous teachings and other integrated courses, to direct the architectural and urban design towards an irreplaceable objective of limitation of energy demand and climate-changing emissions, for an indispensable low-carbon future that necessarily involves, in light of the enormous environmental footprint of buildings, the energy sustainability in the architectural design.

DETAILED DESIGN OF ARCHITECTURE

Eduardo Bassolino

The Executive Planning of Architecture course pursued the objective of developing a process of phases and elaborations in the field of Architectural Technology and Environmental Design that would allow students to consciously carry out those aspects related to construction and to the processes that regulate the construction phases of the architectural buildings, as well as compliance with the regulatory aspects of construction, energy efficiency and the ecological footprint of building processes. This occurred through the definition of integrated technical solutions between buildings and open spaces capable to develop in students a conscious approach in defining the technical-design choices that are capable of contributing to the reduction of environmental impact and CO2 emissions in the whole life cycle of the buildings. An approach

to the project of architecture and open spaces that wanted to compare with those issues related to the modification of the built urban environment and the impact that the construction sector had on the environment and on the occurrence of climate change, in particular on the analysis of the phenomena affecting our cities, such as the increase in urban temperatures and on intervention strategies to reduce their impact, mitigate their effects, and at the same time to implement regenerative adaptive design actions.

TECNICA DELLE COSTRUZIONI

Il corso integrato di Tecnica delle Costruzioni è stato articolato attraverso tre fasi principali: lezioni frontali, esercitazioni collettive e correzioni. Nella prima parte del corso è stata presentata l'opera costruttiva nel suo complesso; sono stati approfonditi alcuni temi fondamentali dal punto di vista delle strutture e dei loro comportamenti, rivolgendo l'attenzione ai casi studio progettuali specifici degli studenti. In particolare sono state indagate le resistenze dei materiali, i requisiti prestazionali, gli aspetti di sicurezza nonché le normative in funzione delle funzioni e degli usi scelti in fase di progettazione. Una parte molto importante del programma del corso è stata dedicata alle azioni del vento e del terremoto, alle possibilità di risposta degli edifici e al corretto approccio strutturale a questi fenomeni. In particolare, sono stati approfonditi i sistemi di fondazione, considerando il fragile e delicato territorio di Acerra che presenta un sistema idrico

di falda molto elevato. Nella seconda parte, il corso è stato caratterizzato sia da singole revisioni che da discussioni collettive sui singoli casi progettuali, seguendone lo sviluppo o il concepimento in modo che anche chi non avesse elementi da sottoporre ascoltasse e partecipasse alle soluzioni dei vari casi proposti. Questo approccio dimostra che non esiste un'unica soluzione strutturale per una proposta architettonica, ma piuttosto un'ampia gamma di possibilità tra cui scegliere attraverso un'indagine coerente tra forme, dettagli, materiali e comportamenti specifici delle strutture.

TECNICA DEL CONTROLLO AMBIENTALE

Il modulo di Tecnica del Controllo Ambientale - dopo i precedenti studi di termodinamica, scambio termico e psicrometria, con particolare riferimento a Fisica Tecnica Ambientale e Tecnologia dell'Architettura - ha approfondito le tematiche dell'efficienza energetica in edilizia, tenendo conto del quadro legislativo e normativo vigente. Partendo dai necessari requisiti di comfort in ambiente indoor ed urbano, ed in particolare perseguendo requisiti di benessere termo-igrometrico tradizionale e adattativo, gli allievi, durante lezioni teoriche, incontri di approfondimento e revisioni individuali, si sono cimentati nella ricerca di elevati standard di qualità energetica ed ambientale, con riferimento a tutti i sistemi coinvolti, dal singolo componente di involucro edilizio sino all'architettura nel suo complesso. Le elaborazioni degli allievi hanno riguardato criticità e soluzioni di efficienza energetica con riferimento a tutte le leve connesse a domanda e conversione di energia negli edifici,

per il controllo microclimatico e l'integrazione dell'approvvigionamento da rete, includendo progettazione dell'involucro edilizio, soluzioni di architettura bioclimatica, impianti di riscaldamento, climatizzazione, sistemi di conversione da fonti rinnovabili. Il laboratorio ha contribuito, insieme ad insegnamenti precedenti e altri corsi integrati, ad orientare la progettazione verso un irrimandabile obiettivo di contenimento di domanda energetica ed emissioni climateranti, per un irrinunciabile futuro "low carbon" che investe necessariamente, alla luce dell'enorme impronta ambientale degli edifici, la sostenibilità energetica in architettura.

285

PROGETTAZIONE ESECUTIVA DELL'ARCHITETTURA

Il corso di Progettazione Esecutiva dell'Architettura ha perseguito l'obiettivo di sviluppare una processualità di fasi ed elaborati nell'ambito della Tecnologia dell'Architettura e della Progettazione Ambientale che permettesse agli allievi di portare avanti, in maniera consapevole, quegli aspetti legati alla costruzione e ai processi che la regolano le fasi di esecuzione dei manufatti architettonici, oltre che al rispetto degli aspetti normativi della costruzione, dell'efficientamento energetico e dell'impronta ecologia dei processi edilizi. Questo è avvenuto attraverso la definizione di soluzioni tecniche integrate tra edifici e spazi aperti capaci di far sviluppare negli allievi un approccio consapevole nella definizione delle scelte tecnico-progettuali che siano capaci di contribuire alla riduzione dell'impatto ambientale e delle emissioni di CO2 nell'intero ciclo di vita del manufatto. Un approccio

al progetto di architettura e degli spazi aperti che si è voluto confrontare con quelle tematiche legate alla modificazione dell'ambiente urbano costruito e sull'impatto che ha avuto il settore delle costruzioni sull'ambiente e sul verificarsi dei cambiamenti climatici, ed in particolare sull'analisi dei fenomeni che colpiscono le nostre città, quale ad esempio l'aumento delle temperature urbane e sulle strategie di intervento per ridurre l'impatto, mitigarne gli effetti, ed al tempo stesso di attuare azioni di regenerative adaptive design.





Napoli: FedOAPress, 2024
(ADS - Advanced Design Studio; 5)
288 pp.; 21x29,7
Access to the electronic version
<http://www.fedoabooks.unina.it>
ISBN: 978-88-6887-325-7
DOI: 10.6093/978-88-6887-325-7

ADS Advanced Design Studio is a book series that collects the design experimentations results conducted in the context of the Final Design Studios within 5UE Master's Degree Course in Architecture, Department of Architecture University of Naples Federico II. The goal is to combine scientific research and methodological processes of teaching practice through the common thread of the architectural and urban design. Conceived as an opportunity for discussion in which the themes widely explored and developed during the interdisciplinary studio experience are summarized, the series proposes to investigate, through essays and contributions to be combined with the work of students, the possibility of questioning and recalibrate the traditional tools of the project by adopting a multiscale approach.

The joint action of the different disciplines involved allows us to reflect on the "boundaries" of each of them: from technological and environmental problems to landscape design and economic evaluation, the design variables are progressively defined, proposing and tracing new disciplinary paths of unprecedented correlation. At the same time, the design action at different scales defines the contents of an architectural design in the framework of a comprehensive interpretation of complex and articulated territorial problems.

The investigated territories become the great protagonists of the design and didactic investigation, within which the specific geographical, morphological, urban and landscape peculiarities lead from time to time to the identification of the different case studies and project areas. They can be understood as demonstrative cases for the verification of general and wide-ranging theoretical positions, but more often, through an empirical and inductive dimension, as pre-text, as triggers of new potential lines of research and new scenarios for the project. In fact, the latter is always considered contextually and simultaneously as an interpretative key and an operational tool for modification through which to propose solutions to real and concrete problems and imagine new possible futures.

ADS Advanced Design Studio è una collana che raccoglie gli esiti delle sperimentazioni progettuali condotte nell'ambito del Laboratorio di Sintesi finale del Corso di Laurea Magistrale in Architettura 5UE del Dipartimento di Architettura dell'Università Federico II di Napoli. L'obiettivo è coniugare ricerca scientifica e processi metodologici della pratica didattica attraverso il filo conduttore del progetto architettonico e urbano. Pensata come un'occasione di confronto in cui si sintetizzano le tematiche ampiamente trattate e sviluppate durante l'esperienza laboratoriale di carattere interdisciplinare, la collana propone di indagare, attraverso saggi e contributi da affiancare al lavoro degli studenti, la possibilità di mettere in questione e ricalibrare gli strumenti tradizionali del progetto adottando un approccio multiscale.

La coazione congiunta delle differenti discipline coinvolte consente di riflettere sui "confini" di ognuna di esse: dalle problematiche tecnologiche e ambientali alla progettazione del paesaggio e alla valutazione economica, le variabili progettuali vengono progressivamente definite, proponendo e tracciando nuovi percorsi disciplinari di inedita correlazione. Al contempo l'azione progettuale alle diverse scale definisce i contenuti di un progetto di architettura che è dentro un'interpretazione compiuta di complessi e articolati problemi territoriali.

I territori indagati diventano i grandi protagonisti dell'indagine progettuale e didattica, all'interno dei quali le specifiche peculiarità geografiche, morfologiche, urbane e paesaggistiche conducono di volta in volta all'individuazione dei differenti casi studio e delle aree di progetto. Essi possono essere intesi come casi dimostratori per la verifica di posizioni teoriche generali e di ampia portata, ma più spesso, attraverso una dimensione empirica e induttiva, come pre-testo, come inneschi di nuove potenziali linee di ricerca e nuovi scenari per il progetto. Quest'ultimo infatti è sempre considerato contestualmente e simultaneamente chiave interpretativa e strumento operativo di modificazione attraverso cui proporre soluzioni di problemi reali e concreti e immaginare nuovi futuri possibili.